

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 demolition of the existing building and whether Project emissions would conflict with or obstruct implementation of the applicable air quality plan; result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or State ambient air quality standard; expose sensitive receptors to substantial pollutant concentrations; or result in other emissions, such as those leading to odors, affecting a substantial number of people. This section relies on information included in the *Air Quality and Greenhouse Gas Technical Documentation (AQ and GHG Technical Documentation)*, provided in Appendix B of this Draft EIR.

2. Environmental Setting

a) Air Quality Background

(1) Air Quality and Public Health

Certain air pollutants have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants, due to their presence in elevated concentrations in the atmosphere. Such pollutants have been identified and regulated as part of an overall endeavor to prevent further deterioration and to facilitate improvement in air quality. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been set at levels considered safe to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly with a margin of safety, and to protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.¹ As the scientific methods for the study of air pollution health effects have progressed over the past decades, adverse effects have been shown to occur at lower levels of exposure. For some pollutants, no clear thresholds for effects have been demonstrated. New findings over time have, in turn, led to the revision and lowering of NAAQS which, in the judgment of the U.S. Environmental Protection Agency (USEPA), are necessary to protect public health. Ongoing assessments of the scientific evidence from health studies continue to be an important

¹ USEPA, NAAQS Table, <https://www.epa.gov/criteria-air-pollutants/naaqs-table>. February 3, 2022.

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 on pages IV.A-10 and IV.A-11.

At the regional level, the South Coast Air Quality Management District (SCAQMD) is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange County, Riverside and San Bernardino Counties, including the Coachella Valley.³ The City of Los Angeles is located within the South Coast Air Basin (Air Basin) which is a distinct geographic subarea within 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

² SCAQMD, *Final 2016 AQMP*, 2017. Appendix I-69.

³ SCAQMD, *Map of Jurisdiction*, 1999.

temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid to late afternoons on hot summer days. Winter inversions frequently break by midmorning.

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

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

(3) Air Pollutant Types

(a) *Criteria Pollutants*

The six principal pollutants for which national and State criteria and standards have been promulgated, known as “criteria pollutants”, and which are most relevant to current air quality planning and regulation in the Air Basin include ozone (O₃), respirable and fine particulate matter (PM₁₀ and PM_{2.5}, respectively), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), 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 (O₃)*

O₃ 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. O₃ 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 (PM₁₀ and PM_{2.5})*

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Respirable and fine particulate matter, PM₁₀ and PM_{2.5}, consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, such as pollen and windstorms, are naturally occurring. However, in 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 PM₁₀ and PM_{2.5}. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

(iii) *Carbon Monoxide (CO)*

CO is a colorless, odorless gas primarily emitted from combustion processes and motor vehicles due to incomplete combustion of carbon-containing fuels, such as gasoline or wood. In urban areas, such as the City of Los Angeles, automobile exhaust accounts for the majority of CO emissions. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike 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 (NO₂)*

NO₂ 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} . NO_x irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_x is as a precursor to the formation of O_3 .

(v) *Sulfur Dioxide (SO_2)*

Sulfur oxides (SO_x) are compounds of sulfur and oxygen molecules. SO_2 is the predominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Generally, the highest levels of SO_2 are found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. Emissions of SO_2 aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of SO_2 , and long-term exposures to both pollutants 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., SO_4^{2-} and visibility reducing particles) through other criteria pollutants. For example, SO_4^{2-} are associated with SO_x emissions, and visibility-reducing particles are associated with particulate matter emissions. A description of the health effects of the State-identified criteria air pollutants is provided below.

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

SO_4^{2-} are the fully oxidized ionic form of sulfur. SO_4^{2-} occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized during the combustion process and subsequently converted to SO_4^{2-} in the atmosphere. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. SO_4^{2-} are particularly effective in degrading visibility, and, due to the fact that they are usually acidic, can harm ecosystems and damage materials and property.

(ii) *Hydrogen Sulfide (H_2S)*

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

(iii) *Visibility-Reducing Particles*

Visibility-reducing particles come from a variety of natural and manmade sources and can vary greatly in shape, size and chemical composition. Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles are directly emitted to the air, such as windblown dust and soot, while others are formed in the atmosphere through chemical transformations of gaseous pollutants (e.g., 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 $\text{PM}_{2.5}$, as discussed above.⁸

⁴ CARB, Hydrogen Sulfide & Health, 2019.

⁵ CARB, Hydrogen Sulfide & Health, 2019.

⁶ CARB, Hydrogen Sulfide & Health, 2019

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

⁸ California Air Resources Board, Visibility-Reducing Particles and Health.

(iv) *Vinyl Chloride*

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

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

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

(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 O₃, NO₂, 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).

(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

⁹ California Air Resources Board, Vinyl Chloride & Health, <https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health>. February 3, 2022.

¹⁰ California Air Resources Board, Vinyl Chloride & Health.

¹¹ California Air Resources Board, Vinyl Chloride & Health.

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

b) Regulatory Framework

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

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

(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 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 O₃ 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.

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

¹³ USEPA, Clean Air Act, 1963.

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

**TABLE IV.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 (SO ₄ ²⁻)	24-hour	—	25 µg/m ³	—	Attainment
Hydrogen Sulfide (H ₂ S)	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 2016 AQMP.

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

^d California and Federal standard attainment status based on SCAQMD’s 2016 AQMP and 2018 updates from CARB. <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>.

^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 February 3, 2022.

CARB, Ambient Air Quality Standards May 4, 2016, <https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf>. Accessed February 3, 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 includes the CAAQS currently in effect for each of the criteria pollutants, as well as other pollutants recognized by the State. As shown in Table IV.A-1, the CAAQS include more stringent standards than the NAAQS. The Air Basin fails to meet State standards for O₃, PM₁₀, and PM_{2.5} and, therefore, is considered “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 us into the risk management phase of the program. CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines* and the *Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines*. The Diesel Advisory Committee approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase. During the control measure phase, specific Statewide regulations designed to further reduce DPM emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible

by establishing state-of-the-art technology requirements or emission standards to reduce DPM emissions.

(3) Regional

(a) *South Coast Air Quality Management District*

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

(i) *2016 Air Quality Management Plan and 2022 Air Quality Management Plan; 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy and 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy*

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of AQMPs, which serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the area into attainment with the standards in a timely manner. The 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines for O₃ and PM_{2.5} are met and that public health is protected to the maximum extent feasible. The most significant air quality challenge in the Air Basin is to reduce NO_x emissions¹⁵ sufficiently to meet the upcoming O₃ standard deadlines, as NO_x plays a critical role in the creation of O₃. The AQMP's strategy to meet the 8-hour O₃ standard in 2023 should lead to sufficient NO_x emission reductions to attain the 1-hour O₃ standard by 2022. Since NO_x emissions also lead to the formation of PM_{2.5}, the NO_x reductions needed to meet the O₃ standards will likewise lead to improvement of PM_{2.5} levels and attainment of PM_{2.5} standards.^{16,17}

The SCAQMD's strategy to meet the NAAQS and CAAQS distributes the responsibility for emission reductions across federal, State and local levels and industries. The 2016 AQMP is composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile source strategies, and reductions from federal sources, which include aircraft, locomotives and ocean-going vessels. These strategies are to be implemented in partnership with the CARB and USEPA.

The AQMP also incorporates the transportation strategy and transportation control measures from SCAG's 2016–2040 Regional Transportation Plan/Sustainable

¹⁵ NO_x emissions are a precursor to the formation of both O₃ and secondary PM_{2.5}.

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

¹⁷ SCAQMD, *Final 2016 AQMP*, 2017. Page ES-2.

Communities Strategy (RTP/SCS) Plan.¹⁸ SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and State air quality requirements. Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is required by law to ensure that transportation activities “conform” to, and are supportive of, the goals of regional and State air quality plans to attain the NAAQS. The RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP. The SCAQMD combines its portion of the AQMP with those prepared by SCAG.¹⁹ The RTP/SCS and Transportation Control Measures, included as Appendix IV-C of the 2016 AQMP, are based on SCAG’s 2016–2040 RTP/SCS.

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

The SCAQMD adopted the 2022 AQMP on December 2, 2022, which bases its analyses on the 2020–2045 RTP/SCS. However, until the 2022 AQMP is adopted by the USEPA and CARB and incorporated into the State Implementation Plan, the 2016 AQMP remains the applicable air quality plan for the region. However, for this Air Quality analysis, the Project’s consistency with the 2022 AQMP shall also be discussed below. The 2022 AQMP builds upon measures and strategies already in place from previous AQMPs. It also includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies, when cost-effective and feasible, and low NO_x technologies in other applications), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015 8-hour ozone standard.²⁰ The 2022 AQMP includes 49 control measures; 31 measures target stationary sources under residential, commercial and large industrial combustion and 18 measures target mobile sources. The two key areas for incentive programs are (1) promoting widespread deployment of available ZE and low NO_x technologies and (2) developing new ZE and ultra-low NO_x technologies. The 2022 AQMP notes Air Basin emissions of NO_x, the key pollutant controlling formation of ozone, must be reduced by approximately 67 percent

¹⁸ SCAG, Final 2016 RTP/SCS, 2016.

¹⁹ SCAQMD, *Final 2016 AQMP*, 2017. Page ES-2.

²⁰ SCAQMD, Final 2022 AQMP, 2022, Page ES-2, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16>. Accessed April 2023.

beyond what we would achieve through current programs by 2037 to meet the 2015 8-hour ozone standard.²¹ This reduction would require that sources of emissions be controlled as stringently as possible and the use of flexible “black box” measures as provided in Section 182(e)(5) of the CAA, which means the development and deployment of future technologies to reduce emissions as well as the reduction of NO_x from sources regulated by the federal government such as aircraft, locomotives and oceangoing vessels. The SCAQMD’s strategies to meet the NAAQS and CAAQS distribute the responsibility for emission reductions across federal, State and local levels and industries and are to be implemented in partnership with the CARB and USEPA. As described in the 2022 AQMP, 46 percent of NO_x emissions in 2037 will come from federal sources, while 34 percent will come from State regulated sources, and only 20 percent will come from South Coast AQMD regulated sources.

The 2022 AQMP also incorporates the transportation strategy and transportation control measures from SCAG’s 2020-2045 RTP/SCS.²² On September 3, 2020, SCAG’s Regional Council adopted the 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS was determined to conform to the federally-mandated SIP, for the attainment and maintenance of NAAQS standards. On October 30, 2020, CARB also accepted SCAG’s determination that the SCS met the applicable future state GHG emissions reduction target of 19 percent. The RTP/SCS and Transportation Control Measures, included as Appendix IV-C of the 2022 AQMP for the Air Basin, are based on SCAG’s 2020-2045 RTP/SCS. The 2022 AQMP forecasts future 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 an eight 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.²³

(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.²⁴ 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

²¹ SCAQMD, Final 2022 AQMP, 2022, Page ES-2, <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16>. Accessed April 2023.

²² SCAG, Final 2020-2045 RTP/SCS, 2020. <https://scag.ca.gov/read-plan-adopted-final-connect-socal-2020>.

²³ SCAQMD, Final 2022 AQMP, Page 3-23, , <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/final-2022-aqmp.pdf?sfvrsn=16>. Accessed April 2023.

²⁴ SCAQMD, CEQA Air Quality Handbook 1993, [http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-\(1993\)](http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993)). Accessed February 2022.

the *Air Quality Analysis Guidance Handbook*. While this process is underway, the SCAQMD has provided supplemental guidance on the SCAQMD website.²⁵

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.²⁶ SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). The SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies.

The SCAQMD has published a guidance document called the *Final Localized Significance Threshold Methodology* for CEQA evaluations that is intended to provide guidance when evaluating the localized effects from mass emissions during construction or operation of a project.²⁷ The SCAQMD adopted additional guidance regarding PM_{2.5} emissions in a document called *Final Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds*.²⁸ 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.

²⁵ SCAQMD, *Air Quality Analysis Guidance*, <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook#>. Accessed February 3, 2022.

²⁶ SCAQMD, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, 2005.

²⁷ SCAQMD, *Final Localized Significance Threshold Methodology*, June 2003 (Revised July 2008).

²⁸ SCAQMD, *Final Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds*, 2006.

- **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 PM₁₀ emissions to less than 50 micrograms per cubic meter (µg/m³) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Best available control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by the USEPA.

Regulation XI – Source Specific Standards: Regulation XI sets emissions standards for specific sources. The following is a list of rules 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 1186 – PM₁₀ Emissions from Paved and Unpaved Roads, and Livestock Operations:** This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM₁₀ emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Regulation XIII – New Source Review (NSR): Regulation XIII sets requirements for preconstruction review required under both federal and state statutes for new and modified sources located in areas that do not meet the 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 the only rule under Regulation XIV 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 (Air Quality Element), was adopted on November 24, 1992, and sets forth the goals, objectives, and policies which guide the City in its implementation of its air quality improvement programs and strategies. A number of these goals, objectives, and policies are relevant to land use development, and relate to traffic mobility, minimizing particulate emissions from construction activities, discouraging single-occupancy vehicle trips, managing traffic congestion during peak hours, and increasing energy efficiency in City facilities and private developments.

The Air Quality Element establishes six goals:

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

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

The City is also responsible for the implementation of transportation control measures as outlined in the AQMP. Through capital improvement programs, the City can fund infrastructure that contributes to improved air quality by requiring such improvements as bus turnouts as appropriate, installation of energy-efficient streetlights, and synchronization of traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation measures.

(ii) Plan for a Healthy Los Angeles

The Plan for a Healthy Los Angeles, adopted by the City Council on March 31, 2015, lays the foundation to create healthier communities for all residents in the City. As an element of the General Plan, it provides high-level policy vision, along with measurable objectives and implementation programs, to elevate health as a priority for the City's future growth and development. With a focus on public health and safety, the Plan for a Healthy Los Angeles provides a roadmap for addressing the most basic and essential quality-of-life issues: safe neighborhoods, a clean environment (i.e., improved ambient and indoor air quality), the opportunity to thrive, and access to health services, affordable housing, and healthy and sustainably produced food.

(b) City of Los Angeles All-Electric Building Ordinance

Chapter IX of the LAMC also requires that all new buildings be all-electric buildings, with some exceptions. Equipment typically powered by natural gas such as space heating, water heating, cooking appliances and clothes drying would need to be powered by electricity for new construction. Exceptions are made for commercial restaurants, laboratories, and research and development uses. The LAMC is consistent with 2022 Title 24 goals of encouraging all-electric development which requires new residential uses to be electric-ready (wiring installed for all-electric appliances). Buildings in Los Angeles account for 43 percent of greenhouse gas

emissions—more than any other sector in the City. These LAMC requirements ensure that new buildings being constructed are built to leverage the increasingly clean electric grid, which is anticipated to be carbon-free by 2035, rather than relying on fossil fuels.

c) Existing Conditions

(1) Regional Context

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

The greatest air pollution throughout the Air Basin occurs from June through September that is generally attributed to light winds, shallow vertical atmospheric mixing, as well as the large amount of pollutant emissions. This frequently reduces pollutant dispersion, resulting in elevated air pollution levels. In addition, pollutant concentrations in the Air Basin vary with location, season, and time of day. For instance, O₃ concentrations tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert. While substantial progress has been made in reducing air pollution levels in Southern California, the Air Basin still fails to meet the national standards for O₃ and PM_{2.5} and, therefore, is considered a federal “non-attainment” area for these pollutants. In addition, Los Angeles County still fails to meet the national standard for Pb and, therefore, is considered a federal “non-attainment” area for Pb.

As described above, at the regional level, SCAQMD is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange County, Riverside and San Bernardino Counties. Specifically, 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 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines are met and that public health is protected to the maximum extent feasible where reducing NO_x emissions sufficiently to meet the upcoming O₃ standard deadlines is the most significant air quality challenge in the Air Basin. The 2016 AQMP reported a baseline year 2012 inventory of 512 tons per day (tpd) of NO_x and based on modeling results show that NO_x emissions are estimated to be 214 tpd in the 8-hour ozone attainment year of 2031, due to continued implementation of already adopted regulatory actions (“baseline emissions”). The 2016 AQMP states that total Air Basin

emissions of NO_x must be reduced to 96 tpd by 2031 to attain the 8-hour O₃ standard. However, while existing air regulations and programs will continue to lower NO_x emissions in the region, an additional 55 percent reduction in the year 2031 are necessary to attain the 8- hour O₃ standard.²⁹

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

The 2016 AQMP also forecasts the 2031 emissions inventories “with growth” based on the 2016–2040 RTP/SCS where the region was projected from baseline year 2012 to see a 12 percent growth in population, 16 percent growth in housing units, 23 percent growth in employment, and eight percent growth in VMT by year 2031. Appendix IV-C, Regional Transportation Plan/Sustainable Communities Strategy and Transportation Control Measures, of the 2016 AQMP describes the regional land use and transportation strategies and the transportation control measures in RTP/SCS that are included in the 2016 AQMP.³¹

Despite the projected growth in the region, air quality has improved substantially over the years. This is largely due to the effects of local, State and federal air quality control programs as described above. As seen in Figure IV.A-1 on page IV.A-18 of the AQMP, the percent change in air quality is shown along with demographic data for the 4-county region from the 2016 AQMP where in particular, the trends since 1990 of the 8-hour O₃ levels, the 1-hour O₃ levels, and annual average PM_{2.5} concentrations (since 1999), compared to the regional gross domestic product, total employment and population. In addition, the O₃ and particulate matter levels continue to trend downward as the economy and population increase, demonstrating that it is possible to maintain a healthy economy while improving public health through air quality improvements.³²

The 2022 AQMP builds upon measures already in place from previous AQMPs and includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technologies (e.g., zero emissions technologies and low NO_x technologies), best management practices, co-benefits from existing programs (e.g., climate and energy efficiency), incentives, and other CAA measures to achieve the 2015

²⁹ SCAQMD, Final 2016 AQMP, March 2017, page ES-2.

³⁰ SCAQMD, Final 2016 AQMP, March 2017, page ES-2.

³¹ SCAQMD, Final 2016 AQMP, March 2017, page ES-2.

³² SCAQMD, Final 2016 AQMP, March 2017, page 1-6.

8-hour ozone standard by 2037. However, the 2037 NO_x limit is 60 tons per day and emissions from federal and international sources are estimated to be 85 tons per day in 2037; thus, federal sources alone would emit more than the 60 tons per day limit in 2037. The SCAQMD and CARB cannot sufficiently reduce NO_x emissions to meet the standard without federal action.

As with the 2016 AQMP, the 2022 AQMP also notes that despite the projected growth in the region, air quality has improved substantially over the years. This is largely due to the effects of local, State and federal air quality control programs as described above. As seen in Figure 1-4 on page 1-9 of the AQMP, the percent change in air quality is shown along with demographic data for the 4-county region from the 2022 AQMP where in particular, the trends since 1995 of the 8-hour O₃ levels, the 1-hour O₃ levels, and annual average PM_{2.5} concentrations (since 2001), compared to the regional gross domestic product, total employment and population. In addition, the O₃ and particulate matter levels continue to trend downward as the economy and population increase, demonstrating that it is possible to maintain a healthy economy while improving public health through air quality improvements.³³

(a) *Criteria Pollutants*

The extent and severity of pollutant concentrations in the Air Basin are a function of the area's natural physical characteristics (weather and topography) and man-made influences (development patterns and lifestyle). Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, all affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential. The Air Basin's meteorological conditions, in combination with regional topography, are conducive to the formation and retention of ozone, which is a secondary pollutant that forms through photochemical reactions in the atmosphere. Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. **Table IV.A-2, *South Coast Air Basin Attainment Status (Los Angeles County)***, shows the attainment status of the Air Basin for each criteria pollutant with respect to the State and federal standards. The Air Basin is designated as attainment for the California standards for sulfates and unclassified for hydrogen sulfide and visibility-reducing particles.³⁴ The Air Basin is currently in non-attainment for O₃, PM₁₀, and PM_{2.5} under the CAAQS and O₃, and PM_{2.5} under the NAAQS. Since vinyl chloride is a carcinogenic toxic air contaminant, CARB does not classify attainment status for this pollutant. Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria.

³³ SCAQMD, Final 2022 AQMP, December 2022, page 1-9.

³⁴ Unclassified is the category designation of an area for a pollutant with insufficient data. CARB, Proposed 2017 Amendments to Area Designations for State Ambient Air Quality Standards, December 19, 2017 (release date).

TABLE IV.A-2
SOUTH COAST AIR BASIN ATTAINMENT STATUS (LOS ANGELES COUNTY)

Pollutant	National Standards (NAAQS)	California Standards (CAAQS)
O ₃ (1-hour standard)	N/A ^a	Non-attainment – Extreme
O ₃ (8-hour standard)	Non-attainment – Extreme	Non-attainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
PM ₁₀	Attainment	Non-attainment
PM _{2.5}	Non-attainment – Serious	Non-attainment
Lead (Pb)	Non-attainment (Partial) ^b	Attainment
Visibility Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment
Hydrogen Sulfide	N/A	Unclassified
Vinyl Chloride ^c	N/A	N/A

N/A = not applicable

^a The NAAQS for 1-hour ozone was revoked on June 15, 2005, for all areas except Early Action Compact areas.

^b Partial Non-attainment designation – Los Angeles County portion of the Air Basin only for near-source monitors.

^c In 1990, the California Air Resources Board identified vinyl chloride as a toxic air contaminant and determined that it does not have an identifiable threshold. Therefore, the California Air Resources Board does not monitor or make status designations for this pollutant.

SOURCE: USEPA, The Green Book Non-Attainment Areas for Criteria Pollutants, <https://www.epa.gov/green-book>, Green Book current as of January 31, 2020. Accessed October 1, 2020; CARB, Area Designations Maps/State and National, <https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations>, last reviewed October 24, 2019. Accessed October 1, 2020.

The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this is due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating.³⁵

As detailed in the AQMP, the major sources of air pollution in the Air Basin are divided into four major source classifications: point, area stationary sources, and on-road and off-road mobile sources. Point and area sources are the two major subcategories of stationary sources.³⁶ Point sources are permitted facilities that contain one or more emission sources at an identified location (e.g., power plants, refineries, emergency generator exhaust stacks). Area sources consist of many small emission sources (e.g.,

³⁵ SCAQMD, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

³⁶ SCAQMD, Final 2016 AQMP, March 2017, page 3-32.

water heaters, architectural coatings, consumer products, and fireplaces), which are distributed across the region. Mobile sources consist of two main subcategories: On-road sources (such as cars and trucks) and off-road sources (such as heavy construction equipment and landscaping equipment).

(b) *Toxic Air Contaminants*

In addition to criteria pollutants, the SCAQMD periodically assesses levels of TACs in the Air Basin. The greatest potential for TAC emissions during construction is related to 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.

In August 2021, the SCAQMD released the Final Multiple Air Toxics Exposure Study V (MATES V).³⁷ The MATES V study includes a fixed site monitoring program with 10 stations, an updated emissions inventory of TACs, and a modeling effort to characterize risk across the Air Basin. The purpose of the fixed site monitoring is to characterize long-term regional air toxics levels in residential and commercial areas. In addition to new measurements and updated modeling results, several key updates were implemented in MATES V. First, MATES V estimates cancer risks by taking into account multiple exposure pathways, which includes inhalation and non-inhalation pathways. This approach is consistent with how cancer risks are estimated in South Coast AQMD's programs such as permitting, Air Toxics Hot Spots (AB2588), and CEQA. Previous MATES studies quantified the cancer risks based on the inhalation pathway only. Second, along with cancer risk estimates, MATES V includes information on the chronic non-cancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic non-cancer risks from MATES II through IV measurements have been re-examined using current OEHHA and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time. This has led to a reduction of the Air Basin average air toxics cancer risk in MATES V of 455 in one million, compared to MATES IV of 997 in one million.³⁸ The key takeaways from the MATES V study: air toxics cancer risk has decreased by about 50 percent since MATES IV based on modeling data; MATES V Air Basin average multi-pathway air toxics cancer risk is 455 in one million, with the highest risk locations being in the Los Angeles International Airport, downtown and the ports areas; diesel particulate matter is the main risk driver for air toxics cancer risk; goods movement and transportation corridors have the highest air toxics

³⁷ SCAQMD, 2021. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin MATES V, August 23, 2021.

³⁸ SCAQMD, 2021. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin MATES V, August 2021.

cancer risks; and the chronic non-cancer risk was estimated for the first time with a chronic hazard index of approximately five to nine across all 10 fixed stations.^{39,40}

(2) Local Area Conditions

(a) Local Air Pollution Sources

The sources of air pollutant emissions in the Project Site area include stationary (point and area) sources and mobile sources. Point sources include boilers and fossil-fuel combustion equipment that produce energy or generate heat in surrounding commercial uses. Area sources include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources include vehicles traveling on local roadways.

(b) Existing Ambient Air Quality in the Surrounding Area

The SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient pollutant concentrations. The monitoring station most representative of the Project Site for ozone, NO₂, CO, SO₂, Pb, PM₁₀, and PM_{2.5} is the Central Los Angeles County Monitoring Station, located at 1630 North Main Street in Los Angeles as it is the SCAQMD monitoring station nearest to the Project Site that measures the ambient concentrations of these pollutants.⁴¹ The most recent data available from the SCAQMD for the Central Los Angeles County Monitoring Station are from years 2018 to 2020.⁴² The pollutant concentration data for these years are summarized in **Table IV.A-3, Ambient Air Quality in the Project Vicinity**. As shown in Table IV.A-3, the CAAQS and

³⁹ SCAQMD, 2021. Multiple Air Toxics Exposure Study V (MATES V): Overview of Results and Major Changes, MATES V Technical Advisory Group Meeting April 14, 2021. <http://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-tag-item2-overview.pdf?sfvrsn=12>, accessed May 25, 2021.

⁴⁰ Chronic non-cancer index is calculated by multiplying the annual average concentrations for each pollutant by the molecular weight adjustment factor and multi-pathway adjustment factor, and then dividing by the applicable chronic REL to determine a hazard quotient. The hazard quotients are then summed for each target organ for all applicable toxic substances, and the maximum hazard quotient from all the target organ is reported as the hazard index. A hazard index of less than one indicates that the levels of that pollutant (or group of pollutants) are unlikely to cause chronic non-cancer risk health effects for any of the target organs. A hazard index greater than one does not mean that adverse health effects will occur, but rather that the risk of chronic non-cancer health effects increases with increasing levels of the pollutant. SCAQMD, 2021. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin MATES V, Appendix I-2 April. <http://www.aqmd.gov/docs/default-source/planning/mates-v/mates-v-final-report.pdf?sfvrsn=4><http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>, accessed June 30, 2023.

⁴¹ SCAQMD, General Forecast Areas & Air Monitoring Areas, <http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf>, accessed October 1, 2020.

⁴² SCAQMD, Historical Data by Year, 2018–2020, <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year>, accessed February 4, 2022.

NAAQS were not exceeded in the Project Site vicinity for most pollutants between 2018 and 2020, except for O₃, PM₁₀, and PM_{2.5}.

**TABLE IV.A-3
AMBIENT AIR QUALITY IN THE PROJECT VICINITY**

Pollutant/Standard ^a	2018	2019	2020
Ozone, O₃ (1-hour)			
Maximum Concentration (ppm)	0.098	0.085	0.185
Days > CAAQS (0.09 ppm)	2	0	14
Ozone, O₃ (8-hour)			
Maximum Concentration (ppm)	0.073	0.080	0.118
4th High 8-hour Concentration (ppm)	0.071	0.065	0.093
Days > CAAQS (0.070 ppm)	4	2	22
Days > NAAQS (0.070 ppm)	4	2	22
Nitrogen Dioxide, NO₂ (1-hour)			
Maximum Concentration (ppm)	0.071	0.070	0.062
Days > CAAQS (0.18 ppm)	0	0	0
98th Percentile Concentration (ppm)	0.057	0.056	0.055
Days > NAAQS (0.100 ppm)	0	0	0
Nitrogen Dioxide, NO₂ (Annual)			
Annual Arithmetic Mean (0.030 ppm)	0.019	0.018	0.017
Carbon Monoxide, CO (1-hour)			
Maximum Concentration (ppm)	2.0	2.0	1.9
Days > CAAQS (20 ppm)	0	0	0
Days > NAAQS (35 ppm)	0	0	0
Carbon Monoxide, CO (8-hour)			
Maximum Concentration (ppm)	1.7	1.6	1.5
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9 ppm)	0	0	0
Sulfur Dioxide, SO₂ (1-hour)			
Maximum Concentration (ppm)	0.018	0.010	0.004
Days > CAAQS (0.25 ppm)	0	0	0
99th Percentile Concentration (ppm)	0.003	0.002	0.003
Days > NAAQS (0.075 ppm)	0	0	0
Sulfur Dioxide, SO₂ (24-hour)			
Maximum Concentration (ppm)	0.001	0.001	0.001
Days > CAAQS (0.04 ppm)	0	0	0

**TABLE IV.A-3
AMBIENT AIR QUALITY IN THE PROJECT VICINITY**

Pollutant/Standard ^a	2018	2019	2020
Respirable Particulate Matter, PM10 (24-hour)			
Maximum Concentration ($\mu\text{g}/\text{m}^3$)	81	62	77
Samples > CAAQS ($50 \mu\text{g}/\text{m}^3$)	31	3	24
Samples > NAAQS ($150 \mu\text{g}/\text{m}^3$)	0	0	0
Respirable Particulate Matter, PM10 (Annual)			
Annual Arithmetic Mean ($20 \mu\text{g}/\text{m}^3$)	34.1	25.5	23.0
Fine Particulate Matter, PM2.5 (24-hour)			
Maximum Concentration ($\mu\text{g}/\text{m}^3$)	43.8	43.5	47.3
98th Percentile Concentration ($\mu\text{g}/\text{m}^3$)	30.5	28.3	28.00
Samples > NAAQS ($35 \mu\text{g}/\text{m}^3$)	3	1	2
Fine Particulate Matter, PM2.5 (Annual)			
Annual Arithmetic Mean ($12 \mu\text{g}/\text{m}^3$)	12.6	10.9	12.3
Lead, Pb			
Maximum 30-day average ($\mu\text{g}/\text{m}^3$)	0.011	0.012	0.013
Samples > CAAQS ($1.5 \mu\text{g}/\text{m}^3$)	0	0	0
Maximum 3-month rolling average ($\mu\text{g}/\text{m}^3$)	0.010	0.010	0.011
Days > NAAQS ($0.15 \mu\text{g}/\text{m}^3$)	0	0	0

^a ppm = parts per million; $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter

SOURCE: SCAQMD, Historical Data by Year, <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year>; CARB, Air Quality Data Statistics, <http://www.arb.ca.gov/adam/>; USEPA, AirData, http://www.epa.gov/airdata/ad_rep_mon.html. Accessed February 4, 2022.

(c) Existing Health Risk in the Surrounding Area

The SCAQMD has prepared a series of maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps represent the estimated number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years). The background potential cancer risk per million people in the Project Site area using the updated OEHHA methodology is estimated at 791 in one million (compared to an overall Air Basin-wide risk of 455 in one million for the average of 10 fixed monitoring sites).⁴³ Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, rail yards and ports).

⁴³ SCAQMD, Multiple Air Toxics Exposure Study, MATES V Data Visualization Tool, Cancer Risk.

(d) Existing Site Emissions

The Project Site is currently occupied by cold storage facilities that include warehouse and industrial buildings and associated office space, truck loading docks, and surface parking. For purposes of this analysis, although the Project intends to retain and reuse one of the on-site structures (if feasible), all existing structures and facilities on the Project Site are conservatively assumed to be demolished and removed to allow for development of the Project. Existing site emissions are associated with vehicle trips to and from the Project Site, heavy-duty equipment and on-site combustion of fossil fuels for an existing emergency generator, on-site combustion of natural gas for heating, fugitive refrigerant emissions from coolers and freezers, and fugitive emissions of VOCs from the use of aerosol products and coatings.

California Emissions Estimator Model (CalEEMod Version 2022.1) software was used to estimate the existing site emissions from vehicle trips, natural gas appliances, and fugitive VOC emissions. Mobile source emissions have been estimated based on CARB's on-road vehicle emissions factor (EMFAC) model. In addition, emissions from transportation refrigeration units (TRUs) used to provide refrigeration for cargo transported by trucks were based on ten hours of TRU operation per truck per day and emission factors from the CARB OFFROAD model. The existing facility provided data on the proportion and types of delivery trucks (medium-duty and heavy-duty) that travel within the Southern California region, outside the Southern California region towards northern California, and outside of California. A detailed discussion of the methodology used to estimate the existing Project Site emissions is provided below. The existing Project Site emissions are summarized in **Table IV.A-4, Estimated Existing Site Regional Operational Emissions (Pounds Per Day)**. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

TABLE IV.A-4
EXISTING SITE OPERATIONAL EMISSIONS (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area	9	0	0	0	0	0
Energy (Natural Gas)	<1	2	2	<1	<1	<1
Motor Vehicles	4	79	42	<1	13	4
Delivery Truck TRUs	16	160	195	<1	5	5
Emergency Generators	1	11	10	<1	<1	<1
Total Existing Emissions	29	252	250	<1	18	9

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

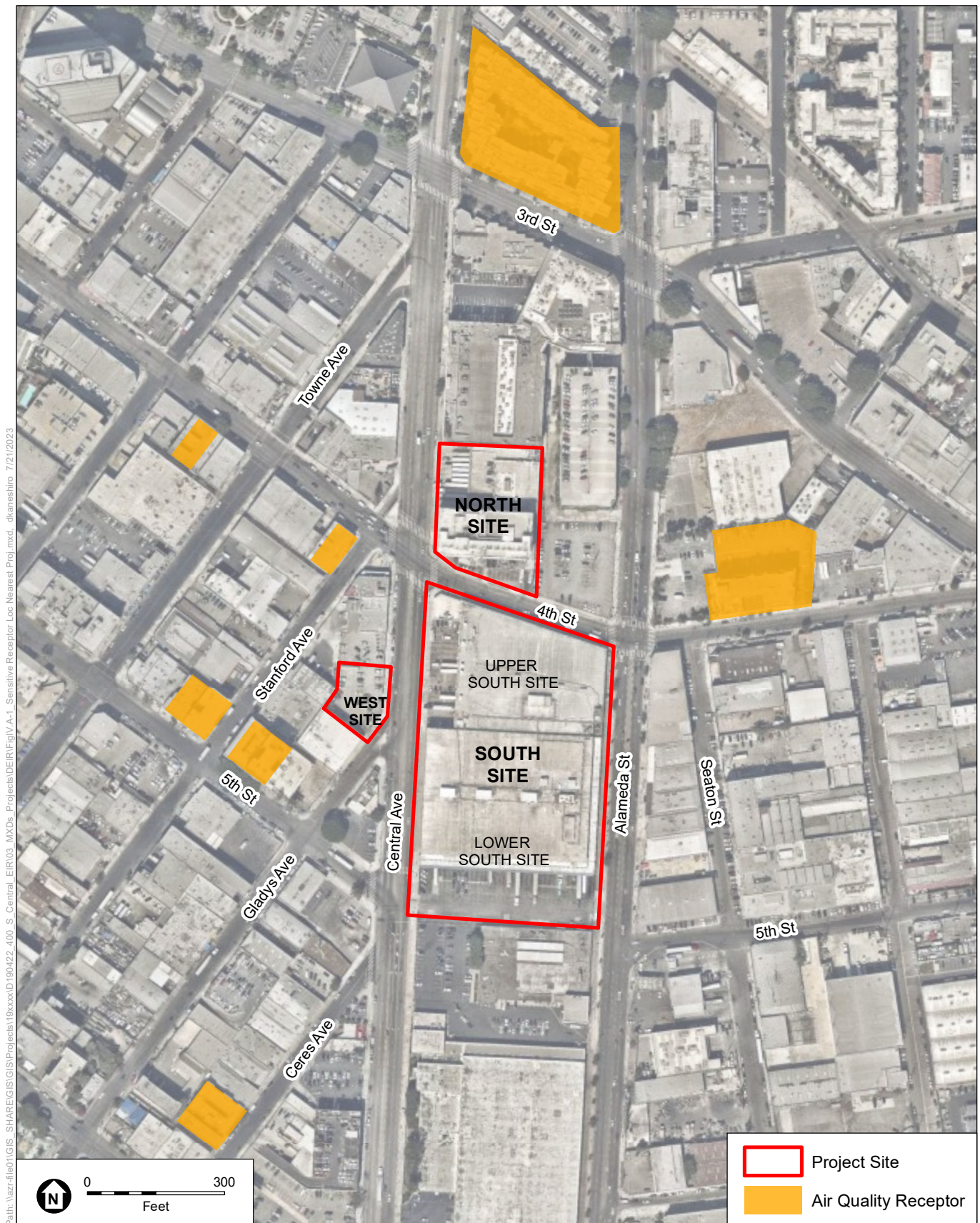
SOURCE: ESA, 2023.

(e) *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. The Project Site is primarily surrounded by general commercial and manufacturing uses such as wholesale, warehouse, and food processing facilities, as well as air quality-sensitive land uses (i.e., multi-family residential) in the vicinity of the Project Site, as shown in **Figure IV.A-1, Sensitive Receptor Locations Nearest to the Project Site**. The closest air quality-sensitive receptors to the Project Site include the multi-family residential uses along 4th Street to the east of the Project Site across South Alameda Street, approximately 250 feet east from the South Site, 430 feet east from the North Site, and 750 feet east from the West Site, the multi-family uses along 4th Street to the west of the Project Site across Stanford Ave, approximately 175 feet west from the North Site, 200 feet west from the South Site, and 210 feet north from the West Site, and the multi-family residential uses to the west of the Project Site at the northeast corner of 5th street and Stanford Avenue, approximately 120 feet west from the West Site, approximately 275 feet west from the South Site, and approximately 515 feet southwest of the North Site. All other air quality-sensitive uses are located at greater distances from the Project Site and would experience lower air pollutant impacts from potential sources of pollutants from the Project Site due to atmospheric dispersion effects.

(f) *Project Location and Surrounding Land Uses*

The North Site and a surface parking lot are located to the north of 4th Street. A three-story commercial shopping center (Little Tokyo Market Place) is located directly north of the Project North Site. A six-story parking structure and surface parking lot are located directly east of the North Site. The South Site is located south of 4th Street between Central Avenue and Alameda Street. A mix of one to three-story warehouse/light manufacturing and commercial uses are located east and west of the South Site, across Central Avenue and Alameda Street, respectively. Directly south of the South Site is a low-rise distribution center (Young's Market) and associated parking and loading dock areas. The West Site is located at the intersection of Central Avenue and Gladys Avenue. The West Site is adjacent to low-rise warehouse/light manufacturing and supporting surface parking. The Project Site is located adjacent to the Arts District, which is an emerging neighborhood in the City's Downtown area and has experienced an increased demand for new retail, hotel, creative office, and residential spaces. The Project Site is also situated just south of the Little Tokyo neighborhood, where numerous former warehouse structures are being converted to artists' workshops, live-work spaces, and neighborhood-serving retail and commercial uses.



SOURCE: ESRI Imagery.

Fourth & Central Project

Figure IV.A-1
Sensitive Receptor Locations Nearest to the Project Site

3. Project Impacts

a) Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, a 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 City's 2006 L.A. CEQA Thresholds Guide, as appropriate, to assist in answering the Appendix G Threshold questions. The factors to evaluate air quality impacts are listed below.

- 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.

While these factors are important inputs in determining the amounts and nature of air pollution emissions generated by a project during construction, construction air quality emissions are evaluated in consideration of the thresholds set forth by the SCAQMD. Pursuant to the CEQA Guidelines (Section 15064.7), a lead agency may consider using, when available, significance thresholds established by the applicable air quality management district or air pollution control district when making determinations of significance. For purposes of this analysis, the City has determined to assess the potential air quality impacts of the Project in accordance with the latest thresholds adopted by the SCAQMD in connection with its CEQA Air Quality Handbook, Air Quality Analysis Guidance Handbook, and subsequent SCAQMD guidance, as discussed below, and this assessment satisfies the considerations raised in the 2006 L.A. CEQA Thresholds Guide. While the SCAQMD CEQA Air Quality Handbook contains significance thresholds for lead, Project construction and operation would not include sources of lead emissions and would therefore not exceed the significance thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from mixed-use land use projects such as the Project. As a result, lead emissions are not further evaluated in this Draft EIR.

Consistency with Applicable Air Quality Plans. CEQA Guidelines Section 15125 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 2016 AQMP, 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.

The Project's potential impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD's 2016 AQMP, 2022 AQMP, and applicable City Air Quality Element plans and policies.

Construction and Operational Emission Air Quality Standards. A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or State non-attainment pollutant. The Air Basin is currently in non-attainment for O₃, PM₁₀, and PM_{2.5}. SCAQMD methodology recommends that significance thresholds be used to

determine the potential cumulative impacts to regional air quality along with a project's consistency with the current AQMP.

The SCAQMD has established numerical significance thresholds for construction and operational activities. The numerical thresholds 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.⁴⁴ Given that construction impacts are temporary and limited to the construction phase, the SCAQMD has established numerical significance thresholds specific to construction activity. Based on the thresholds in the SCAQMD CEQA Air Quality Handbook,⁴⁵ the Project would potentially result in a significant impact of a federal or State non-attainment pollutant if emissions of O₃ precursors (VOC and NO_x), PM₁₀, or PM_{2.5} would exceed the values shown in **Table IV.A-5, SCAQMD Regional Emissions Thresholds**.

TABLE IV.A-5
SCAQMD REGIONAL EMISSIONS THRESHOLDS (POUNDS PER DAY)

Activity	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Construction	75	100	550	150	150	55
Operations	55	55	550	150	150	55

SOURCE: SCAQMD, Air Quality Significance Thresholds, April 2019.

Localized Emission Impacts on Sensitive Receptors. In addition, the SCAQMD has developed a methodology to assess the potential for localized 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 NO_x and/or CO during construction or operation are 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 NO₂ and/or CO.⁴⁶
- Maximum daily localized emissions of PM₁₀ and/or PM_{2.5} during construction are 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).
- Maximum daily localized emissions of PM₁₀ and/or PM_{2.5} during operation are greater than the applicable localized significance thresholds, resulting in predicted

⁴⁴ SCAQMD, CEQA Air Quality Handbook, April 1993.

⁴⁵ SCAQMD, Air Quality Significance Thresholds, April 2019.

⁴⁶ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

ambient concentrations in the vicinity of the Project Site to exceed $2.5 \mu\text{g}/\text{m}^3$ over 24 hours (SCAQMD Rule 1303 allowable change in concentration).

- The following conditions would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:
 - The Project would cause or contribute to an exceedance of the CAAQS 1-hour or 8-hour CO standards of 20 or 9.0 parts per million (ppm), respectively.
 - Where the CO standard is exceeded at the intersection, the Project would result in a significant impact if 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 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.⁴⁷ This analysis uses the screening criteria to evaluate impacts from localized emissions where applicable.

Toxic Air Contaminants and Sensitive Receptors. Based on the SCAQMD thresholds, the Project would cause a significant impact by exposing sensitive receptors to toxic air contaminants if any of the following would occur:⁴⁸

- The Project emits carcinogenic materials or TACs that exceed the maximum incremental cancer risk of ten in one million or a cancer burden greater than 0.5 excess cancer cases (in areas greater than or equal to 1 in 1 million) or an acute or chronic hazard index of 1.0.

Objectionable Odors and Other Emissions. With respect to other emissions, such as odors, the Project's impacts would be considered significant if it created objectionable odors affecting a substantial number of people. In addition, based on the thresholds in the SCAQMD CEQA Air Quality Handbook,⁴⁹ the Project would potentially result in a significant impact for other emissions of an attainment, maintenance, or unclassified pollutant if emissions of CO or SO₂ would exceed the values shown in Table IV.A-5.

b) Methodology

The evaluation of potential impacts to regional and local air quality that may result from the construction and long-term operations of the Project is discussed below. Additional details are provided in the *Air Quality and Greenhouse Gas Technical Appendix* in Appendix B of this Draft EIR.

⁴⁷ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

⁴⁸ SCAQMD, CEQA Air Quality Handbook, April 1993.

⁴⁹ SCAQMD, Air Quality Significance Thresholds, April 2019.

(1) SCAQMD Air Quality Guidance Documents

The SCAQMD published the CEQA Air Quality Handbook to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.⁵⁰ The CEQA Air Quality Handbook provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. SCAQMD is currently in the process of replacing the CEQA Air Quality Handbook with the Air Quality Analysis Guidance Handbook.

Supplemental guidance/information to assist lead agencies is provided on the SCAQMD website (www.aqmd.gov/ceqa/hdbk.html) and includes: (1) Emission FACTor model (EMFAC) on-road vehicle emission factors; (2) background CO concentrations; (3) localized significance thresholds; (4) mitigation measures and control efficiencies; (5) mobile source toxics analysis; (6) off-road mobile source emission factors; (7) PM_{2.5} significance thresholds and calculation methodology; and (8) updated SCAQMD Air Quality Significance Thresholds. The SCAQMD also recommends using approved models to calculate emissions from land use projects, such as the CalEEMod software, which is a model developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts. CalEEMod is 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 from a variety of land use projects.

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.⁵¹ The SCAQMD adopted additional guidance regarding PM_{2.5} emissions in a document called Final Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds.⁵² This latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and Final Localized Significance Threshold Methodology.

(2) Conflict with Air Quality Management Plan

The SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the Air Basin is in non-attainment of the NAAQS (e.g., O₃ and PM_{2.5}).⁵³ The SCAQMD's 2016 and 2022 AQMP contains a comprehensive list of pollution control

⁵⁰ SCAQMD, CEQA Air Quality Handbook, April 1993.

⁵¹ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

⁵² SCAQMD, Final Methodology to Calculate Particulate Matter (PM)_{2.5} and PM_{2.5} Significance Thresholds, 2006.

⁵³ The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating. For reference see South Coast Air Quality Management District, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

strategies directed at reducing emissions and achieving the five NAAQS related to these pollutants, including transportation control strategies from SCAG's 2016–2040 RTP/SCS designed to reduce VMT.⁵⁴ The 2016 and 2022 AQMP control strategies were developed, in part, based on regional growth projections prepared by SCAG through 2045.⁵⁵ For this reason, projects whose growth is consistent with the assumptions used in the 2016–2040 and 2020–2045 RTP/SCS will be deemed to be consistent with, and therefore not conflict with, nor obstruct implementation of, the 2016 and 2022 AQMPs because their growth has already been included in the growth projections utilized in the formulation of the control strategies in the 2016 and 2022 AQMPs. Thus, emissions from projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the 2016 and 2022 AQMPs would not jeopardize attainment of the air pollutant reduction goals identified in the AQMPs even if their emissions exceed the SCAQMD thresholds of significance.⁵⁶ As noted above, the 2016 and 2022 AQMPs have been adopted by the SCAQMD and CARB. Therefore, this analysis considers whether the Project (see Chapter II, *Project Description*, of this Draft EIR for additional details) would conflict with the 2016 and 2022 AQMP based on the Project's consistency with applicable growth projections and emission control strategies.

(3) Conflict with General Plan – Air Quality Element

As discussed previously, the City's Air Quality Element includes Citywide goals, objectives, and policies that guide the City in the implementation of its air quality improvement programs and strategies. Goals, objectives, and policies of the Air Quality Element relevant to the Project include minimizing traffic congestion and increasing energy efficiency, as well as reducing air pollutant emissions consistent with the AQMP. The analysis below provides a side-by-side comparison of each of the relevant provisions in the Air Quality Element with the Project to determine whether the Project would be consistent with, and therefore not conflict with, or obstruct implementation of, those provisions.

(4) Existing Project Site Emissions

Existing operational site emissions were estimated using CalEEMod Version 2022.1, as described below. For purposes of this analysis, although the Project intends to retain and reuse one of the on-site structures (if feasible), all existing structures and facilities on the Project Site are conservatively assumed to be demolished and removed to allow for development of the Project. Existing site emissions are associated with vehicle trips to and from the Project Site, on-site combustion of fossil fuels for an existing emergency generator, on-site combustion of natural gas for heating, fugitive refrigerant emissions from coolers and freezers, and fugitive emissions of VOCs from the use of aerosol

⁵⁴ SCAQMD, 2016 AQMP, March 2017, pages ES-6 and 4-42; SCAQMD, Final 2022 AQMP, December 2022, pp. ES-5 and 4-51.

⁵⁵ SCAQMD, 2016 AQMP, March 2017, pages 4-42 to 4-44; SCAQMD, Final 2022 AQMP, December 2022, pp. 4-51 to 4-54.

⁵⁶ SCAQMD, CEQA Air Quality Handbook, April 1993, page 12-1.

products and coatings. For mobile sources, the vehicle trips and VMT were obtained for the existing uses from the Project's Transportation Assessment (TA), which incorporates the City's VMT analysis procedures and Transportation Assessment Guidelines and emission factors from the CARB on-road vehicle emissions factor (EMFAC2021) model.⁵⁷ In addition, emissions from transportation refrigeration units (TRUs) used to provide refrigeration for cargo transported by trucks were based on ten hours of TRU operation per truck per day and emission factors from the CARB off-road (OFFROAD) emissions factor model.

As discussed in the CalEEMod User's Guide, emissions from on-site natural gas combustion were based on usage data from the based on data from the CEC's (2020, 2021) 2018–2030 Uncalibrated Commercial Sector Forecast (Commercial Forecast) and the 2019 Residential Appliance Saturation Survey (RASS).⁵⁸

(5) Construction Emissions Methodology

Construction air quality impacts were assessed based on the incremental increase in emissions compared to baseline conditions. Under CEQA, the baseline environmental setting for an EIR is generally established at or around the time that the Notice of Preparation (NOP) for the EIR is published.⁵⁹

Project construction activities that would have the potential to create regional air quality impacts include vehicle trips generated by construction workers, vendor trucks, and haul trucks traveling to and from the Project Site and building activities, such as the application of paint and other surface coatings. The Project's daily regional criteria pollutant emissions during construction have been estimated by assuming a conservative scenario for construction activities (i.e., assuming all construction occurs at the earliest feasible date, given that regulatory requirements will improve future emissions associated with fleet, vehicle, and equipment mixes) and applying the mobile source and fugitive dust emissions factors. The emissions have been estimated using the CalEEMod software (Version 2022.1), an emissions inventory software program recommended by the SCAQMD, and the CARB on-road vehicle EMFAC2021 model. The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule based on information provided by the Project's architectural and engineering representatives. When information was unknown, CalEEMod defaults were used. Emissions from off-road equipment and off-road vehicles were estimated through CalEEMod since CalEEMod is based on outputs from the CARB off-road emissions factor (OFFROAD), which is the emissions estimation model developed by CARB and used to calculate emissions from construction activities, including off-road vehicles. Worker trip, concrete truck, vendor truck and haul truck trip estimates were provided by the Project's

⁵⁷ Gibson Transportation Consulting, Inc., Transportation Assessment for the Fourth & Central Project, June 2022. Provided in Appendix J of the Project's Draft EIR.

⁵⁸ https://caleemod.com/documents/user-guide/01_User%20Guide.pdf

⁵⁹ Fourth & Central Project Notice of Preparation was published on March 10, 2022.

construction representative. Emissions from construction vehicles including worker vehicles, haul trucks, vendor trucks, and concrete trucks were also estimated outside of CalEEMod using EMFAC2021 emission factors for haul, vendor and concrete trucks because CalEEMod assumes that the number of heavy-duty trucks input into the model occurs across the entire length of the applicable construction phases. However, since the applicable construction phases would not have the same number of haul trucks, vendor trucks, and concrete trucks on-site every day within each particular phase, the emissions calculations performed outside of CalEEMod are able to account for the varying maximum numbers of daily haul truck and concrete truck trips within each of the demolition, site preparation, grading/excavation, foundations/concrete pour, and building construction phases. Haul truck trip estimates were based on excavation volumes obtained from the Project's architectural and engineering representatives and 10 cubic yard soil capacity haul trucks for demolition phases and for the grading/excavation phases; cement truck trip estimates were based on the Project's engineering representative and 10 cubic yard concrete capacity concrete trucks. Emissions from worker trips, haul truck trips, concrete truck trips, and vendor truck trips were estimated using the CARB EMFAC2021 model. These values were applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. The Project would export approximately 651,000 cubic yards (CY) of grading (cut), including 105,000 CY within the North Site, 534,000 CY in the South Site and 12,000 CY in the West Site, all of which would be exported from the Project Site. Emissions from these activities were estimated by construction phase. The maximum daily emissions were estimated based on maximum construction activity conditions for heavy-duty off-road construction equipment and on-road mobile sources and do not represent the emissions that would occur every day during Project construction. The maximum daily emissions were compared to the SCAQMD daily regional thresholds of significance. A detailed discussion of the Project's construction phasing and equipment list is available in the *Technical Appendix for Air Quality and Greenhouse Gas Emissions* for the Project, which is provided in Appendix B of this Draft EIR.⁶⁰

Project construction activities that would have the potential to create local air quality impacts include fugitive dust from demolition, grading, and building activities, such as the application of paint and other surface coatings. The localized effects from the on-site portion of the Project's construction emissions were evaluated at the nearby sensitive receptor locations that would be potentially impacted by Project construction in accordance with the SCAQMD's *Final Localized Significance Threshold Methodology*.⁶¹ The localized significance thresholds only address NO_x, CO, PM₁₀, and PM_{2.5} emissions. 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

⁶⁰ Impacts from asbestos and lead-based paint from Project demolition are expected to be less than significant with compliance with regulations. For additional details please refer to the Project's Initial Study, included in Appendix A of this Draft EIR.

⁶¹ SCAQMD, *Final Localized Significance Threshold Methodology*, June 2003 and revised July 2008.

applicable ambient air quality standards without the need for Project-specific dispersion modeling. The localized analysis for the Project is based on this SCAQMD screening criteria. The Project Site is located within the boundaries of the Central City Community Plan and as described in Chapter II, *Project Description*, is approximately 7.6 acres in size, where the Project Site is comprised of the following areas: North Site (1.35 acres) located at the northeast corner of 4th Street and Central Avenue; South Site (5.98 acres) located south of 4th Street between Central Avenue and Alameda Street; and West Site (0.32 acres) located at the northwestern intersection of Gladys Avenue and Central Avenue. If the average of a site was between one acre and two acres or between two acres and five acres, the thresholds were interpolated to match the specific acreage of each individual site. The North, South and West Sites are located in the Central Los Angeles County area with sensitive receptors located 50 meters away for the South Site, 50 meters away for the North Site, and 25 meters away for the West Site.⁶² The total Project Site (i.e. the sum of overlapping construction phases between Project sites) was also conservatively evaluated using the thresholds for a 5-acre site and for a sensitive receptor assumed to be located 25 meters from the Project Site.⁶³

The closest air quality-sensitive receptors to the Project Site include the multi-family residential uses along 4th Street to the east of the Project Site across South Alameda Street, approximately 250 feet east from the South Site, 430 feet east from the North Site, and 750 feet east from the West Site, the multi-family uses along 4th Street to the west of the Project Site across Stanford Ave, approximately 175 feet west from the North Site, 200 feet west from the South Site, and 210 feet north from the West Site, and the multi-family residential uses to the west of the Project Site at the northeast corner of 5th street and Stanford Avenue, approximately 120 feet west from the West Site, approximately 275 feet west from the South Site, and approximately, 515 feet southwest of the North Site. The analysis uses Project Site-specific screening criteria based on the acreage and distance to the nearest sensitive receptor for the North Site, Upper South Site, Lower South Site, and West Site.

Project construction is estimated to start in 2025 and end in 2029 under the most intensive schedule with overlapping construction on all the sites but may commence at a later date. If this occurs, construction impacts would be lower than those analyzed below due to the use of a more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment (see Subsection IV.A.2.b)(2)(b), *On-Road and Off-Road Vehicle*

⁶² SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008, page 3-3. "Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters."

⁶³ For any park zones greater than five acres, using the screening criteria applicable for a five-acre site is conservative because the localized significance thresholds are project site dependent and the allowable thresholds increase with increasing project size. Therefore, using a five-acre site threshold instead of the acreage for the larger Project park zones and for the acreage for the groupings of park zones that would be constructed simultaneously that are larger than five acres yields a more stringent analysis.

Rules, for additional details). As a result, should Project construction commence at a later date than analyzed in this Draft EIR, air quality impacts would be lower than the impacts disclosed herein.

(6) Operational Emissions Methodology

Project operational emissions were estimated using CalEEMod Version 2022.1 to forecast the daily regional criteria pollutant emissions from on-site area and stationary sources that would occur during long-term Project operations.

Operation of the Project has the potential to generate criteria pollutant emissions through vehicle and truck trips traveling to and from the Project Site. For mobile sources, the estimated vehicle trips and maximum daily VMT were provided for the Project uses in the Project's TA where the VMT analysis used the City's VMT analysis procedures and Transportation Assessment Guidelines.⁶⁴ Therefore, the Project's mobile source operational emissions represent a maximum day with the highest estimated VMT. The EMFAC2021 model was run in the emissions mode (also referred to as the "Burden" mode) and used to generate Air Basin-specific vehicle fleet emission factors in units of grams or metric tons per mile. These emission factors were then applied to the daily VMT to obtain daily mobile source emissions. The Project's operational emissions were estimated using the CalEEMod software. CalEEMod was used to forecast the daily regional criteria pollutant emissions from on-site areas and stationary sources that would occur during long-term Project operations. Emissions would result from area sources located on-site, such as landscaping equipment, architectural coating, and use of consumer products. The Project is not expected to contain any large stationary combustion equipment, such as large boilers or combustion turbines. The Project buildings would be all-electric and would not use any natural gas, supporting local and State sustainability goals and decarbonization strategies consistent with the City's All - Electric Building Ordinance and CARB's 2022 Climate Change Scoping Plan for Achieving Carbon Neutrality (see Section IV.E, *Greenhouse Gas Emissions*, of this Draft EIR for additional details). Accordingly, natural gas would not be supplied to support proposed Project operational activities related to building energy. The Project would not result in installation of any new natural gas infrastructure. While building electrification would result in higher electricity usage, it would eliminate the use of a fossil fuel and the associated criteria pollutant emissions (i.e., natural gas combustion) from building energy demand.

Stationary-source emissions are estimated separately outside of the CalEEMod software as certain stationary sources, such as restaurant charbroilers, are not accounted for in CalEEMod. Stationary sources may include charbroiling of meat that may occur on-site during food preparation activities in a restaurant kitchen. Charbroiling emissions are calculated based on emissions factors available from the SCAQMD. In order to provide a conservative analysis, it was assumed that the restaurant uses would charbroil meat with

⁶⁴ Gibson Transportation Consulting, Inc., Transportation Assessment for the Fourth & Central Project, June 2022. Provided in Appendix J of the Project's Draft EIR.

relatively high emission factors (i.e., hamburger meat and chicken). The quantity of meat charbroiled in the restaurant uses are based on survey data from the SCAQMD and San Joaquin Valley Air Pollution Control District. The estimated emissions account for reductions from compliance with emissions control requirements consistent with SCAQMD Rule 1138.

Stationary sources would also include emergency generators with one emergency generator in Building 2 on the North Site with an estimated capacity rated at approximately 2,500 kilowatts (3,353 horsepower), two emergency generators shared between Buildings 3, 4 and 5 on the South Site with an estimated capacity rated at approximately 1,500 kilowatts (2,012 horsepower) each, two emergency generators shared between Buildings 6, 7, 8 and 9 on the South Site with an estimated capacity rated at approximately 2,000 kilowatts (2,682 horsepower) each, one emergency generator in Building 10 on the West Site with an estimated capacity rated at approximately 1,500 kilowatts (2,012 horsepower), which would provide emergency power primarily for lighting and other emergency building systems. The emergency generators would result in emissions during maintenance and testing operations. Emergency generators are permitted by the SCAQMD and regulated under SCAQMD Rule 1470. Maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year per Rule 1470. For the purpose of estimating maximum daily emissions, it is estimated that the emergency generators would operate for up to two hours a day for maintenance and testing purposes.

Stationary sources would also include on-site cooling towers to assist in dissipating heat from commercial processes, such as commercial heating, ventilation and air conditioning (HVAC) systems, of the Project. The Project's cooling towers emissions were estimated separately outside of the CalEEMod software. To estimate daily emissions, particulate matter emission factors for wet cooling towers calculated by the USEPA were used, conservatively assuming the cooling towers would operate 24 hours a day, every day of the year.⁶⁵

Operational air quality impacts were assessed based on the incremental increase in emissions compared to baseline conditions. As noted above, under CEQA, the baseline environmental setting for an EIR is generally established at or around the time that the NOP for the EIR is published. As discussed previously, the Project Site is currently occupied by cold storage facilities that include warehouse and wholesale commercial buildings and associated office space, truck loading docks, and surface parking. The existing buildings on the Project Site total approximately 360,734 sf of floor area. Existing site emissions are associated with vehicle trips to and from the Project Site, on-site combustion of fossil fuels for an existing emergency generator, on-site combustion of natural gas for heating, fugitive refrigerant emissions from coolers and freezers, and fugitive emissions of VOCs from the use of aerosol products and coatings. Therefore, the net change in operational emissions is based on the difference between the existing Project Site emissions and the emissions of the Project Site at full buildout. The maximum

⁶⁵ USEPA, Air Pollutant Factors (AP-42), Fifth Edition, Volume I - Chapter 13.4: Wet Cooling Towers.

daily net emissions from operation of the Project are compared to the SCAQMD daily regional significance thresholds.

The localized effects from the on-site portion of the maximum daily net emissions from Project operation were evaluated at the nearby sensitive receptor locations that would be potentially impacted by operation of the Project according to the SCAQMD's *Final Localized Significance Threshold Methodology*.⁶⁶ The localized impacts from operation of the Project were assessed similar to the construction emissions, as discussed previously. For further explanation, please see the *Air Quality and Greenhouse Gas Emissions Technical Documentation* in Appendix B of this Draft EIR.

Project operation is conservatively estimated at the earliest feasible year after construction (i.e., 2030) but may commence at a later date. If the onset of Project operations is delayed to a later date than assumed in the modeling analysis, operational impacts would be less than those analyzed here in 2030 due to the improving vehicle technology that would be more fuel-efficient and lead to a cleaner vehicle fleet mix traveling to and from the Project Site as reflected in EMFAC mobile source emission factors. As a result, Project buildout at a later date than analyzed in emissions modeling would result in air quality emission impacts that would be lower than the impacts disclosed herein.

(7) Localized Emissions

The localized effects from the on-site portion of the maximum daily emissions from Project operation were evaluated at the nearby sensitive receptor locations that would be potentially impacted by operation of the Project according to the SCAQMD's *Final Localized Significance Threshold Methodology*.⁶⁷ The localized impacts from operation of the Project were assessed similar to the construction emissions, as discussed previously. For further explanation, please see Appendix B of this Draft EIR.

(8) CO Hotspots

The greatest quantities of CO are produced from motor vehicle combustion and are usually concentrated at or near ground level because they do not readily disperse into the atmosphere, particularly under cool, stable (i.e., low or no wind) atmospheric conditions. Localized areas where ambient concentrations exceed State and/or federal standards are termed "CO hotspots." The potential for the Project to cause or contribute to the formation of off-site CO hotspots was evaluated based on prior dispersion modeling of the four busiest intersections in the Air Basin that the SCAQMD conducted for its CO Attainment Demonstration Plan in the AQMP. The analysis compares the intersections with the greatest peak-hour traffic volumes that would be impacted by the Project to the intersections modeled by the SCAQMD. Project-impacted intersections with peak-hour traffic volumes that would be lower than the intersections modeled by the SCAQMD, in

⁶⁶ SCAQMD, *Final Localized Significance Threshold Methodology*, June 2003 and revised July 2008.

⁶⁷ SCAQMD, *Final Localized Significance Threshold Methodology*, June 2003 and revised July 2008.

conjunction with lower background CO levels, would result in lower overall CO concentrations as compared to the SCAQMD-modeled values to maintain attainment status in its AQMP.

(9) Toxic Air Contaminant Impacts (Construction and Operations)

The greatest potential for TAC emissions during construction would be related to DPM emissions associated with heavy-duty equipment during excavation and grading, and other construction activities. Construction activities associated with the Project would be sporadic, transitory, and short-term in nature (approximately 56 months). As further described below, the City is not required to conduct a quantified health risk assessment (HRA) for mixed-use development projects that include multi-family housing, office, retail, hotel and restaurant uses, such as the Project, as the applicable standards and guidance that are available are intended for evaluation of health risks associated with stationary long-term sources of TAC emissions. Rather than being a stationary source of TAC emissions, the Project's emissions are largely from mobile sources, and, while the Project would generate localized TAC emissions during construction, the associated activities and exposures would be short-term rather than long-term.

The OEHHA developed the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (Guidance Manual),⁶⁸ in conjunction with CARB, for use in implementing the Air Toxics "Hot Spots" Program (Health and Safety Code Section 44360 et. seq.). The Air Toxics "Hot Spots" Program requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. The intent in developing the Guidance Manual was to provide HRA procedures for use in the Air Toxics Hot Spots Program or for the permitting of new or modified stationary sources.

Although the HRA guidelines are intended for assessment of long-term stationary sources, in relation to assessment of health risk due to short-term construction, the Guidance Manual states:

"The local air pollution control districts sometimes use the risk assessment guidelines for the Hot Spots program in permitting decisions for short-term projects such as construction or waste site remediation. Frequently, the issue of how to address cancer risks from short-term projects arises. Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is

⁶⁸ Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, February 2015.

considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime.”⁶⁹

The Project is not a “Hot Spots” Program project but rather involves the construction and operation of a mixed-use development that includes multi-family housing, office, retail, hotel and restaurant uses. The OEHHA Guidance Manual applies to stationary source operations which have no applicability to mixed-use projects that consist of residential, hotel, retail, office, and restaurant uses, such as the Project. While OEHHA provides limited guidance on how to conduct HRAs for short-term projects, it makes it clear there is “considerable uncertainty” in evaluating cancer risk over short-term durations. In addition, the Guidance Manual does not identify short-term projects or non-stationary source projects that warrant the preparation of a HRA or recommend the preparation of HRAs for short-term construction projects or non-stationary source projects, such as the Project.

In addition to OEHHA highlighting the considerable uncertainty in meaningfully evaluating short term exposures to TACs, with respect to construction emissions, the SCAQMD states that it “currently does not have guidance on construction Health Risk Assessments.”⁷⁰ Furthermore, in comments presented to the SCAQMD Governing Board⁷¹ relating to TAC exposures associated with Rules 1401, 1401.1, 1402 and 212 revisions, with regard to the use of the OEHHA Guidance Manual for projects subject to CEQA, SCAQMD staff reported that:

The Proposed Amended Rules are separate from the CEQA significance thresholds. Per the Response to Comments Staff Report PAR 1401, 1401.1, 1402, and 212 A—(8 June 2015), SCAQMD staff is currently evaluating how to implement the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will evaluate a variety of options on how to evaluate health risks under the Revised OEHHA Guidelines under CEQA. The SCAQMD staff will conduct public workshops to gather input before bringing recommendations to the Governing Board.

⁶⁹ Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, February 2015, page 8-17.

⁷⁰ South Coast Air Quality Management District, Final Environmental Assessment for: Proposed Amended Rule 307.1 – Alternative Fees for Air Toxics Emissions Inventory; Proposed Amended Rule 1401 – New Source Review of Toxic Air Contaminants; Proposed Amended Rule 1402 – Control of Toxic Air Contaminants from Existing Sources; SCAQMD Public Notification Procedures for Facilities Under the Air Toxics “Hot Spots” Information and Assessment Act (AB 2588) and Rule 1402; and, SCAQMD Guidelines for Participating in the Rule 1402 Voluntary Risk, page 2-23, September 2016. The SCAQMD only applies the revised OEHHA Guidelines for operational impacts at stationary industrial source facilities that are in the AB 2588 Air Toxics Hot Spots program, which does not apply to the Project.

⁷¹ SCAQMD, Board Meeting, Agenda No. 28, Proposed Amended Rules 1401 – New Source Review of Toxic Air Contaminants, 1401.1 – Requirements for New and Relocated Facilities Near Schools, Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, and 212 – Standards for Approving Permits and Issuing Public Notice, June 5, 2015.

To date, the SCAQMD has not conducted public workshops nor developed policies relating to the applicability of applying the Guidance Manual for projects prepared by other public/lead agencies subject to CEQA, for short-term construction emissions, or for mixed-use development projects that include multi-family housing, office, retail, hotel and restaurant uses, such as the Project. Therefore, in light of the considerable uncertainty and lack of accepted guidance for assessing short-term construction emissions from OEHHHA and SCAQMD, the City does not require that a quantified HRA be prepared for the Project for purposes of CEQA compliance. Based on the above, a qualitative analysis is appropriate for assessing the Project's construction emissions.

During long-term operations, TACs could be emitted as part of periodic maintenance operations, from routine cleaning, from periodic painting, etc., and from periodic visits from delivery trucks and service vehicles. However, these events are expected to be occasional and result in minimal emissions exposure to off-site sensitive receptors. As the Project consists of multi-family housing, office, retail, hotel and restaurant uses, the Project would not include sources of substantial TAC emissions identified by the SCAQMD or CARB siting recommendations.^{72,73} Thus, a qualitative analysis is appropriate for assessing the Project's operational emissions. The siting of the Project itself in relation to off-site sources of TACs is addressed under land use compatibility for the surrounding area in Section IIV.G, *Land Use and Planning*, of this Draft EIR.

c) Project Design Features

The following Project Design Feature related to air quality emissions would be implemented as part of the Project:

AQ-PDF-1: Construction Power Pole Usage. The Project contractor(s) will use electricity from power poles (where available) and/or solar-powered generators rather than temporary diesel or gasoline generators during construction.

d) Analysis of Project Impacts

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

(1) Impact Analysis

(a) SCAQMD CEQA Air Quality Handbook Policy Analysis

The following analysis addresses the Project's consistency with applicable SCAQMD and SCAG policies, inclusive of regulatory compliance. In accordance with SCAQMD's CEQA

⁷² SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, 2005, Table 2-3.

⁷³ CARB, Air Quality and Land Use Handbook: A Community Health Perspective, 2005, Table 1-1.

Air Quality Handbook, Chapter 12, the following criteria are required to be addressed to determine the Project's consistency with applicable SCAQMD and SCAG policies:

- 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;
 - 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 2016 AQMP, 2022 AQMP, and applicable City Air Quality Element plans and policies.

(i) Criterion 1

With respect to the first criterion, as discussed in more detail under the analysis for Threshold (b) below, regional concentrations of NO₂ as NO_x, VOC, SO₂, CO, PM₁₀, and PM_{2.5} have been analyzed for the Project. As shown in Tables IV.A-7 through IV.A-11 in Threshold (b) below, regional maximum daily Project construction emissions would exceed the SCAQMD regional construction emissions thresholds for VOC, NO_x, and CO. With implementation of Mitigation Measures AQ-MM-1 and AQ-MM-2, as shown in Tables IV.A-14 through IV.A-18, NO_x and CO for regional construction emissions would remain above SCAQMD regional construction emissions thresholds. As shown in Table IV.A-12 in Threshold (b) below, regional maximum daily Project interim operations emissions would exceed the SCAQMD regional operations emissions thresholds for NO_x. With implementation of Mitigation Measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4 and AQ-MM-5, as shown in Table IV.A-19, NO_x emissions would be reduced to below regional operational emissions thresholds, however CO for regional interim operations emissions would be above SCAQMD regional operations emissions thresholds. As further explained under Threshold (b), this is due to the construction activities that would overlap with the interim operations of the Project where emissions of CO from construction activities that would overlap with the interim operations of the Project would exceed the SCAQMD regional significance threshold due to the Tier 4 Final equipment and CNG truck engine technology where the technology used to reduce NO_x emissions leads to slightly higher CO emissions. As shown in Table IV.A-13 in Threshold (b) below, regional maximum daily

Project VOC operations emissions would exceed the SCAQMD regional operations emissions thresholds for VOC. As shown in Table IV.A-20, with implementation of Mitigation Measures AQ-MM-3, AQ-MM-4 and AQ-MM-5, regional operations VOC emissions would be reduced to below the VOC threshold during operations.

CEQA criteria pollutants significance thresholds from the air district were set at emission levels tied to the region's attainment status; they are emission levels at which stationary pollution sources permitted by the air district must offset their emissions and CEQA projects must use feasible mitigations, and they are not intended to be indicative of any localized human health impact that a project may have.^{74,75} Therefore, just because a project exceeds the mass regional emissions threshold (i.e., pounds per day NO_x thresholds) from project-related activities does not necessarily indicate that a project will cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

The primary health concern with exposure to NO_x emissions is the secondary formation of ozone. Based on discussions with air quality management district staff, and as the *amicus curiae* brief submitted for the *Sierra Club v. County of Fresno* case (*Friant Ranch Case*) suggested, because of the complexity of ozone formation and given the state of environmental science modeling in use at this time, it is infeasible to determine whether, or the extent to which, a single project's precursor (i.e., NO_x and VOCs) emissions would potentially result in the formation of secondary ground-level ozone and the geographic and temporal distribution of such secondary formed emissions.⁷⁶ As previously stated, meteorology, the presence of sunlight, seasonal impacts, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone. Furthermore, available models today are designed to determine regional, population-wide health impacts, and cannot accurately quantify ozone-related health impacts caused by NO_x or VOCs emissions from local level (project-level). Notwithstanding these scientific constraints, the disconnect between project-level NO_x emissions and ozone-related health impact cannot be bridged at this time.

As discussed in more detail under the analysis for Threshold (c) below, localized concentrations of NO₂ as NO_x, CO, PM₁₀, and PM_{2.5} have been analyzed for the Project. SO₂ emissions would be negligible during construction and long-term operations, in part due to the ultra-low sulfur diesel regulations (13 CCR Section 2281), and, therefore, would not have the potential to cause or effect a violation of the SO₂

⁷⁴ SCAQMD, Amicus Brief in Support of Neither Party, *Sierra Club v. County of Fresno*, April 6, 2015.

⁷⁵ San Joaquin Valley Air Pollution Control District (SJVAPCD), Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. *Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno*, Filed April 13, 2015.

⁷⁶ Models available today are designed to determine regional, population-wide health impacts, and cannot accurately quantify ozone-related health impacts caused by NO_x or VOC emissions from a project level.

ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. However, due to the role VOCs play in O₃ formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

The Project's NO_x, CO, PM₁₀, and PM_{2.5} emissions during construction and operations were analyzed: (1) to ascertain potential effects on localized concentrations; and (2) to determine if there is a potential for such emissions to cause or effect a violation of the ambient air quality standards for NO₂, CO, PM₁₀, and PM_{2.5}. As shown in Tables IV.A-21 through Table IV.A-25 in Threshold (c) below, localized maximum daily Project construction emissions would exceed SCAQMD localized construction emissions thresholds, respectively, for NO_x and PM_{2.5} and would result in a potentially significant impact before implementation of mitigation measures. However, as shown in Tables IV.A-27 through IV.A-31, the increases in localized emissions of NO_x, CO, PM₁₀, and PM_{2.5} during construction would not exceed the localized significance thresholds with implementation of AQ-MM-1 and AQ-MM-2 (Refer to Mitigation Measures AQ-MM-1 and AQ-MM-2 below for additional information).

As shown in Table IV.A-26 and Table IV.A-32, the increases in long-term localized emissions of NO_x, CO, PM₁₀, and PM_{2.5} emissions during operation of the Project would not exceed the SCAQMD-recommended localized significance thresholds at sensitive receptors in proximity to the Project Site with the implementation of AQ-MM-3 and AQ-MM-4 (Refer to Mitigation Measures AQ-MM-3 and AQ-MM-4 below). As a result, the Project would not contribute to a long-term increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants.

The 2022 AQMP is the current SCAQMD-adopted management plan for continued progression toward clean air and compliance with state and federal requirements (it is not yet adopted by the USEPA for inclusion in the State Implementation Plan). It includes a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on- and off-road mobile sources, and area sources. It builds upon measures already in place from previous AQMPs and includes a variety of new strategies (e.g., regulation, accelerated deployment of available cleaner technologies, best management practices, co-benefits from existing programs, incentives, etc.) to achieve the NAAQS. The Project would be required to comply with all new and existing regulatory measures set forth by the SCAQMD so as not to potentially increase the frequency or severity of an existing violation or cause or contribute to a new violation. Implementation of the Project would not interfere with air pollution control measures listed in the 2022 AQMP and therefore would not delay attainment of the air quality standards.

The Project would not introduce any substantial stationary sources of emissions; therefore, CO is the appropriate benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.⁷⁷ As indicated below in

⁷⁷ SCAQMD, CEQA Air Quality Handbook, Chapter 12, Assessing Consistency with Applicable Regional Plans, April 1993.

Threshold (c), no intersections would result in a CO hotspot in excess of the ambient air quality standards, and impacts would be less than significant. Accordingly, the Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.

Therefore, in response to Criterion 1, the Project could increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project could potentially exceed any of the State and federal standards, the Project could potentially delay timely attainment of air quality standards or interim emission reductions specified in the AQMP. However, as discussed above and below, this impact would be reduced to less than significant with implementation of Mitigation Measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4, and AQ-MM-5.

(ii) *Criterion 2*

With respect to the second criterion for determining consistency with 2016 and 2022 AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG's 2016–2040 and 2020–2045 RTP/SCS regarding population, housing, and growth trends. Determining whether a project exceeds the assumptions reflected in the 2016 and 2022 AQMP involves the evaluation of consistency with applicable population, housing, and employment growth projections and appropriate incorporation of 2016 and 2022 AQMP control measures. The following discussion provides an analysis with respect to these measures.

(a) *Air Quality Management Plan*

Construction and operation of the Project would comply with applicable required fleet rules and control strategies to reduce on-road truck emissions (i.e., 13 CCR, Section 2025 [CARB Truck and Bus regulation]), and other applicable SCAQMD rules specified and incorporated in the 2016 AQMP. As discussed under Subsection 3.b, *Methodology*, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP even if their emissions exceed the SCAQMD's thresholds of significance. As discussed below, compliance with the applicable required fleet rules and control strategies and requirements would render the Project consistent with, and meet or exceed, the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Thus, the Project's construction-related and operations-related criteria pollutant emissions would not cause the Air Basin's criteria pollutant emissions to worsen so as to impede the SCAQMD's efforts to achieve attainment with respect to any criteria pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM10, and

PM2.5)⁷⁸ or to cause the Air Basin to deteriorate from its current attainment status with respect to any other criteria pollutant emissions.

As further discussed below, the Project would also not conflict with the 2016 AQMP as the Project would incorporate into its design appropriate regulatory control strategies set forth in the 2016 AQMP, as further discussed below, for achieving its emission reduction goals and would be consistent with the demographic and economic assumptions upon which the 2016 AQMP is based (see Chapter II.4.g), *Sustainability Features*, of this Draft EIR for additional details).

With respect to the determination of consistency with the 2022 AQMP growth assumptions, the projections in the 2022 AQMP for achieving air quality goals are based on assumptions in the SCAG 2020–2045 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) project mitigation measures (discussed under Section 2, Mitigation Measures, below); and (3) appropriate incorporation of AQMP land use planning strategies (discussed under Subsection (ii), Operations, below).

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

(i) *Construction Growth Projections*

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 temporary in nature. **Therefore, the Project's construction jobs would not conflict with the long-term employment or population projections upon which the 2016 and 2022 AQMP is based. Impacts would be less than significant.**

(ii) *Operations Growth Projections*

As stated above, for purposes of the air quality modeling, the Project is assumed to be operational in 2030 to provide a conservative estimate of emissions. However, if the Project buildout comes at a later time, the emissions will be less than disclosed herein. As discussed in Section IV.H, *Population and Housing*, of this Draft EIR, the Project's growth would fall within the growth projections contained in the 2016-2040 and 2020–

⁷⁸ As previously explained, the Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating. For reference see SCAQMD, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

2045 RTP/SCS, which builds on the prior projections of the 2016–2040 RTP/SCS that forms the basis of the growth projections in the 2016 and 2022 AQMPs, respectively.

Based on the 2016–2040 SCAG RTP/SCS growth projections, the Project's proposed 3,423 population increase would comprise approximately 1.6 percent of SCAG's year 2040 estimated increase of 218,257 in population growth within the City and approximately 0.7 percent of SCAG's 2040 estimated increase of 491,079 population growth within the City, relative to 2022.⁷⁹ Based on the 2016–2040 SCAG RTP/SCS growth projections, the Project's proposed 1,521 housing units would comprise approximately 2.9 percent of SCAG's year 2030 estimated increase of 52,114 households within the City and approximately 0.6 percent of SCAG's 2040 estimated increase of 234,514 households within the City, relative to 2022.⁸⁰ Based on the 2016–2040 SCAG RTP/SCS growth projections, the Project would result in an increase in the number of employees on the Project Site of approximately 2,039 net new employees, which would comprise approximately 1.5 percent of SCAG's year 2030 estimated increase of 135,057 employees within the City and approximately 0.7 percent of SCAG's 2045 estimated increase of 303,879 employees within the City.⁸¹ However, the Project would have a small effect on the overall employment projections for the City.

Based on the 2020–2045 RTP/SCS growth projections, the Project's proposed 3,423 population increase would comprise approximately 1.5 percent of SCAG's year 2030 estimated increase of 231,034 households within the City and approximately 0.5 percent of SCAG's 2045 estimated increase of 664,224 population growth within the City, relative to 2022.⁸² Based on the 2020–2045 RTP/SCS growth projections, the Project's proposed 1,521 housing units would comprise approximately 1.3 percent of SCAG's year 2030 estimated increase of 117,517 households within the City and approximately 0.5 percent of SCAG's 2045 estimated increase of 337,862 households within the City, relative to 2022.⁸³ Based on the 2020–2045 RTP/SCS growth projections, the Project would result in an increase in the number of employees on the Project Site of approximately 2,039 net new employees, which would comprise approximately 2.6 percent of SCAG's year 2030 estimated increase of 79,337 employees within the City and approximately 0.9 percent of SCAG's 2045 estimated increase of 228,096 employees within the City.⁸⁴ However, the Project would have a small effect on the overall employment projections for the City. The Project's contribution to population, housing and employment would be consistent with SCAG population, housing and employment projections for the City and would be consistent with SCAG's RTP/SCS goals and with the growth projections contained in the 2020–2045 RTP/SCS. Accordingly, the Project's generation of population, households

⁷⁹ SCAG, Final 2016 RTP/SCS, 2016. Demographics & Growth Forecast Appendix.

⁸⁰ SCAG, Final 2016 RTP/SCS, 2016. Demographics & Growth Forecast Appendix.

⁸¹ SCAG, Final 2016 RTP/SCS, 2016. Demographics & Growth Forecast Appendix.

⁸² Refer to Section IV. H, *Population and Housing*, of this Draft EIR for additional information.

⁸³ Refer to Section IV.H, *Population and Housing*, of this Draft EIR for additional information.

⁸⁴ Refer to Section IV.H, *Population and Housing*, of this Draft EIR for additional information.

and employees would not conflict with employment generation projections contained in the 2020–2045 RTP/SCS. Refer to Section IV.F, *Land Use and Planning*, of this Draft EIR, for additional information regarding consistency with the 2020–2045 RTP/SCS.

The Project's contribution to population, housing and employment would be consistent with both SCAG's 2016-2040 and 2020-2045 RTP/SCS goals, as well as both the 2016-2040 and 2020-2045 RTP/SCS population, housing and employment projections for the City. The Project's contribution to employment would be consistent with SCAG employment projections for the City and would be consistent with both SCAG's 2016-2040 and 2020-2045 RTP/SCS goals, as well as both the 2016-2040 and 2020-2045 RTP/SCS growth projections that the growth projections in the 2016 and 2022 AQMP are based on. As discussed above under Subsection 3.b, *Methodology*, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the 2016 and 2022 AQMP would not jeopardize attainment of the air quality reductions identified in the 2016 and 2022 AQMP, even if their emissions exceed the SCAQMD's thresholds of significance.⁸⁵ The Project would not obstruct implementation of the 2016 and 2022 AQMPs, as discussed below under Thresholds (b), (c), and (d), since its regional construction and operational emissions would be less than significant with implementation of feasible mitigation measures (discussed further below under the *Mitigation Measures* subsection), and its localized construction and operational emissions would be less than significant. **As a result, the Project would not conflict with the growth projections and control strategies used in the development in the 2016 and 2022 AQMP. Impacts would be less than significant.**

- Does the Project include air quality mitigation measures?

As further discussed below, the Project would comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment and with SCAQMD's regulations, such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. The Project would also incorporate Project Design Feature, AQ-PDF-1, above to support and promote sustainability. Furthermore, the Project would implement Mitigation Measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4, and AQ-MM-5 (Refer to Mitigation Measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4, and AQ-MM-5 below for additional information) to reduce the Project's construction and operational emissions of VOC, NO_x, CO, PM₁₀ and PM_{2.5}. **As such the Project is consistent with this this AQMP consistency criterion.**

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

⁸⁵ SCAQMD, CEQA Air Quality Handbook, April 1993, page 12-1.

(b) Control Strategies

(i) Construction

During its construction phase, the Project would comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment and with SCAQMD's regulations, such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, the Project would utilize construction contractors in compliance with State on-road and off-road vehicle rules, including the ATCM that limits heavy-duty diesel motor vehicle idling to five minutes at any location (Title 13 CCR, Section 2485), the Truck and Bus regulation that reduces NO_x, PM₁₀, and PM_{2.5} emissions from existing diesel vehicles operating in California (13 CCR, Section 2025) and the In-Use Off-Road Diesel Fueled Fleets regulation that reduces emissions by the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models (13 CCR, Section 2449). The Project's construction contractor would be required to comply with these regulatory control measures. **Compliance with these regulatory control measures would ensure the Project would not conflict with 2016 and 2022 AQMP control strategies intended to reduce emissions from construction equipment and activities. Impacts would be less than significant.**

(ii) Operations

The Project's location, design, and land uses would be consistent with both the 2016 and 2022 AQMP during operations. As discussed above, the 2016 and 2022 AQMPs include land use and transportation strategies from both the SCAG 2016–2040 and 2020-2045 RTP/SCS that are intended to reduce VMT and resulting regional mobile source emissions. The majority of these strategies are to be implemented by cities, counties, and other regional agencies, such as SCAG and SCAQMD, although some can be furthered by individual development projects.

The Project's location, design, and land uses would support transportation control strategies related to reducing vehicle trips for residents, patrons and employees by increasing residential, hotel, office, retail, and restaurant density near public transit. The Project is considered an "urban infill" project, as it would replace existing warehouse and industrial uses with a high-density, mixed-use development. associated with the Project (refer to Section IV.J, *Transportation*, for additional details). The Project proposes higher density, consistent with compact growth, on parcels of infill urban land accessible to and served by public transit, such as bus service provided by the Los Angeles County Metropolitan Transportation Authority (Metro) and Los Angeles Department of Transportation (LADOT). The closest bus stop to the Project Site is located at Alameda Street and 4th Street, approximately 100 feet northeast of the Project Site, which is served by the LADOT Downtown Area Short Hop (DASH) Route A, which is a downtown route that connects the Arts District and Little Tokyo with the rest of Downtown Los Angeles. Other bus lines in the vicinity of the Project Site include Metro bus lines 16, 18, 53, 50, 62, 72, and 760 and LADOT DASH Route D. The Metro Little Tokyo/Arts District station, which is

expected to complete construction and open in 2023, will be located on 1st Street between Alameda and Central Avenue, approximately 0.3 miles north of the Project's North Site.

New housing and job growth, as a result of the completed Project, is focused in a high quality transportation area (HQTAs).⁸⁶ This analysis provides evidence that the Project would not conflict with the 2016 and 2022 AQMPs' goal of reducing mobile source emissions as a source of NO_x and PM_{2.5}. As described above, by locating its residential, hotel, office, retail, and restaurant uses within an area that has existing high quality public transit (with access to existing local and regional bus service), employment opportunities, restaurants, and entertainment, all within walking distance, and by including features that support and encourage pedestrian activity and other non-vehicular transportation and increased transit use in the Central City Community Plan area of the City, the Project would reduce vehicle trips and VMT, and the corresponding reduction in air pollutant emissions.

The Project's mobile source emissions are calculated based on the VMT generated by the Project, as obtained from the Project's TA,⁸⁷ which take into account the Project Site's location within the City, incorporates VMT reductions from the land use characteristics, and Project-specific transportation demand management features (refer to Section IV.J, *Transportation*, for a discussion of the transportation demand management features). **Thus, the Project would not conflict with either the 2016 or 2022 AQMPs with respect to transportation control strategies from the 2016–2040 and 2020-2045 RTP/SCS that are intended to reduce VMT and resulting regional mobile source emissions. Impacts would be less than significant.**

(b) General Plan Air Quality Element

The Project would promote the Air Quality Element goals, objectives, and policies as listed above in Subsection 2(b)(4)(a), *City of Los Angeles Air Quality Element*. In particular, the Project location and characteristics, as discussed above, would achieve several goals, policies, and objectives of the Air Quality Element by locating its development in an urban infill area and supporting a land use pattern that promotes sustainability and minimization of VMT. The project would achieve LEED Gold Certification or equivalent and would provide a minimum of eight percent of on-site non-residential parking for carpool and/or alternative-fueled vehicles and shall pre-wire, or install conduit and panel capacity for a minimum of 30 percent of the LAMC-required electric vehicle parking spaces, with 10 percent of the LAMC-required spaces further improved with electric vehicle charging stations.

The Project would continue to support pedestrian activity in the Central City Community Plan area of the City and contribute to a land use pattern that addresses housing needs.

⁸⁶ HQTAs are corridor-focused areas within 0.5 mile of an existing or planned fixed guideway transit stop or a bus transit corridor where buses pick up passengers at a frequency of every 15 minutes (or less) during peak commuting hours.

⁸⁷ Gibson Transportation Consulting, Inc., Transportation Assessment for the Fourth & Central Project, June 2022. Provided in Appendix J of the Project's Draft EIR.

The Project is located in a Transit Priority Area (TPA), which the City defines as an area within one-half mile of a major transit stop that is existing or planned.⁸⁸ As such, the Project would reduce vehicle trips and air pollutant emissions generated by the proposed development by locating residential, hotel, office, retail, and restaurant land uses within an identified TPA that has multiple public transit options (with access to existing local and regional bus and rail service), and employment opportunities, restaurants and entertainment, all within walking distance. The reduction in VMT is supported by a number of land use characteristics, such as proposed development density, location, mix of land uses, proximity to alternative transportation options, and pedestrian oriented design. The Project would increase the site density to approximately 200 dwelling units per acre.⁸⁹ Site density is a land use characteristic that reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services.⁹⁰ The Project's increased land use diversity and mixed-uses is a VMT-reducing characteristic for projects that locate different types of land uses near one another since trips between land use types are shorter and can be accommodated by alternative modes of transportation, such as public transit, bicycles, and walking.⁹¹ The Project Site is located in an area that offers access to multiple other nearby destinations, including restaurant, office, retail, entertainment, and residential uses. Increased destination accessibility provides ready access to multiple destinations in close proximity to the Project Site, which encourages walking and non-automotive forms of transportation.⁹²

The Project Site is also located within 1.0 miles of public transportation, including bus service provided by Metro and LADOT where the closest bus stop to the Project Site is located at Alameda Street and 4th Street, approximately 100 feet northeast of the Project Site, which is served by the LADOT DASH Route A, which is a downtown route that connects the Arts District and Little Tokyo with the rest of Downtown Los Angeles. Other bus lines in the vicinity of the Project Site include Metro bus lines 16, 18, 53, 50, 62, 72, and 760 and LADOT DASH Route D. The Metro Little Tokyo/Arts District station, which is expected to complete construction and open in 2023, will be located on 1st Street between Alameda and Central Avenue, approximately 0.3 miles north of the Project's North Site.

The City's General Plan Air Quality Element includes Citywide policies that are related to air quality. The Project's characteristics and AQ emissions are evaluated by comparing the Project to applicable AQ goals, policies and objectives of the Air Quality Element.

⁸⁸ City of Los Angeles, Department of City Planning, Zoning Information File ZI NO. 2451 Transit Priority Areas (TPAs)/Exemptions to Aesthetics and Parking within TPAs Pursuant to CEQA, <https://files.alston.com/files/docs/ZI%202451-TPA-Aesthetics-and-Parking.pdf>. Accessed October 2018.

⁸⁹ The Project Site is 7.6 acres and the Project would have 1,521 dwelling units (1,521 dwelling units / 7.6 acres = 200 dwelling units per acre).

⁹⁰ CAPCOA, Quantifying Greenhouse Gas Mitigation Measures, 2010, pages 155–158.

⁹¹ CAPCOA, Quantifying Greenhouse Gas Mitigation Measures, 2010, pages 162–166.

⁹² CAPCOA, Quantifying Greenhouse Gas Mitigation Measures, 2010, pages 167–170.

Table IV.A-6, *Consistency with Applicable Air Quality Policies of the General Plan*, assesses the consistency of the Project with the applicable air quality goals, objectives, and policies in the Air Quality Element of the General Plan.

TABLE IV.A-6
CONSISTENCY WITH APPLICABLE AIR QUALITY POLICIES OF THE GENERAL PLAN

Recommendation	Conflict Analysis
Air Quality Element	
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 proximity to existing job centers and multiple existing transit options on an urban infill site in the Arts District neighborhood of Los Angeles. As such, Project residents can live near their work, and have access to convenient modes of transportation that provide options for reducing reliance on automobiles, thereby minimizing associated air pollutant emissions. The Project would reduce VMT as a result of its mixed-use design and increased density in an urban infill location within an identified HQTa and TPA, with nearby access to public transportation within a quarter-mile of the Project Site, and its proximity to other destinations including job centers, retail and entertainment. As a result, the Project would provide people with convenient mobility options and a wide range of economic/employment opportunities.
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 location, land use characteristics and project design features would reduce emissions associated with energy and transportation. As discussed under Threshold a), the Project would be consistent with the relevant SCAG growth projections in the SCAG 2016-2040 and 2020-2045 RTP/SCS that were used in preparing the 2016 and 2022 AQMP. The Project would occupy a location within an identified HQTa and TPA that is highly accessible by existing transit options, including the Los Angeles County Metropolitan Transportation Authority (Metro) and Los Angeles Department of Transportation (LADOT). The closest bus stop to the Project Site is located at Alameda Street and 4th Street, approximately 100 feet northeast of the Project Site, which is served by the LADOT Downtown Area Short Hop (DASH) Route A, which is a downtown route that connects the Arts District and Little Tokyo with the rest of Downtown Los Angeles. Other bus lines in the vicinity of the Project Site include Metro bus lines 16, 18, 53, 50, 62, 72, and 760 and LADOT DASH Route D. The Metro Little Tokyo/Arts District station, which is expected to complete construction and open in 2023, will be located on 1st Street between Alameda and Central Avenue, approximately 0.3 miles north of the Project's North Site. 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 increase residential and commercial density near public transit, which would reduce the Project's transportation-related emissions compared to a development that is not located near transit options.

TABLE IV.A-6
CONSISTENCY WITH APPLICABLE AIR QUALITY POLICIES OF THE GENERAL PLAN

Recommendation	Conflict Analysis
Air Quality Element	
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 diesel particulate matter emissions. The Project would require the construction contractor(s) to comply with the applicable provisions of the CARB In-Use Off-Road Diesel Vehicle Regulation, which aims to reduce emissions through the installation of diesel particulate matter filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. The Project would require the contractors and vendors to comply with the applicable provisions of the CARB Truck and Bus regulation to reduce PM and NO_x emissions from existing diesel trucks. The Project incorporates landscaped open spaces and trees.
Policy 1.3.1: Minimize particulate emissions from construction sites.	No Conflict. The Project would incorporate measures that would reduce particulate air pollutants from construction activity as described above under Objective 1.3.
Policy 1.3.2: Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic.	No Conflict. The Project would implement required control measures for construction-related fugitive dust pursuant to SCAQMD Rule 403, which would minimize particulate emissions from unpaved roads and parking lots associated with construction-related vehicular traffic. See also description under Objective 1.3.
Goal 2: Less reliance on single-occupant vehicles with fewer commute and non-work trips.	No Conflict. The Project's land use characteristics would reduce trips and VMT due to its mixed-use design and increased density in an urban infill location within an identified HQTa and TPA, with nearby access to public transportation within a quarter-mile of the Project Site and its location in an area with access to multiple other destinations, including job centers, and retail uses. In addition, the Project would include on-site residential, hotel, office, retail, and commercial/restaurant land uses which would serve the local community and reduce reliance on single-occupancy vehicles. The Project would also provide bicycle parking facilities to encourage alternative modes of transportation.

TABLE IV.A-6
CONSISTENCY WITH APPLICABLE AIR QUALITY POLICIES OF THE GENERAL PLAN

Recommendation	Conflict Analysis
Air Quality Element	
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 would be located within an identified HQTa and TPA within a quarter-mile of existing public transportation, including the LADOT Downtown Area Short Hop (DASH) Route A, which is a downtown route that connects the Arts District and Little Tokyo with the rest of Downtown Los Angeles. Other bus lines in the vicinity of the Project Site include Metro bus lines 16, 18, 53, 50, 62, 72, and 760 and LADOT DASH Route D. The Metro Little Tokyo/Arts District station, which is expected to complete construction and open in 2023, will be located on 1st Street between Alameda and Central Avenue, approximately 0.3 miles north of the Project's North Site. The Project would provide access to on-site uses from existing pedestrian pathways. The Project would also provide bicycle parking facilities. These features would reduce work trips and encourage employees, residents and visitors to utilize alternative modes of transportation.
Policy 2.1.1: Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce vehicle trips and/or VMT as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion.	No Conflict. The Project would be located within a quarter-mile of existing public transportation, provide access to on-site uses from existing pedestrian pathways, provide bicycle parking facilities, and be wired for internet. These features would reduce work trips, encourage employees to utilize alternative modes of transportation including public transportation, walking, and bicycling, and allow for telecommuting.
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. While this action applies to the City of Los Angeles and is not applicable to the Project, the Project would be located within an identified HQTa and TPA within a quarter-mile of existing public transportation, including the LADOT Downtown Area Short Hop (DASH) Route A, which is a downtown route that connects the Arts District and Little Tokyo with the rest of Downtown Los Angeles. Other bus lines in the vicinity of the Project Site include Metro bus lines 16, 18, 53, 50, 62, 72, and 760 and LADOT DASH Route D. The Metro Little Tokyo/Arts District station, which is expected to complete construction and open in 2023, will be located on 1st Street between Alameda and Central Avenue, approximately 0.3 miles north of the Project's North Site.

TABLE IV.A-6
CONSISTENCY WITH APPLICABLE AIR QUALITY POLICIES OF THE GENERAL PLAN

Recommendation	Conflict Analysis
Air Quality Element	
Policy 2.2.1: Discourage single-occupant vehicle use through a variety of measures such as market incentive strategies, mode-shift incentives, trip reduction plans and ridesharing subsidies.	No Conflict. The Project is proposed on an infill location and would incorporate pedestrian pathways and a series of outdoor plazas and open spaces that connect to the existing sidewalk network. The Project would also encourage the use of electric vehicles, as the Project design would provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for a minimum of 30 percent of the Code-required parking spaces, with 10 percent of the Code-required spaces further improved with electric vehicle charging stations. The Project would provide bicycle parking spaces and facilities. In addition, the Project's land use characteristics, including Increased Density, Location Efficiency, Increased Land Use Diversity, Increased Destination Accessibility, and Increased Transit Accessibility, have been shown by CAPCOA to reduce VMT. In addition, as discussed previously, the Project would be located within an identified HQTa and TPA within a quarter-mile of existing public transportation, including the LADOT Downtown Area Short Hop (DASH) Route A, which is a downtown route that connects the Arts District and Little Tokyo with the rest of Downtown Los Angeles. Other bus lines in the vicinity of the Project Site include Metro bus lines 16, 18, 53, 50, 62, 72, and 760 and LADOT DASH Route D.
Policy 2.2.2: Encourage multi-occupant vehicle travel and discourage single-occupant vehicle travel by instituting parking management practices.	No Conflict. While this action applies to the City of Los Angeles and is not applicable to the Project, the Project would encourage the use of electric vehicles, as the Project design would provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for a minimum of 30 percent of the Code-required parking spaces, with 10 percent of the Code-required spaces further improved with electric vehicle charging stations.
Goal 4: Minimize 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 would reduce trips and VMT due to its mixed-use design and increased density in an urban infill location within an identified HQTa and TPA, on-site amenities and residential, hotel, office, retail, commercial/restaurant uses, access to public transportation within a quarter-mile of the Project Site, and close proximity to multiple other destinations including job centers and retail uses. The Project would increase the residential density near public transportation options, which would allow people to live near places of employment, retail, and recreation. See the discussion of Project characteristics and the discussion regarding consistency with the 2016 and 2022 AQMP.

TABLE IV.A-6
CONSISTENCY WITH APPLICABLE AIR QUALITY POLICIES OF THE GENERAL PLAN

Recommendation	Conflict Analysis
Air Quality Element	
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 would occupy an urban infill location within an identified Transit Priority Area in the Arts District area. The Project would co-locate complementary residential and commercial land uses in proximity to existing job centers and retail uses. The Project would be located within a quarter-mile of existing public transportation. The Project's location and its land use characteristics would reduce land use planning-related air pollutant emissions, primarily mobile source emissions, consistent with the CAPCOA guidance document entitled <i>Quantifying Greenhouse Gas Mitigation Measures</i>, which provides emission reduction values for recommended strategies for reducing VMT and associated GHG and air pollutant emissions (refer to Section IV.E, <i>Greenhouse Gas Emissions</i>, of the Project's Draft EIR, for additional details regarding the Project Site land use characteristics and reductions in VMT, as estimated from the CAPCOA guidance document). As is also discussed in this EIR section, the Project's location and its land use characteristics are consistent with the land use and transportation control strategies identified in the 2016 RTP/SCS that are incorporated into the 2016 and 2022 AQMP, and that are identified as reducing mobile source emissions, including criteria pollutant emissions.
Policy 4.1.2: Ensure that project level review and approval of land use development remain at the local level.	No Conflict. The environmental review and approval of the Project 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 would reduce trips and VMT due to its mixed-use design and increased density in an urban infill location within an identified Transit Priority Area, access to public transportation within a quarter-mile of the Project Site, and proximity to employment and retail destinations. The Project would include on-site retail, office, hotel, restaurant, commercial, and residential land uses that would serve the local community and would be located within a quarter-mile of off-site commercial and residential uses. The Project would also provide bicycle parking facilities to encourage utilization of alternative modes of transportation. See the discussion of Project characteristics and the discussion regarding consistency with the 2016 and 2022 AQMP above.

TABLE IV.A-6
CONSISTENCY WITH APPLICABLE AIR QUALITY POLICIES OF THE GENERAL PLAN

Recommendation	Conflict Analysis
Air Quality Element	
Policy 4.2.2: Improve accessibility for the City's residents to places of employment, shopping centers and other establishments.	No Conflict. The Project would provide residential, office, retail, hotel, and commercial/restaurant uses in a compact urban infill location. The Project would add new residents as well as employment opportunities that are readily accessible via public and alternative forms of transportation including walking and bicycling. The Project would occupy an urban infill location within an identified Transit Priority Area with access to public transportation within a quarter-mile of the Project Site. The Project would be located within a quarter-mile of off-site commercial and residential uses. The Project would also provide bicycle parking facilities to encourage utilization of alternative modes of transportation.
Policy 4.2.3: Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles.	No Conflict. The Project would provide bicycle parking facilities to encourage utilization of alternative modes of transportation. The Project would also provide access to on-site uses from existing pedestrian pathways. The Project would also provide infrastructure for electric vehicle charging stations and preferential parking for hybrid/electric vehicles. The Project design would provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for a minimum of 30 percent of the Code-required parking spaces, with 10 percent of the Code-required spaces further improved with electric vehicle charging stations.
Policy 4.2.4: Require that air quality impacts be a consideration in the review and approval of all discretionary projects.	No Conflict. The environmental review and potential approval of the Project include an analysis of air quality impacts.
Policy 4.2.5: Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects.	No Conflict. The Project incorporates characteristics that would reduce VMT and trips, encourage alternative modes of transportation, and incorporate congestion management. The Project proposes a mixed-use design and increased density in an urban infill location within an identified Transit Priority Area within a quarter-mile of existing public transportation, and would provide bicycle parking facilities to encourage alternative modes of transportation.
Goal 5: Energy efficiency through land use and transportation planning, the use of renewable resources and less polluting fuels, and the implementation of conservation measures including passive methods such as site orientation and tree planting.	No Conflict. The Project would be designed and operated to meet or exceed the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code. In addition to providing infrastructure for hybrid/electric vehicles as described above, the Project would incorporate sustainability measures and performance standards including diverting 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, optimize energy performance and reduce building energy cost by achieving LEED Gold Certification or equivalent. The Project would include 90,113

TABLE IV.A-6
CONSISTENCY WITH APPLICABLE AIR QUALITY POLICIES OF THE GENERAL PLAN

Recommendation	Conflict Analysis
Air Quality Element	
	square feet of outdoor public open space. All of the open space areas would have extensive landscaping and well-detailed hardscape. The Project would also include 422 new trees, including street trees. The Project would include landscaped areas that would include native plants, shrubs, perennials, and ground-cover. New street trees would be consistent with the City's Bureau of Street Services, Urban Forestry Division standards.
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 discussed above, the Project would be designed and operated to meet or exceed 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 non-polluting sources of energy in its buildings and operations.	No Conflict. As discussed above, the Project would be designed and operated to meet or exceed the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code.
Policy 5.1.4: Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling.	No Conflict. The Project would divert 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. The Project would also provide space for the collection and storage of recyclables such as paper, cardboard, glass, plastic, and metals.
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 discussed above, the Project would be designed and operated to meet or exceed 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 discussed above, the Project would be designed and operated to meet or exceed the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code.
SOURCE: ESA, 2023.	

As described in Section IV.E, *Greenhouse Gas Emissions*, of this Draft EIR, the Project design includes characteristics that would reduce vehicle trips and VMT when compared to a standard project within the Air Basin as measured by CalEEMod. These relative reductions in vehicle trips and VMT from a standard project within the Air Basin help quantify the criteria air pollutant emissions reductions achieved by locating the Project in an infill, HQTa and TPA area that promotes alternative modes of transportation. Previously, trip generation for land uses was calculated based on survey data collected by the ITE. However, these ITE trip generation rates were based on data collected at suburban, single-use, free standing sites, which may not be representative of urban

mixed-use environments. Beginning in 2019, the USEPA has sponsored a study to collect travel survey data from mixed-use developments in order provide a more representative trip generation rate for multi-use sites. Results of the USEPA survey indicate that trip generation and VMT are affected by factors such as resident and job density, availability of transit, and accessibility of biking and walking paths. Based on these factors, the USEPA has developed equations known as the EPA Mixed-Use Development (MXD) model to calculate trip reductions for multi-use developments.⁹³ The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project features such as increased density and proximity to transit, which would reduce VMT and associated fuel usage in comparison to free-standing sites. As shown in Appendix B, *Air Quality and Greenhouse Gas Emissions Appendix*, and the Project's TA, included as Appendix J of this Draft EIR,⁹⁴ incorporation of USEPA MXD VMT reduction features applicable to the Project results in a 34.0 percent reduction in overall VMT for the Project and resultant pollutant emissions. This reduction in VMT would not conflict with the Air Quality Element, which supports less reliance on single-occupant vehicles, reducing land use transportation emissions and associated air quality impacts, and providing people with less polluting transportation options. As such, the Project would provide opportunities for the use of alternative modes of transportation, including convenient access to public transit and opportunities for walking and biking, thereby facilitating a reduction in VMT.

Based on the above analysis, the Project would not conflict with applicable air quality policies of the General Plan's Air Quality Element, and impacts would be less than significant.

(2) Mitigation Measures

(a) Construction

The following mitigation measures would reduce potentially significant impacts regarding conflict with the AQMP:

AQ-MM-1: Construction Equipment Features: The Applicant shall implement the following construction equipment features for equipment operating at the Project Site. These features shall be included in applicable bid documents, and successful contractor(s) must demonstrate the ability to supply such equipment. Construction features shall include the following:

- The Project shall utilize off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and United States Environmental Protection Agency (USEPA) Tier 4 Final off-road emissions standards or equivalent for equipment rated at 50 horsepower (hp) or greater during Project construction where available

⁹³ USEPA, Mixed-Use Trip Generation Model, www.epa.gov/smartgrowth/mixed-use-trip-generation-model, accessed on June 22, 2023.

⁹⁴ Gibson Transportation Consulting, Inc., Transportation Assessment for the Fourth & Central Project, June 2022. Provided in Appendix J of the Project's Draft EIR.

within the Los Angeles region. Such equipment shall be outfitted with Best Available Control Technology (BACT) which means a CARB certified Level 3 Diesel Particulate Filter or equivalent.

- Contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. All construction equipment must be properly tuned and maintained in accordance with the manufacturer's specifications. The contractor shall keep documentation on-site demonstrating that the equipment has been maintained in accordance with the manufacturer's specifications. Tampering with construction equipment to increase horsepower or to defeat emission control devices shall be prohibited.

AQ-MM-2: Concrete Truck Features: The Applicant shall implement the following measures to reduce the emissions of air pollutants generated by concrete trucks:

- The contractor shall use concrete trucks with an average capacity of 10 cubic yards to minimize the number of concrete truck trips;
- The contractor shall use local concrete suppliers with concrete supplied by one or more facilities located within a driving distance of approximately 10 miles per one-way trip (approximately 20 miles per round trip).
- The contractor shall be required to ensure that trucks used to deliver concrete are made by CNG-fueled concrete trucks or trucks that achieve the same or lower NO_x emissions as CNG-fueled concrete trucks.
- During plan check, the Project representative shall make available to the lead agency and SCAQMD a comprehensive inventory of all concrete trucks that will be used during the days of concrete pouring. The inventory shall include the concrete truck capacity, fuel specification, and NO_x emissions rating. A copy of each such unit's certified emissions rating shall be provided on-site at the time of mobilization of each applicable unit of equipment to allow the Construction Monitor to compare the on-site equipment with the inventory and certified emissions specification.

(b) Operations

The following mitigation measures would reduce potentially significant impacts regarding operational emissions:

AQ-MM-3: Emergency Generator Maintenance & Testing: The Project representative shall schedule routine maintenance and testing of the emergency generators installed on the Project Site on different days. Prior to the installation of emergency generators, the Project representative shall supply documentation to the City that emergency generator testing by contractors, service providers, or maintenance crews will be conducted in accordance with the specified requirements. The Project representative shall maintain records of emergency generator testing, including testing dates, which shall be made available to the City upon request.

AQ-MM-4: Electric Landscaping Equipment: The Project representative shall only allow for electric landscaping equipment to be used at the Project Site. If electric landscaping equipment for specific types of equipment are not commercially available from landscaping contractors then up to two pieces of landscaping equipment per day may be gasoline-fueled. The Project representative shall require that landscaping contract documents include the requirement to use electric landscaping equipment for all future operational landscaping activities.

AQ-MM-5: Use of Super-Compliant VOC Paints. The Project representative shall only allow “Super-Compliant” architectural coating paints to be used at the Project Site as defined by SCAQMD to be less than 10 grams per liter VOC for all future operational on-going maintenance coating and painting activities (does not apply to coating activities for future new construction, tenant improvements, and additions). The Project representative shall require that all tenant and lease contract documents include the requirement to use “Super-Compliant” architectural coating paints for all future operational coating and painting activities.

(3) Level of Significance After Mitigation

Mitigation Measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4, and AQ-MM-5 would reduce the amount of criteria pollutant emissions from construction and operations and would ensure the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these pollutants. As the Project would not exceed any of the State and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP and impacts would be less than significant after mitigation.

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

(1) Impact Analysis

(a) Construction

Construction of the Project has the potential to generate temporary regional criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators and forklifts, through vehicle trips generated by workers and haul trucks traveling to and from the Project Site, and through building activities, such as the application of paint and other surface coatings. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO_x, would result from the use of construction equipment, such as dozers and loaders.

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions.⁹⁵

Construction emissions were quantified for construction of each of the Project's North, South and West Sites and each Site's associated land uses. Each of the Sites includes implementation of different construction phases including demolition, site preparation, excavation, drainage/utilities/trenching, foundations, building construction, paving, and architectural coating. Maximum daily construction emissions were calculated by combining overlapping phases within construction of each Site and the maximum simultaneous/overlapping construction across the Project North, South and West Sites. The maximum daily emissions were estimated based on maximum construction activity conditions for heavy-duty off-road construction equipment and on-road mobile sources and do not represent the emissions that would occur every day during Project construction, which would be lower on construction days under typical or below average construction activity conditions. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

The results of the criteria pollutant calculations are presented in **Table IV.A-7, Estimated Maximum Regional Construction Emissions for the North Site, Table IV.A-8, Estimated Maximum Regional Construction Emissions for the South Site - Upper South, Table IV.A-9, Estimated Maximum Regional Construction Emissions for the South Site – Lower South, Table IV.A-10, Estimated Maximum Regional Construction Emissions for the West Site, Table IV.A-11, Estimated Maximum Regional Construction Emissions for Maximum Overlapping of Construction.** As shown in Table IV.A-7, IV.A-8, IV.A-9, IV.A-10 and IV.A-11, construction-related daily emissions of VOC, NO_x, and CO would exceed the SCAQMD thresholds of significance. Emissions of other criteria pollutants would be below SCAQMD thresholds. The NO_x and CO emissions result primarily from heavy-duty trucks required for on-road soil hauling and from concrete trucks delivering concrete to the Project Site from concrete suppliers. The VOC emissions result primarily from the architectural coating phases where painting of interior and exteriors of the buildings would occur. **Therefore, the Project's temporary impact related to regional VOC, NO_x and CO construction emissions would be potentially significant. As discussed below, this impact would remain significant and unavoidable with the implementation of feasible mitigation measures.**

⁹⁵ Impacts from asbestos and lead-based paint from Project demolition are expected to be less than significant. For additional details please refer to the Project's Initial Study included as Appendix A of this Draft EIR.

TABLE IV.A-7
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS FOR THE NORTH SITE
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Demolition	2.7	32.7	34.3	0.1	4.6	1.8
Site Preparation	1.5	13.4	15.5	<0.1	4.2	2.1
Grading	3.9	70.6	53.6	0.4	14.2	5.4
Building Construction - Building 1	3.2	28.0	65.9	0.2	14.1	4.0
Foundations	7.8	214.4	144.3	1.4	40.5	12.5
Building Construction - Building 2	3.8	38.3	74.9	0.2	15.5	4.6
Architectural Coating - Building 1	2.2	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 2	13.8	1.1	1.5	<0.1	<0.1	<0.1
Paving	1.2	9.7	14.5	<0.1	0.3	0.3
Overlapping Phases						
Demolition + Site Preparation	4.2	46.1	49.8	0.2	8.8	3.9
Foundations + Building Construction - Building 1 + Building Construction - Building 2	14.2	278.2	249.0	1.7	57.6	17.9
Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2	8.6	64.9	106.3	0.3	17.2	5.5
Building Construction - Building 2 + Architectural Coating - Building 2	17.0	30.4	68.4	0.2	14.2	4.1
Building Construction - Building 2 + Architectural Coating - Building 2 + Paving	18.2	40.1	82.9	0.2	14.8	4.4
Maximum Daily Emissions	18.2	278.2	249.0	1.7	57.6	17.9
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

TABLE IV.A-8
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS FOR THE LOWER SOUTH SITE
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Demolition	2.8	32.8	36.1	0.2	5.6	2.0
Site Preparation	3.3	31.7	31.4	0.1	9.4	5.3
Grading	3.2	62.8	49.8	0.4	11.6	3.8
Parking Garage Construction	1.9	18.9	27.0	0.1	4.3	1.4
Foundations	14.1	257.4	214.4	1.5	44.6	15.0
Building Construction - Building 6	3.8	40.8	77.7	0.3	16.9	4.9
Building Construction - Building 7	2.4	23.1	57.0	0.2	15.1	4.1
Building Construction - Building 8	2.4	23.5	57.3	0.2	15.2	4.1
Building Construction - Building 9	3.2	31.8	68.4	0.2	15.8	4.4
Architectural Coating - Building 6	2.9	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 7	1.9	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 8	2.7	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 9	4.5	1.1	1.5	<0.1	<0.1	<0.1
Paving	1.2	9.8	16.5	<0.1	1.3	0.5
Demolition + Site Preparation	6.1	64.6	67.5	0.2	15.0	7.3
Grading + Parking Garage Construction	3.6	31.6	49.6	0.1	6.1	2.1
Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building 8 + Building Construction - Building 9	24.2	369.2	367.2	2.1	68.0	22.6
Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9	22.1	116.2	158.8	0.6	23.5	7.7
Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving	22.2	99.3	158.5	0.5	19.9	6.6
Maximum Daily Emissions	24.2	369.2	367.2	2.1	68.0	22.6
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

TABLE IV.A-9
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS FOR THE UPPER SOUTH SITE
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Demolition	2.7	32.7	34.8	0.2	4.9	1.8
Site Preparation	1.2	11.1	12.4	<0.1	1.5	0.6
Grading	2.8	50.6	41.9	0.3	8.8	3.0
Parking Garage Construction	1.6	16.1	20.8	0.1	3.3	1.1
Foundations	9.8	217.2	163.4	1.3	40.1	12.9
Building Construction - Building 3	2.5	27.6	58.0	0.2	14.9	4.1
Building Construction - Building 4	2.4	24.1	55.3	0.2	14.3	3.9
Building Construction - Building 5	2.3	25.1	54.5	0.2	14.9	4.1
Architectural Coating - Building 3	5.0	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 4	8.7	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 5	17.5	1.1	1.5	<0.1	<0.1	<0.1
Paving	1.2	9.8	16.5	<0.1	1.3	0.5
Overlapping Phases						
Demolition + Site Preparation	4.0	43.8	47.2	0.2	6.4	2.5
Grading + Parking Garage Construction	3.3	28.7	42.3	0.1	4.7	1.8
Foundations + Building Construction - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	16.0	289.6	264.8	1.7	59.9	18.9
Building Construction - Building 3 + Architectural Coating - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	11.1	73.5	103.0	0.4	19.8	6.0
Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving	32.9	65.0	108.0	0.3	17.5	5.4
Maximum Daily Emissions	32.9	289.6	264.8	1.7	59.9	18.9
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

TABLE IV.A-10
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS FOR THE WEST SITE
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Demolition	1.7	20.9	21.6	0.1	2.6	1.0
Site Preparation	0.5	4.2	6.0	<0.1	0.5	0.3
Grading	1.6	23.5	22.9	0.1	3.9	1.4
Foundations	10.9	199.1	151.8	1.1	29.9	10.4
Building Construction - Building 10	2.1	22.5	27.8	0.1	4.1	1.4
Architectural Coating - Building 10	4.0	1.1	1.5	<0.1	<0.1	<0.1
Paving	1.6	13.1	18.0	<0.1	0.7	0.5
Overlapping Phases						
Demolition + Site Preparation + Grading	3.8	48.6	50.6	0.2	7.1	2.6
Foundations + Building Construction - Building 10	12.9	221.6	179.7	1.2	33.9	11.8
Building Construction - Building 10 + Paving	3.4	28.9	41.6	0.1	3.5	1.5
Building Construction - Building 10 + Architectural Coating	5.8	16.9	25.2	0.1	2.9	1.0
Maximum Daily Emissions	12.9	221.6	179.7	1.2	33.9	11.8
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

TABLE IV.A-11
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS FOR MAXIMUM OVERLAPPING
OF CONSTRUCTION
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Overall Construction (Excluding Foundations)						
Upper South (Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving)	32.9	65.0	108.0	0.3	17.5	5.4
Lower South (Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving)	22.2	99.3	158.5	0.5	19.9	6.6
North (Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2)	8.6	64.9	106.3	0.3	17.2	5.5
West (Building Construction - Building -10 + Paving)	3.4	28.9	41.6	0.1	3.5	1.5
Subtotal	67.1	258.0	414.5	1.3	58.2	18.9
Foundations and Concurrent Construction on Remaining Sites						
Upper South (Building Construction - Building 3 + Architectural Coating - Building 3 + Building Construction - Building 4 + Building Construction - Building 5)	11.1	73.5	103.0	0.4	19.8	6.0
Lower South (Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building 8 + Building Construction - Building 9)	24.2	369.2	367.2	2.1	68.0	22.6
North (Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2)	8.6	64.9	106.3	0.3	17.2	5.5
West (Building Construction - Building -10 + Paving)	3.4	28.9	41.6	0.1	3.5	1.5
Subtotal	47.4	536.4	618.1	2.9	108.5	35.5
Grading on Four Sites						
Upper South (Grading)	2.8	50.6	41.9	0.3	8.8	3.0
Lower South (Grading)	3.2	62.8	49.8	0.4	11.6	3.8
North (Grading)	3.9	70.6	53.6	0.4	14.2	5.4
West (Grading)	1.6	23.5	22.9	0.1	3.9	1.4
Subtotal	11.5	207.5	168.4	1.2	38.6	13.6

TABLE IV.A-11
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS FOR MAXIMUM OVERLAPPING
OF CONSTRUCTION
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Architectural Coating and Overlapping Phases on Four Sites						
Upper South (Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving)	32.9	65.0	108.0	0.3	17.5	5.4
Lower South (Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving)	22.2	99.3	158.5	0.5	19.9	6.6
North (Building Construction - Building 2 + Architectural Coating - Building 2 + Paving)	18.2	40.1	82.9	0.2	14.8	4.4
West (Building Construction - Building 10 + Architectural Coating - Building 10)	5.8	16.9	25.2	0.1	2.9	1.0
Subtotal	79.2	221.2	374.6	1.1	55.1	17.4
Maximum Daily Emissions	79.2	536.4	618.1	2.9	108.5	35.5
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	Yes	Yes	Yes	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

(b) Operations

Mobile, stationary, and area source operational regional criteria pollutant emissions were calculated for the Project's full buildout year. Operational emission estimates include compliance with SCAQMD rules and regulations, such as Rule 1113 (Architectural Coatings), which limits the VOC content of architectural coatings. Detailed emissions calculations are provided in Appendix B of this Draft EIR. Landscape equipment emissions are based on off-road emission factors from CARB. Emissions from the use of consumer products and the reapplication of architectural coatings are based on data provided in CalEEMod.

In addition, the Project is expected to be partially operational by year 2027 with continued construction of the remaining buildings. The results of the regional criteria pollutant emission calculations for VOC, NO_x, CO, SO_x, PM10, and PM2.5 are presented in **Table IV.A-12, Estimated Maximum Regional Interim Operational Emissions and Concurrent Construction of the Remaining Buildings** and **Table IV.A-13, Estimated Maximum Unmitigated Regional**

Operational Emissions – Project. The Project’s net interim operations and concurrent construction-related daily emissions would exceed the SCAQMD thresholds of significance for NO_x. The exceedance from NO_x is primarily from mobile sources and from emergency generator testing emissions, as well as concurrent construction activities emissions during interim operations. The Project’s net operations-related daily emissions would exceed the SCAQMD thresholds of significance for VOC. The exceedance in VOC would be mainly from consumer products during operations. **As the Project’s maximum net regional emissions from interim operations and concurrent construction-operational-related daily emission and operations would exceed the thresholds of significance, regional operational emissions impacts would be significant and mitigation is required. As discussed below, this impact would remain significant and unavoidable with the implementation of feasible mitigation measures.**

TABLE IV.A-12
ESTIMATED MAXIMUM REGIONAL INTERIM OPERATIONAL EMISSIONS AND CONCURRENT CONSTRUCTION OF THE REMAINING BUILDINGS – PROJECT (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10	PM2.5
Existing						
Area	9	0	0	0	0	0
Energy (Natural Gas)	<1	2	2	<1	<1	<1
Motor Vehicles	4	79	42	<1	13	4
Delivery Truck TRUs	16	160	195	<1	5	5
Emergency Generators	1	11	10	<1	<1	<1
Total Existing	29	252	250	<1	18	9
Project Interim Operations						
Area (Consumer Products, Architectural Coating, Landscaping)	27	1	66	<1	<1	<1
Motor Vehicles	11	16	104	<1	30	8
Emergency Generators	4	80	46	<1	<1	<1
Charbroilers	<1	-	-	-	1	<1
Cooling Towers	-	-	-	-	<1	<1
Project Overlapping Construction						
Foundations + Building Construction - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	16	290	265	2	60	19
Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2	9	65	106	<1	17	5
Building Construction – Building 10 + Paving	3	29	42	<1	3	2
Total Project (Interim Conditions)	71	480	628	3	111	34

TABLE IV.A-12
ESTIMATED MAXIMUM REGIONAL INTERIM OPERATIONAL EMISSIONS AND CONCURRENT
CONSTRUCTION OF THE REMAINING BUILDINGS – PROJECT (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10	PM2.5
Net Increase (Interim Conditions)						
Area (Coating, Consumer Products, Landscaping)	18	1	66	<1	<1	<1
Energy	<1	-2	-2	<1	<1	<1
Mobile	8	-63	62	<1	17	4
Emergency Generators	4	69	35	<1	<1	<1
Charbroilers	<1	-	-	-	1	<1
Cooling Towers	-	-	-	-	<1	<1
Construction						
Foundations + Building Construction - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	16	290	265	2	60	19
Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building - Building 8 + Building Construction – Building 9	9	65	106	<1	17	5
Building Construction – Building 10 + Paving	3	29	42	<1	3	2
Delivery Truck TRUs	-16	-160	-195	-1	-5	-5
Net Total Regional Emissions (Interim Conditions)	42	227	379	2	93	25
SCAQMD Thresholds of Significance	55	55	550	150	150	55
Exceeds Thresholds?	No	Yes	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Area source VOC emissions are primarily emitted by consumer product usage as estimated in CalEEMod.

SOURCE: ESA, 2023.

TABLE IV.A-13
ESTIMATED MAXIMUM REGIONAL OPERATIONAL EMISSIONS – PROJECT (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Existing						
Area	9	0	0	0	0	0
Energy (Natural Gas)	<1	2	2	<1	<1	<1
Motor Vehicles	4	79	42	<1	13	4
Delivery Truck TRUs	16	160	195	<1	5	5
Emergency Generators	1	11	10	<1	<1	<1
Total Existing	29	252	250	<1	18	9
Project						
Area (Consumer Products, Architectural Coating, Landscaping)	78	2	176	<1	<1	<1
Motor Vehicles	22	30	199	1	64	16
Emergency Generators	12	220	126	<1	1	1
Charbroilers	1	-	-	-	2	1
Cooling Towers	-	-	-	-	<1	<1
Total Project	112	251	500	1	67	19
Net Increase						
Area (Coating, Consumer Products, Landscaping)	69	2	176	<1	<1	<1
Energy	<1	-2	-2	<1	<1	<1
Mobile	18	-49	157	<1	51	12
Emergency Generators	11	208	115	<1	1	1
Charbroilers	<1	-	-	-	2	<1
Cooling Towers	-	-	-	-	<1	<1
Delivery Truck TRUs	-16	-160	-195	-1	-5	-5
Net Total Regional Emissions	83	-1	251	<1	49	10
SCAQMD Thresholds of Significance	55	55	550	150	150	55
Exceeds Thresholds?	Yes	No	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Area source VOC emissions are primarily emitted by consumer product usage as estimated in CalEEMod.

SOURCE: ESA, 2023.

(2) Mitigation Measures

(a) Construction

The following mitigation measures would reduce potentially significant impacts regarding construction emissions:

AQ-MM-1: Construction Equipment Features: The Applicant shall implement the following construction equipment features for equipment operating at the Project Site. These features shall be included in applicable bid documents, and successful contractor(s) must demonstrate the ability to supply such equipment. Construction features shall include the following:

- The Project shall utilize off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and United States Environmental Protection Agency (USEPA) Tier 4 Final off-road emissions standards or equivalent for equipment rated at 50 horsepower (hp) or greater during Project construction where available within the Los Angeles region. Such equipment shall be outfitted with Best Available Control Technology (BACT) which means a CARB certified Level 3 Diesel Particulate Filter or equivalent.
- Contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. All construction equipment must be properly tuned and maintained in accordance with the manufacturer's specifications. The contractor shall keep documentation on-site demonstrating that the equipment has been maintained in accordance with the manufacturer's specifications. Tampering with construction equipment to increase horsepower or to defeat emission control devices shall be prohibited.

AQ-MM-2: Concrete Truck Features: The Applicant shall implement the following measures to reduce the emissions of air pollutants generated by concrete trucks:

- The contractor shall use concrete trucks with an average capacity of 10 cubic yards to minimize the number of concrete truck trips;
- The contractor shall use local concrete suppliers with concrete supplied by one or more facilities located within a driving distance of approximately 10 miles per one-way trip (approximately 20 miles per round trip).
- The contractor shall be required to ensure that trucks used to deliver concrete are made by CNG-fueled concrete trucks or trucks that achieve the same or lower NO_x emissions as CNG-fueled concrete trucks.
- During plan check, the Project representative shall make available to the lead agency and SCAQMD a comprehensive inventory of all concrete trucks that will be used during the days of concrete pouring. The inventory shall include the concrete truck capacity, fuel specification, and NO_x emissions rating. A copy of each such unit's certified emissions rating shall be provided on-site at the time of mobilization of each applicable unit of equipment to

allow the Construction Monitor to compare the on-site equipment with the inventory and certified emissions specification.

(b) *Operations*

The following mitigation measures would reduce potentially significant impacts regarding operational emissions:

AQ-MM-3: Emergency Generator Maintenance & Testing: The Project representative shall schedule routine maintenance and testing of the emergency generators installed on the Project Site on different days. Prior to the installation of emergency generators, the Project representative shall supply documentation to the City that emergency generator testing by contractors, service providers, or maintenance crews will be conducted in accordance with the specified requirements. The Project representative shall maintain records of emergency generator testing, including testing dates, which shall be made available to the City upon request.

AQ-MM-4: Electric Landscaping Equipment: The Project representative shall only allow for electric landscaping equipment to be used at the Project Site. The Project representative shall require that landscaping contract documents include the requirement to use electric landscaping equipment for all future operational landscaping activities.

AQ-MM-5: Use of Super-Compliant VOC Paints. The Project representative shall only allow “Super-Compliant” architectural coating paints to be used at the Project Site as defined by SCAQMD to be less than 10 grams per liter VOC for all future operational coating and painting activities. The Project representative shall require that all tenant and lease contract documents include the requirement to use “Super-Compliant” architectural coating paints for all future operational coating and painting activities.

(3) *Level of Significance After Mitigation*

(a) *Construction*

Construction of the Project would result in emissions that exceed the VOC, NO_x, and CO regional thresholds, so impacts would be potentially significant prior to mitigation. Implementation of Mitigation Measures AQ-MM-1 and AQ-MM-2 would reduce short-term and temporary VOC and NO_x emissions, including from heavy-duty equipment and concrete trucks during the Project building foundations, parking garage construction, and building construction activities, as shown in **Table IV.A-14, Estimated Maximum Mitigated Regional Construction Emissions for the North Site**, **Table IV.A-15, Estimated Maximum Mitigated Regional Construction Emissions for the South Site - Upper South**, **Table IV.A-16, Estimated Maximum Mitigated Regional Construction Emissions for the South Site – Lower South**, **Table IV.A-17, Estimated Maximum Mitigated Regional Construction Emissions for the West Site**, and **Table IV.A-18, Estimated Maximum Mitigated Regional Construction Emissions for Maximum Overlapping of Construction**.

With implementation of Mitigation Measures AQ-MM-1 and AQ-MM-2, short-term construction NO_x emissions would be reduced, and CO emissions would increase due to the use of Tier 4 Final equipment and CNG trucks. However, even with implementation of Mitigation Measures AQ-MM-1 and AQ-MM-2, short-term construction NO_x and CO emissions would exceed the applicable regional emission significance thresholds.

TABLE IV.A-14
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS FOR THE NORTH SITE
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Demolition	1.8	24.7	39.0	0.1	4.2	1.4
Site Preparation	0.3	1.3	15.1	0.0	3.6	1.6
Grading	2.2	54.5	57.3	0.4	13.5	4.7
Building Construction - Building 1	2.2	19.3	74.1	0.2	13.8	3.7
Foundations	2.9	51.0	441.8	0.1	23.2	6.7
Building Construction - Building 2	2.4	23.0	88.3	0.2	14.5	4.0
Architectural Coating - Building 1	2.2	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 2	13.8	1.1	1.5	<0.1	<0.1	<0.1
Paving	0.6	4.1	19.0	<0.1	0.4	0.2
Overlapping Phases						
Demolition + Site Preparation	2.0	26.0	54.2	0.2	7.8	3.0
Foundations + Building Construction - Building 1 + Building Construction - Building 2	7.0	90.8	568.0	0.4	39.1	11.2
Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2	6.3	40.9	127.8	0.3	15.9	4.6
Building Construction - Building 2 + Architectural Coating - Building 2	15.9	21.4	73.0	0.2	13.8	3.7
Building Construction - Building 2 + Architectural Coating – Building 2 + Paving	16.5	25.6	92.0	0.2	14.2	3.9
Maximum Daily Emissions	16.5	90.8	568.0	0.4	39.1	11.2
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	No	Yes	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

TABLE IV.A-15
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS FOR THE LOWER SOUTH SITE
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Demolition	1.8	24.8	40.8	0.2	5.2	1.6
Site Preparation	0.5	2.7	29.5	0.1	8.2	4.1
Grading	2.1	53.9	54.6	0.4	11.2	3.4
Parking Garage Construction	1.3	11.1	39.2	0.1	3.7	1.1
Foundations	5.6	66.3	510.7	0.2	25.9	7.8
Building Construction - Building 6	2.5	26.4	90.7	0.2	16.0	4.3
Building Construction - Building 7	1.9	15.2	69.2	0.2	14.5	3.9
Building Construction - Building 8	1.9	15.6	69.5	0.2	14.6	3.9
Building Construction - Building 9	2.1	19.0	84.8	0.2	15.1	4.1
Architectural Coating - Building 6	2.9	1.1	1.5	0.0	0.0	0.0
Architectural Coating - Building 7	1.9	1.1	1.5	0.0	0.0	0.0
Architectural Coating - Building 8	2.7	1.1	1.5	0.0	0.0	0.0
Architectural Coating - Building 9	4.5	1.1	1.5	0.0	0.0	0.0
Paving	0.6	4.3	21.0	0.0	1.2	0.4
Overlapping Phases						
Demolition + Site Preparation	2.3	27.5	70.3	0.2	13.4	5.8
Grading + Parking Garage Construction	2.1	16.3	66.6	0.1	5.1	1.6
Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building 8 + Building Construction - Building 9	12.3	135.3	717.3	0.6	46.3	13.9
Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9	18.6	73.4	212.6	0.4	20.6	6.2
Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving	18.8	71.2	183.7	0.5	19.0	5.8
Maximum Daily Emissions	18.8	135.3	717.3	0.6	46.3	13.9
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	Yes	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

TABLE IV.A-16
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS FOR THE UPPER SOUTH SITE
(POUNDS PER DAY)^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Demolition	1.8	24.7	39.5	0.2	4.5	1.5
Site Preparation	0.3	1.4	16.5	0.0	1.1	0.2
Grading	1.8	41.7	46.7	0.3	8.4	2.6
Parking Garage Construction	1.0	8.2	33.0	0.0	2.7	0.9
Foundations	3.9	52.7	432.7	0.1	23.3	6.9
Building Construction - Building 3	2.0	19.8	70.3	0.2	14.3	3.8
Building Construction - Building 4	1.9	16.3	67.5	0.2	13.7	3.7
Building Construction - Building 5	1.7	17.3	66.7	0.2	14.3	3.8
Architectural Coating - Building 3	5.0	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 4	8.7	1.1	1.5	<0.1	<0.1	<0.1
Architectural Coating - Building 5	17.5	1.1	1.5	<0.1	<0.1	<0.1
Paving	0.6	4.3	21.0	0.0	1.2	0.4
Overlapping Phases						
Demolition + Site Preparation	2.1	26.2	56.0	0.2	5.6	1.7
Grading + Parking Garage Construction	1.8	13.4	59.3	0.1	3.8	1.2
Foundations + Building Construction - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	8.5	101.6	570.9	0.4	41.2	12.0
Building Construction - Building 3 + Architectural Coating - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	9.5	49.9	139.7	0.3	18.0	5.2
Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving	31.1	50.4	124.4	0.3	17.1	5.0
Maximum Daily Emissions	31.1	101.6	570.9	0.4	41.2	12.0
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	Yes	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

TABLE IV.A-17
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS FOR THE WEST SITE
(POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Demolition	1.1	16.4	26.2	0.1	2.4	0.8
Site Preparation	0.1	0.4	6.4	<0.1	0.4	0.1
Grading	1.0	18.2	27.4	0.1	3.7	1.2
Foundations	4.6	53.6	378.7	0.1	16.6	5.2
Building Construction - Building 10	1.5	14.0	40.8	0.1	3.4	1.1
Architectural Coating - Building 10	4.0	1.1	1.5	<0.1	<0.1	<0.1
Paving	0.7	4.5	22.7	<0.1	0.3	0.2
Overlapping Phases						
Demolition + Site Preparation + Grading	2.2	35.0	60.0	0.2	6.5	2.1
Foundations + Building Construction - Building 10	6.1	67.6	419.5	0.2	20.0	6.3
Building Construction - Building 10 + Paving	2.1	16.8	50.3	0.1	3.0	1.1
Building Construction - Building 10 + Architectural Coating - Building 10	5.4	13.4	29.1	0.1	2.8	0.9
Maximum Daily Emissions	6.1	67.6	419.5	0.2	20.0	6.3
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

TABLE IV.A-18
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS FOR MAXIMUM OVERLAPPING OF
CONSTRUCTION (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Overall Construction (Excluding Foundations)						
Upper South (Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating – Building 4 + Building Construction – Building 5 + Architectural Coating - Building 5 + Paving)	31.1	50.4	124.4	0.3	17.1	5.0
Lower South (Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving)	18.8	71.2	183.7	0.5	19.0	5.8
North (Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2)	6.3	40.9	127.8	0.3	15.9	4.6
West (Building Construction - Building -10 + Paving)	2.1	16.8	50.3	0.1	3.0	1.1
Subtotal	58.2	179.3	486.2	1.2	55.0	16.4
Foundations and Concurrent Construction on Remaining Sites						
Upper South (Building Construction - Building 3 + Architectural Coating – Building 3 + Building Construction – Building 4 + Building Construction – Building 5)	9.5	49.9	139.7	0.3	18.0	5.2
Lower South (Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building 8 + Building Construction - Building 9)	12.3	135.3	717.3	0.6	46.3	13.9
North (Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2)	6.3	40.9	127.8	0.3	15.9	4.6
West (Building Construction - Building -10 + Paving)	2.1	16.8	50.3	0.1	3.0	1.1
Subtotal	30.2	242.9	1,035.0	1.3	83.3	24.8
Grading on Four Sites						
Upper South (Grading)	1.8	41.7	46.7	0.3	8.4	2.6
Lower South (Grading)	2.1	53.9	54.6	0.4	11.2	3.4
North (Grading)	2.2	54.5	57.3	0.4	13.5	4.7
West (Grading)	1.0	18.2	27.4	0.1	3.7	1.2
Subtotal	7.1	168.2	186.0	1.2	36.7	11.9

TABLE IV.A-18
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS FOR MAXIMUM OVERLAPPING OF
CONSTRUCTION (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Architectural Coating and Overlapping Phases on Four Sites						
Upper South (Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving)	31.1	50.4	124.4	0.3	17.1	5.0
Lower South (Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving)	18.8	71.2	183.7	0.5	19.0	5.8
North (Building Construction - Building 2 + Architectural Coating - Building 2 + Paving)	16.5	25.6	92.0	0.2	14.2	3.9
West (Building Construction - Building 10 + Architectural Coating - Building 10)	5.4	13.4	29.1	0.1	2.8	0.9
Subtotal	71.8	160.6	429.2	1.1	53.1	15.6
Maximum Daily Emissions	71.8	242.9	1,035.0	1.3	83.3	24.8
SCAQMD Thresholds of Significance	75	100	550	150	150	55
Exceeds Thresholds?	No	Yes	Yes	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

SOURCE: ESA, 2023.

It is of note that the emissions estimates related to the Project's construction activities, including grading/excavation and concrete pours, in Tables IV.A-14 through IV.A-18 are conservatively estimated as they characterize the maximum daily emissions with the maximum number of heavy-duty equipment and heavy-duty trucks for these activities. However, in reality, while the maximum number of heavy-duty equipment and trucks represents a maximum impact day, the number of heavy-duty trucks may be substantially lower on a typical or average construction workday. Therefore, the regional emissions related to the grading/excavation phase in Tables IV.A-14 through IV.A-18 only represents the emissions from a portion of the total days of the grading/excavation and concrete pour activities; whereas regional emissions related to the grading/excavation and concrete pour phase on an average day would be lower than presented in Tables IV.A-14 through IV.A-18.

Concrete would be supplied from a variety of area concrete suppliers and concrete trucks would be required to deliver the volume of concrete necessary for the concrete pours.

There are no feasible mitigation measures that would reduce the NO_x and CO emissions from the concrete trucks to below the regional significance threshold. It is not possible to reduce the number of concrete trucks needed to complete the concrete pouring activities without compromising the integrity of the building foundations and building structural needs. Similarly, the Project would require grading/excavation primarily for subterranean parking and haul trucks would be required to transport excavated soil to appropriate regional disposal sites. There are no feasible mitigation measures that would reduce the NO_x and CO emissions from the haul trucks to below the regional significance threshold. Therefore, impacts related to regional NO_x and CO construction emissions would be temporarily significant primarily because of the concrete pours required for the Project building foundations, parking garage construction, and building construction and the hauling required to transport and dispose of excavated soil.

As mentioned above, emissions of CO would increase due to the Tier 4 Final equipment and CNG truck engine technology where the technology used to reduce NO_x emissions leads to slightly higher CO emissions. This is the result of NO_x being formed through high combustion temperatures whereas CO is formed through incomplete combustion from lower combustion temperatures. CO is a pollutant of lesser air quality concern as compared to NO_x given that the Air Basin is in attainment for CO but is in non-attainment for ozone with NO_x constituting an ozone precursor emission. Thus, AQ-MM-1 and AQ-MM-2 represent overall environmentally beneficial mitigation measures as they would reduce emissions of an ozone precursor, NO_x, despite increasing emissions of CO during Project construction.

With implementation of feasible mitigation, regional emissions from construction would remain above the regional significance thresholds for NO_x and CO. Therefore, short-term and temporary impacts related to regional NO_x and CO construction emissions would be significant and unavoidable after implementation of feasible mitigation measures.

(b) Operations

The Project's mitigated regional operational emissions are summarized in **Table IV.A-19, Estimated Maximum Mitigated Regional Interim Operational Emissions and Concurrent Construction of the Remaining Buildings** and **Table IV.A-20, Estimated Maximum Mitigated Regional Operational Emissions – Project**. As shown in Table IV.A-19, implementation of Mitigation Measures AQ-MM-1 and AQ-MM-2, would minimize regional NO_x emissions from construction activities that would overlap with the interim operations of the Project. In addition, implementation of Mitigation Measure AQ-MM-3, would reduce regional NO_x emissions associated with the testing of the emergency generators, implementation of Mitigation Measure AQ-MM-4 would reduce NO_x emissions from landscaping equipment.⁹⁶ Thus, NO_x emissions would be reduced to below the SCAQMD regional significance threshold from construction activities that would overlap with the

⁹⁶ Mitigation Measure AQ-MM-5 would be incorporated during interim operations as well and would further reduce VOC emissions during interim operations below thresholds.

interim operations of the Project. However, CO emissions from construction activities that would overlap with the interim operations of the Project would exceed the SCAQMD regional significance threshold with implementation of Mitigation Measures AQ-MM-1 and AQ-MM-2. As shown in Table IV.A-20, implementation of Mitigation Measure AQ-MM-3 would reduce regional VOC emissions associated with the testing of the emergency generators, implementation of Mitigation Measure AQ-MM-4 would reduce VOC emissions from landscaping equipment and implementation of Mitigation Measure AQ-MM-5 would reduce VOC emissions associated with coating activities during operations. Thus, VOC emissions would be reduced to below the SCAQMD regional significance threshold during Project operations.

TABLE IV.A-19
ESTIMATED MAXIMUM MITIGATED REGIONAL INTERIM OPERATIONAL EMISSIONS AND
CONCURRENT CONSTRUCTION OF THE REMAINING BUILDINGS – PROJECT (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Existing						
Area	9	0	0	0	0	0
Energy (Natural Gas)	<1	2	2	<1	<1	<1
Motor Vehicles	4	79	42	<1	13	4
Delivery Truck TRUs	16	160	195	<1	5	5
Emergency Generators	1	11	10	<1	<1	<1
Total Existing	29	252	250	<1	18	9
Project Interim Operations						
Area (Consumer Products, Architectural Coating)	17	0	0	0	0	0
Motor Vehicles	11	16	104	<1	30	8
Emergency Generators	2	40	23	<1	<1	<1
Charbroilers	<1	-	-	-	1	<1
Cooling Towers	-	-	-	-	<1	<1
Project Overlapping Construction						
Foundations + Building Construction - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	8	102	571	<1	41	12
Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building - Building 8 + Building Construction – Building 9	6	41	128	<1	16	5
Building Construction – Building 10 + Paving	2	17	50	<1	3	1
Total Project (Interim Conditions)	47	215	876	1	91	26

TABLE IV.A-19
ESTIMATED MAXIMUM MITIGATED REGIONAL INTERIM OPERATIONAL EMISSIONS AND
CONCURRENT CONSTRUCTION OF THE REMAINING BUILDINGS – PROJECT (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Net Increase (Interim Conditions)						
Area (Coating, Consumer Products, Landscaping)	8	0	0	0	0	0
Energy	<1	-2	-2	<1	<1	<1
Mobile	8	-63	62	<1	17	4
Emergency Generators	2	29	13	<1	<1	<1
Charbroilers	<1	-	-	-	1	<1
Cooling Towers	-	-	-	-	<1	<1
Construction						
Foundations + Building Construction - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	8	102	571	<1	41	12
Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building - Building 8 + Building Construction – Building 9	6	41	128	<1	16	5
Building Construction – Building 10 + Paving	2	17	50	<1	3	1
Delivery Truck TRUs	-16	-160	-195	<1	-5	-5
Net Total Regional Emissions (Interim Conditions)	19	-37	626	1	72	17
SCAQMD Thresholds of Significance	55	55	550	150	150	55
Exceeds Thresholds?	No	No	Yes	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Area source VOC emissions are primarily emitted by consumer product usage as estimated in CalEEMod.

SOURCE: ESA, 2023.

TABLE IV.A-20
ESTIMATED MAXIMUM MITIGATED REGIONAL OPERATIONAL EMISSIONS – PROJECT (POUNDS PER DAY)^a

Source	VOC	NO _x	CO	SO ₂	PM10	PM2.5
Existing						
Area	9	0	0	0	0	0
Energy (Natural Gas)	<1	2	2	<1	<1	<1
Motor Vehicles	4	79	42	<1	13	4
Delivery Truck TRUs	16	160	195	<1	5	5
Emergency Generators	1	11	10	<1	<1	<1
Total Existing	29	252	250	<1	18	9
Project						
Area (Consumer Products, Architectural Coating)	51	0	0	0	0	0
Motor Vehicles	22	30	199	1	64	16
Emergency Generators	3	50	29	<1	<1	<1
Charbroilers	1	-	-	-	2	1
Cooling Towers	-	-	-	-	<1	<1
Total Project	76	80	227	1	66	18
Net Increase						
Area (Coating, Consumer Products, Landscaping)	43	0	0	0	0	0
Energy	<1	-2	-2	<1	<1	<1
Mobile	18	-49	157	<1	51	12
Emergency Generators	2	39	18	<1	<1	<1
Charbroilers	1	-	-	-	2	1
Cooling Towers	-	-	-	-	<1	<1
Delivery Truck TRUs	-16	-160	-195	<1	-5	-5
Net Total Regional Emissions	48	-172	-22	<1	48	9
SCAQMD Thresholds of Significance	55	55	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Area source VOC emissions are primarily emitted by consumer product usage as estimated in CalEEMod.

SOURCE: ESA, 2023.

The Project would result in potentially significant operational impacts due to regional VOC and NO_x emissions above the regional significance thresholds. During interim operations, Mitigation Measures AQ-MM-1 and AQ-MM-2 would be required to reduce overlapping construction-related NO_x emissions that would be concurrent with the interim regional

operational emissions. Mitigation Measure AQ-MM-3 would reduce regional NO_x emissions from operations by scheduling routine maintenance of emergency generators so that only one emergency generator is maintained on any given day. Mitigation Measure AQ-MM-4 would further reduce regional NO_x emissions from operations by requiring only electric landscaping equipment be used on the Project Site. With implementation of AQ-MM-1, AQ-MM-2, AQ-MM-3 and AQ-MM-4, NO_x emissions would be reduced to below the SCAQMD regional significance threshold from construction activities that would overlap with the interim operations of the Project. However, emissions of CO from construction activities that would overlap with the interim operations of the Project would now exceed the SCAQMD regional significance threshold due to the Tier 4 Final equipment and CNG truck engine technology where the technology used to reduce NO_x emissions leads to slightly higher CO emissions. As stated above, this is the result of NO_x being formed through high combustion temperatures whereas CO is formed through incomplete combustion from lower combustion temperatures. CO is a pollutant of lesser air quality concern as compared to NO_x given that the Air Basin is in attainment for CO but is in non-attainment for ozone, with NO_x constituting an ozone precursor emission. Thus, AQ-MM-1 and AQ-MM-2 represent overall environmentally beneficial mitigation measures as they would reduce emissions of an ozone precursor, NO_x, despite increasing emissions of CO during Project construction activities that would be concurrent with the interim regional operational emissions.

Therefore, while NO_x impacts related to overlapping construction and interim operational emissions would be mitigated to less than significant with implementation of mitigation measures, CO impacts related to regional emissions during this overlapping short-term timeframe would be significant and unavoidable after implementation of mitigation measures.

During full buildout Project operations, Mitigation Measure AQ-MM-3 would reduce regional VOC emissions by scheduling routine maintenance of emergency generators so that only one emergency generator is maintained on any given day. Additionally, as described above, Mitigation Measures AQ-MM-4 and AQ-MM-5 would be required to reduce regional VOC emissions from landscaping equipment and architectural coating by requiring only electric landscaping equipment be used on the Project Site and by requiring the use of “super-compliant” paint during operational coating activities, respectively. Therefore, with incorporation of Mitigation Measures AQ-MM-3, AQ-MM-4 and AQ-MM-5, regional VOC emissions from operations would be reduced to below the SCAQMD regional significance threshold.

Project-level net regional operational emissions for full Project operations (no overlap with construction) would be mitigated to below the SCAQMD significance thresholds. Therefore, full Project operational impacts would be mitigated to less than significant.

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

(1) Impact Analysis

(a) Localized Construction

The localized construction air quality analysis was conducted using the methodology prescribed in the SCAQMD *Final Localized Significance Threshold Methodology*.⁹⁷ 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 without the need for Project-specific dispersion modeling. The localized analysis for the Project is based on this SCAQMD screening criteria. Unlike regional emissions, localized emissions are specific to a smaller source receptor area (SRA) and proximity to sensitive receptors. The maximum daily localized emissions for each of the construction phases and the localized significance thresholds are presented in **Table IV.A-21, Estimated Maximum Localized Construction Emissions for the North Site, Table IV.A-22, Estimated Maximum Localized Construction Emissions for the South Site - Upper South, Table IV.A-23, Estimated Maximum Localized Construction Emissions for the South Site – Lower South, Table IV.A-24, Estimated Maximum Localized Construction Emissions for the West Site, Table IV.A-25, Estimated Maximum Localized Construction Emissions for Maximum Overlapping of Construction.** As shown in Table IV.A-21 through Table IV.A-25, construction-related localized emissions would exceed the SCAQMD localized significance thresholds for NO_x and PM_{2.5}. **Therefore, the Project's temporary impact related to localized construction emissions to existing sensitive receptors would be significant and would require implementation of mitigation measures.**

Project-level net localized construction emissions would be mitigated to below the SCAQMD localized significance thresholds. Therefore, construction impacts would be mitigated to less than significant.

⁹⁷ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

TABLE IV.A-21
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS FOR THE NORTH SITE
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Construction Phases				
Demolition	18.0	23.9	0.9	0.7
Site Preparation	13.2	13.1	3.4	1.9
Grading	21.9	24.4	3.7	2.2
Building Construction - Building 1	18.9	24.8	0.6	0.5
Foundations	14.5	20.2	0.4	0.4
Building Construction - Building 2	21.3	30.2	0.7	0.6
Architectural Coating - Building 1	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 2	1.1	1.5	<0.1	<0.1
Paving	9.6	13.9	0.3	0.3
Overlapping Phases				
Demolition + Site Preparation	31.2	37.0	4.3	2.6
Foundations + Building Construction - Building 1 + Building Construction - Building 2	56.7	75.2	1.8	1.7
Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2	43.3	56.6	1.5	1.3
Building Construction - Building 2 + Architectural Coating - Building 2	22.3	31.6	0.7	0.6
Building Construction - Building 2 + Architectural Coating – Building 2 + Paving	32.0	45.5	1.0	0.9
Maximum Daily Emissions	56.7	75.2	4.3	2.6
SCAQMD Thresholds of Significance	85.2	1,052.1	18.5	5.7
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 1.35-acre site with sensitive receptors conservatively assumed to be 50 meters to the construction area.

SOURCE: ESA, 2023.

TABLE IV.A-22
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS FOR THE LOWER SOUTH SITE
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Construction Phases				
Demolition	18.0	23.9	1.4	0.8
Site Preparation	31.6	30.2	9.0	5.2
Grading	14.1	19.8	0.9	0.6
Parking Garage Construction	12.6	15.8	0.4	0.3
Foundations	64.0	87.4	2.5	2.3
Building Construction - Building 6	22.2	30.2	0.7	0.7
Building Construction - Building 7	12.6	15.8	0.4	0.3
Building Construction - Building 8	12.6	15.8	0.4	0.3
Building Construction - Building 9	18.3	24.8	0.5	0.5
Architectural Coating - Building 6	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 7	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 8	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 9	1.1	1.5	<0.1	<0.1
Paving	9.6	13.9	0.3	0.3
Overlapping Phases				
Demolition + Site Preparation	49.6	54.1	10.4	6.0
Grading + Parking Garage Construction	25.1	35.6	1.1	0.8
Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction 8 + Building Construction - Building 9	129.8	174.0	4.5	4.2
Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9	70.3	92.6	2.1	1.9
Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving	77.3	106.2	2.2	2.0
Maximum Daily Emissions	129.8	174.0	10.4	6.0
SCAQMD Thresholds of Significance	130.8	1,836.7	37.2	8.9
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 3.46-acre site with sensitive receptors conservatively assumed to be 50 meters to the construction area.

SOURCE: ESA, 2023.

TABLE IV.A-23
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS FOR THE UPPER SOUTH SITE
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Construction Phases				
Demolition	18.0	23.9	1.1	0.7
Site Preparation	11.0	11.2	1.1	0.5
Grading	14.1	19.8	0.9	0.6
Parking Garage Construction	10.0	12.2	0.3	0.3
Foundations	35.0	45.8	1.3	1.2
Building Construction - Building 3	12.6	15.8	0.4	0.3
Building Construction - Building 4	12.6	15.8	0.4	0.3
Building Construction - Building 5	10.0	12.2	0.3	0.3
Architectural Coating - Building 3	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 4	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 5	1.1	1.5	<0.1	<0.1
Paving	9.6	13.9	0.3	0.3
Overlapping Phases				
Demolition + Site Preparation	29.0	35.1	2.2	1.2
Grading + Parking Garage Construction	22.5	32.0	1.0	0.8
Foundations + Building Construction - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	70.3	89.7	2.3	2.1
Building Construction - Building 3 + Architectural Coating - Building 3 + Building Construction - Building 4 + Building Construction Building 5	36.4	45.3	1.1	1.0
Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving	46.0	60.5	1.3	1.2
Maximum Daily Emissions	70.3	89.7	2.3	2.1
SCAQMD Thresholds of Significance	114.8	1,534.9	29.3	7.7
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 2.52-acre site with sensitive receptors conservatively assumed to be 50 meters to the construction area.

SOURCE: ESA, 2023.

TABLE IV.A-24
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS FOR THE WEST SITE
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Construction Phases				
Demolition	11.2	15.9	0.5	0.4
Site Preparation	4.2	5.6	0.4	0.2
Grading	8.8	12.9	0.3	0.3
Foundations	55.0	64.7	2.2	2.0
Building Construction - Building 10	13.4	15.9	0.4	0.4
Architectural Coating - Building 10	1.1	1.5	<0.1	<0.1
Paving	13.1	17.6	0.5	0.5
Overlapping Phases				
Demolition + Site Preparation + Grading	24.2	34.3	1.3	0.9
Foundations + Building Construction - Building 10	68.4	80.6	2.6	2.4
Building Construction - Building 10 + Paving	26.1	33.4	0.9	0.8
Building Construction - Building 10 + Architectural Coating - Building 10	14.1	17.4	0.4	0.4
Maximum Daily Emissions	68.4	80.6	2.6	2.4
SCAQMD Thresholds of Significance	50.9	429.8	3.0	1.6
Exceeds Thresholds?	Yes	No	No	Yes

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 0.32-acre site with sensitive receptors conservatively assumed to be 25 meters to the construction area.

SOURCE: ESA, 2023.

TABLE IV.A-25
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS FOR MAXIMUM OVERLAPPING OF
CONSTRUCTION (POUNDS PER DAY) ^a

Source	NO_x	CO	PM10 ^b	PM2.5 ^b
Overall Construction (Excluding Foundations)				
Upper South (Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating – Building 4 + Building Construction – Building 5 + Architectural Coating - Building 5 + Paving)	46.0	60.5	1.3	1.2
Lower South (Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving)	77.3	106.2	2.2	2.0
North (Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2)	43.3	56.6	1.5	1.3
West (Building Construction - Building -10 + Paving)	26.1	33.4	0.9	0.8
Subtotal	192.7	256.7	5.8	5.4
Foundations and Concurrent Construction on Remaining Sites				
Upper South (Building Construction - Building 3 + Architectural Coating – Building 3 + Building Construction – Building 4 + Building Construction – Building 5)	36.4	45.3	1.1	1.0
Lower South (Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building 8 + Building Construction - Building 9)	129.8	174.0	4.5	4.2
North (Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2)	43.3	56.6	1.5	1.3
West (Building Construction - Building -10 + Paving)	26.1	33.4	0.9	0.8
Subtotal	235.6	309.3	8.0	7.3
Grading on Four Sites				
Upper South (Grading)	14.1	19.8	0.9	0.6
Lower South (Grading)	14.1	19.8	0.9	0.6
North (Grading)	21.9	24.4	3.7	2.2
West (Grading)	8.8	12.9	0.3	0.3
Subtotal	58.9	76.9	5.8	3.8

TABLE IV.A-25
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS FOR MAXIMUM OVERLAPPING OF
CONSTRUCTION (POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Architectural Coating and Overlapping Phases on Four Sites				
Upper South (Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving)	46.0	60.5	1.3	1.2
Lower South (Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving)	77.3	106.2	2.2	2.0
North (Building Construction - Building 2 + Architectural Coating - Building 2 + Paving)	32.0	45.5	1.0	0.9
West (Building Construction - Building 10 + Architectural Coating - Building 10)	14.1	17.4	0.4	0.4
Subtotal	169.4	229.6	4.9	4.5
Maximum Daily Emissions	233.7	310.2	8.4	7.4
SCAQMD Thresholds of Significance	161.0	1,861.0	16.0	8.0
Exceeds Thresholds?	Yes	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 5-acre site with sensitive receptors conservatively assumed to be 25 meters to the construction area. The Project Site is 7.6 acres and conservatively uses the 5-acre screening criteria.

SOURCE: ESA, 2023.

(b) Localized Operations

The localized operational air quality analysis was conducted using the methodology prescribed in the SCAQMD Localized Significance Threshold Methodology.⁹⁸ The screening criteria provided in the Localized Significance Threshold Methodology were used to determine the localized operational emissions numerical indicators of significance for the Project. The same assumptions, including compliance with the Title 24 (2019) building energy efficiency standards, CALGreen Code, and City of Los Angeles Green Building Code. The maximum daily localized emissions and the localized significance thresholds are presented in **Table IV.A-26, Estimated Maximum Localized Operational Emissions for Existing Sensitive Receptors – Project**. As shown in Table IV.A-26, operations-related localized emissions would exceed the SCAQMD localized significance thresholds for NO_x. **Therefore, the Project's temporary impact related to localized**

⁹⁸ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

operational emissions to existing sensitive receptors would be significant and would require implementation of mitigation measures.

Project-level net localized construction emissions would be mitigated to below the SCAQMD localized significance thresholds. Therefore, operational impacts would be mitigated to less than significant.

TABLE IV.A-26
ESTIMATED MAXIMUM LOCALIZED OPERATIONAL EMISSIONS – PROJECT (POUNDS PER DAY) ^a

Source	NO _x	CO	PM ₁₀	PM _{2.5}
Existing				
Area	0	0	0.0	0.0
Energy (Natural Gas)	2	2	0.2	0.2
Emergency Generators	11	10	<0.1	<0.1
Total Existing	13	12	0.2	0.2
Project				
Area (Landscaping)	2	176	0.2	0.1
Emergency Generators	220	126	0.9	0.9
Charbroilers	-	-	1.7	1.0
Cooling Towers	-	-	0.1	<0.1
Total Project	221	302	2.9	2.1
Net Increase				
Area (Landscaping)	2	176	0.2	0.1
Energy	-2	-2	-0.2	-0.2
Emergency Generators	208	115	0.9	0.9
Charbroilers	-	-	1.7	1.0
Cooling Towers	-	-	0.1	<0.1
Net Total Regional Emissions	208	290	2.7	1.9
SCAQMD Thresholds of Significance	161	1,861	4.0	2.0
Exceeds Thresholds?	Yes	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Area source VOC emissions are primarily emitted by consumer product usage as estimated in CalEEMod.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 5-acre site with sensitive receptors conservatively assumed to be 25 meters to the Project Site. The Project Site is 7.6 acres and conservatively uses the 5-acre screening criteria.

SOURCE: ESA, 2023.

(c) *Carbon Monoxide Hotspots*

The potential for the Project to cause or contribute to CO hotspots was evaluated by comparing Project intersections (both intersection geometry and traffic volumes) with prior studies conducted by the SCAQMD in support of their AQMPs and considering existing background CO concentrations. As discussed below, this comparison demonstrates that the Project would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at Project-impacted intersections would remain well below the threshold one-hour and eight-hour ambient air quality standards (CAAQS) of 20 or 9.0 parts per million (ppm), respectively within one-quarter mile of a sensitive receptor, and that no further CO analysis is warranted or required.

As shown previously in Table IV.A-3, CO levels in the Project area are substantially below the federal and the State standards. Maximum CO levels in recent years (2018-2020) were 2.0 ppm (one-hour average) and 1.7 ppm (eight-hour average) as compared to the criteria of 20 ppm (CAAQS one-hour average) or 35 ppm (NAAQS one-hour average) and 9.0 ppm (eight-hour average). No exceedances of the CO standards have been recorded at monitoring stations in the Air Basin since 2003,⁹⁹ and the Air Basin is currently designated as a CO attainment area for both the CAAQS and the NAAQS.

The SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin. These included the intersections of Wilshire Boulevard and Veteran Avenue, Sunset Boulevard and Highland Avenue, La Cienega Boulevard and Century Boulevard, and Long Beach Boulevard and Imperial Highway. In the 2003 AQMP CO attainment demonstration, the SCAQMD noted that the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day.¹⁰⁰ Relevant information from the 2003 AQMP CO attainment demonstration relied upon in this assessment is provided in Appendix B of this Draft EIR. This intersection is located near the on- and off-ramps to Interstate 405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP showed that the peak modeled CO concentration due to vehicle emissions (i.e., excluding background concentrations) at these four intersections was 4.6 ppm (one-hour average) and 3.2 ppm (eight-hour average) at Wilshire Boulevard and Veteran Avenue.¹⁰¹

Based on the Project's TA,¹⁰² under Future plus Project (2030) conditions, the intersection of Alameda Street and 3rd Street/4th Place would have a maximum traffic

⁹⁹ SCAQMD, Final 2016 AQMP, March 2017, page 2-38.

¹⁰⁰ SCAQMD, 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations, page V-4-24, 2003.

¹⁰¹ The eight-hour average is based on a 0.7 persistence factor, as recommended by the SCAQMD.

¹⁰² Gibson Transportation Consulting, Inc., Transportation Assessment for the Fourth & Central Project, June 2022. Provided in Appendix J of the Project's Draft EIR.

volume of approximately 63,320 average daily trips (ADT).¹⁰³ As a result, CO concentrations from the Project's maximum traffic volume at the intersection identified above plus the measured background level in the Project Site area are expected to be approximately 4.9 ppm (one-hour average) and 3.7 ppm (eight-hour average), which would not exceed the numerical thresholds of significance. Total traffic volumes at the maximally impacted intersection would likely have to increase by approximately four times higher to cause or contribute to a CO hotspot impact given that vehicles operating today have reduced CO emissions as compared to vehicles operating in year 2003 when the SCAQMD conducted the AQMP attainment demonstration modeling.¹⁰⁴ **This comparison demonstrates that the Project would not contribute to the formation of CO hotspots and that no further CO analysis is required. Therefore, the Project would result in less-than-significant impacts with respect to CO hotspots.**

(d) *Toxic Air Contaminant Emissions*

(i) *Construction*

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during the construction phase of the Project. According to OEHHHA and the SCAQMD Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis,¹⁰⁵ health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary construction schedule (approximately 56 months), the Project would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of Project construction. The nearest residential air quality sensitive receptors are located approximately 250 feet east, 175 feet west, and 120 feet southwest to the nearest parts of the Project Site on the east, north and west, respectively.

In addition, the Project would be consistent with the applicable 2016 and 2022 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 CARB regulations would minimize emissions of TACs during construction. The Project would also comply with the requirements of SCAQMD Rule

¹⁰³ The traffic volume of approximately 63,320 ADT was estimated based on the peak hour intersection volumes under future with Project conditions and the general assumption that peak hour trips represent approximately 10 percent of daily trip volumes (the Federal Highway Administration considers 10 percent to be a standard assumption; see Travel Model Improvement Program Time-of-Day Modeling Procedures: State-of-the-Practice, State-of-the-Art (2.0 Standard Approaches, http://www.fhwa.dot.gov/planning/tmip/publications/other_reports/tod_modeling_procedures/ch02.cfm).

¹⁰⁴ SCAQMD, 2003 AQMP, Chapter 6 Clean Air Act Requirements.

¹⁰⁵ SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003.

1403 if asbestos is found during the demolition and construction activities. As stated in the Project's Initial Study, included as Appendix A-2 of this Draft EIR, demolition activities for the Project would include the removal of existing buildings, structures, and associated infrastructure. As such, hazardous materials may be present in the structures because of their age. The hazardous materials may include asbestos-containing materials and lead based paint. Numerous existing regulations require that demolition activities that may disturb or require the removal of materials that consist of, contain, or are coated with hazardous materials include inspection and testing for the presence of hazardous materials. If present, the hazardous materials are required to be managed and disposed of in accordance with applicable laws and regulations.¹⁰⁶ Based on the short-term duration of Project construction and compliance with regulations that would minimize emissions, construction of the Project would not expose sensitive receptors to substantial TAC concentrations.

Furthermore, as discussed in Threshold (b), the Project would be required to implement Mitigation Measures AQ-MM-1 and AQ-MM-2 to reduce regional NO_x emissions. The measure would have co-benefits of reducing emissions of PM₁₀ and PM_{2.5} from heavy-duty diesel construction equipment (see Tables IV.A-14 through IV.A-18), further reducing the TAC emissions during construction activities. **Therefore, impacts from TACs during construction would be less than significant with mitigation incorporated.**

(ii) Operations

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.¹⁰⁷ The Project would not include any truck stop or warehouse distribution uses, and, as such, operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance. Furthermore, Project trucks would be required to comply with the applicable provisions of 13 CCR, Section 2025 (Truck and Bus regulation) to minimize and reduce PM₁₀, PM_{2.5}, and NO_x emissions from existing diesel trucks. Therefore, Project operation would not be considered a substantial source of DPM or other TACs. Relative to existing conditions, as explained in Subsection 2.c(2)(d), *Existing Site Emissions*, since the Project would remove the existing cold storage facilities, the DPM emissions from the approximately 144 trucks and equipped TRUs that currently visit the site on a daily basis would no longer occur. Furthermore, Project trucks would be required to comply with the applicable provisions of the CARB Truck and Bus regulation to minimize and reduce PM and NO_x emissions from existing diesel trucks, and these requirements become more stringent over time. Therefore, given that the Project would remove an existing source of DPM

¹⁰⁶ Impacts from asbestos and lead-based paint from demolition are expected to be less than significant. For additional details, refer to the Project's Initial Study, included as Appendix J of this Draft EIR.

¹⁰⁷ SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003.

emissions in the local area and that delivery and maintenance trucks that would visit the Project Site in the future would be required to comply with the applicable provisions of the CARB Truck and Bus regulation, which would impose more stringent requirements in future years than current conditions, Project operations would not be a substantial source of diesel particulates.

In addition, Project operation would only result in minimal emissions of TACs from maintenance or other ongoing activities, such as from the re-application 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 to cause human health impacts. 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. The emissions controls would minimize the already small amounts of TAC emissions associated with charbroiling (as seen in Tables IV.A-13, IV.A-20, IV.A-25 and IV.A-31) by approximately 83 percent,¹⁰⁸ such that charbroiling would not cause or contribute to adverse health impacts at nearby sensitive receptors.

The emergency generators would be required to comply with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines), the purpose of which is to control and limit emissions of TACs from emergency generators and similar equipment. In accordance with Rule 1470, emissions from maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year. Furthermore, the emergency generators would be certified to the most stringent CARB and SCAQMD Rule 1470 standards and minimize emissions to the lowest technically feasible and regulatory required level for equipment of this size and type. As shown in Tables IV.A-20 and IV.A-26, PM₁₀ and PM_{2.5} emissions (i.e., DPM emissions) from the emergency generators would be approximately 0.2 pounds per day with incorporation of Mitigation Measure AQ-MM-3 for only those periodic days in which maintenance and testing would occur. Compliance with Rule 1470 would ensure the TAC emissions from the emergency generators would not cause or contribute to adverse health impacts at nearby sensitive receptors. Therefore, with mitigation the emissions would not pose a health risk to off-site receptors.

With respect to the use of consumer products and architectural coatings, the residential, office, hotel, restaurant, 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

¹⁰⁸ USEPA, Methods for Developing a National Emission Inventory for Commercial Cooking Processes: Technical Memorandum, 2003.

expected to occur in any substantial amounts in conjunction with operation of the proposed land uses within the Project Site. **Based on the uses planned for the Project Site, operation of the Project would not expose sensitive receptors to substantial TAC concentrations, and operational impacts would be less than significant.**

(e) *Conclusion*

Based on the above, construction of the Project could expose sensitive receptors to a substantial pollutant concentration and impacts would be potentially significant before implementation of mitigation measures. Operation of the Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts during Project operation would be less than significant.

(2) Mitigation Measures

(a) *Construction*

Refer to Mitigation Measure AQ-MM-1 and AQ-MM-2 to reduce impacts regarding the exposure of substantial pollutant concentrations on sensitive receptors during construction. No additional mitigation measures are required.

(b) *Operations*

Refer to Mitigation Measure AQ-MM-3 and AQ-MM-4 to reduce impacts regarding the exposure of substantial pollutant concentrations on sensitive receptors during operations. No additional mitigation measures are required.

(3) Level of Significance After Mitigation

(a) *Construction*

Impacts regarding the exposure of substantial pollutant concentrations on sensitive receptors during construction were determined to be potentially significant. With implementation of Mitigation Measure AQ-MM-1, impacts regarding the exposure of substantial pollutant concentrations on sensitive receptors during construction would be reduced to less than significant. Mitigated localized construction emissions are provided in **Table IV.A-27**, *Estimated Maximum Mitigated Localized Construction Emissions for the North Site*, **Table IV.A-28**, *Estimated Maximum Mitigated Localized Construction Emissions for the South Site – Upper South*, **Table IV.A-29**, *Estimated Maximum Mitigated Localized Construction Emissions for the South Site – Lower South*, **Table IV.A-30**, *Estimated Maximum Localized Construction Emissions for the West Site*, **Table IV.A-31**, *Estimated Maximum Localized Construction Emissions for Maximum Overlapping of Construction*.

TABLE IV.A-27
ESTIMATED MAXIMUM MITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR THE NORTH SITE
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Construction Phases				
Demolition	10.0	28.6	0.5	0.3
Site Preparation	1.1	12.7	2.8	1.4
Grading	5.8	28.0	3.0	1.5
Building Construction - Building 1	10.2	33.0	0.3	0.3
Foundations	9.1	26.1	0.3	0.2
Building Construction - Building 2	12.7	34.9	0.3	0.3
Architectural Coating - Building 1	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 2	1.1	1.5	<0.1	<0.1
Paving	4.1	18.3	0.1	0.1
Overlapping Phases				
Demolition + Site Preparation	11.1	41.3	3.3	1.7
Foundations + Building Construction - Building 1 + Building Construction - Building 2	32.0	94.0	0.9	0.9
Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2	24.1	69.3	0.7	0.6
Building Construction - Building 2 + Architectural Coating - Building 2	13.4	36.3	0.3	0.3
Building Construction - Building 2 + Architectural Coating - Building 2 + Paving	17.4	54.6	0.4	0.4
Maximum Daily Emissions	32.0	94.0	3.3	1.7
SCAQMD Thresholds of Significance	85.2	1,052.1	18.5	5.7
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 1.35-acre site with sensitive receptors conservatively assumed to be 50 meters to the construction area.

SOURCE: ESA, 2023.

TABLE IV.A-28
ESTIMATED MAXIMUM MITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR THE
LOWER SOUTH SITE
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Construction Phases				
Demolition	10.0	28.6	0.9	0.4
Site Preparation	2.6	28.3	7.8	4.0
Grading	5.1	24.6	0.4	0.2
Parking Garage Construction	9.4	19.8	0.3	0.2
Foundations	27.3	105.3	0.9	0.9
Building Construction - Building 6	12.5	34.8	0.3	0.3
Building Construction - Building 7	9.4	19.8	0.3	0.2
Building Construction - Building 8	9.4	19.8	0.3	0.2
Building Construction - Building 9	10.1	32.9	0.3	0.3
Architectural Coating - Building 6	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 7	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 8	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 9	1.1	1.5	<0.1	<0.1
Paving	4.1	18.3	0.1	0.1
Overlapping Phases				
Demolition + Site Preparation	12.6	56.9	8.7	4.4
Grading + Parking Garage Construction	14.5	44.3	0.6	0.4
Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building 8 + Building Construction - Building 9	68.7	212.6	2.0	1.9
Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9	45.8	113.3	1.2	1.1
Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving	49.2	131.4	1.2	1.2
Maximum Daily Emissions	68.7	212.6	8.7	4.4
SCAQMD Thresholds of Significance	130.8	1,836.7	37.2	8.9
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 3.46-acre site with sensitive receptors conservatively assumed to be 50 meters to the construction area.

SOURCE: ESA, 2023.

TABLE IV.A-29
ESTIMATED MAXIMUM MITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR THE UPPER SOUTH SITE
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Construction Phases				
Demolition	10.0	28.6	0.7	0.4
Site Preparation	1.4	15.3	0.7	0.1
Grading	5.1	24.6	0.4	0.2
Parking Garage Construction	6.8	16.2	0.2	0.2
Foundations	16.1	52.9	0.5	0.5
Building Construction - Building 3	9.4	19.8	0.3	0.2
Building Construction - Building 4	9.4	19.8	0.3	0.2
Building Construction - Building 5	6.8	16.2	0.2	0.2
Architectural Coating - Building 3	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 4	1.1	1.5	<0.1	<0.1
Architectural Coating - Building 5	1.1	1.5	<0.1	<0.1
Paving	4.1	18.3	0.1	0.1
Overlapping Phases				
Demolition + Site Preparation	11.3	43.9	1.4	0.5
Grading + Parking Garage Construction	11.8	40.7	0.6	0.4
Foundations + Building Construction - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	41.7	108.6	1.3	1.2
Building Construction - Building 3 + Architectural Coating - Building 3 + Building Construction - Building 4 + Building Construction - Building 5	26.7	57.2	0.8	0.7
Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving	31.4	76.9	0.8	0.8
Maximum Daily Emissions	41.7	108.6	1.4	1.2
SCAQMD Thresholds of Significance	114.8	1,534.9	29.3	7.7
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 2.52-acre site with sensitive receptors conservatively assumed to be 50 meters to the construction area.

SOURCE: ESA, 2023.

TABLE IV.A-30
ESTIMATED MAXIMUM MITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR THE WEST SITE
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Construction Phases				
Demolition	6.6	20.4	0.3	0.2
Site Preparation	0.4	6.0	0.2	0.0
Grading	3.5	17.3	0.1	0.1
Foundations	22.0	81.3	0.8	0.8
Building Construction - Building 10	9.7	19.8	0.3	0.3
Architectural Coating - Building 10	1.1	1.5	<0.1	<0.1
Paving	4.5	22.3	0.2	0.1
Overlapping Phases				
Demolition + Site Preparation	10.6	43.7	0.7	0.4
Foundations + Building Construction - Building 10	31.7	101.1	1.1	1.1
Building Construction - Building 10 + Paving	14.0	42.1	0.4	0.4
Building Construction - Building 10 + Architectural Coating - Building 10	10.7	21.3	0.3	0.3
Maximum Daily Emissions	31.7	101.1	1.1	1.1
SCAQMD Thresholds of Significance	50.9	429.8	3.0	1.6
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 0.32-acre site with sensitive receptors conservatively assumed to be 25 meters to the construction area.

SOURCE: ESA, 2023.

TABLE IV.A-31
ESTIMATED MAXIMUM MITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR MAXIMUM OVERLAPPING
OF CONSTRUCTION (POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Overall Construction (Excluding Foundations)				
Upper South (Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating – Building 4 + Building Construction – Building 5 + Architectural Coating - Building 5 + Paving)	31.45	76.91	0.84	0.78
Lower South (Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving)	49.2	131.4	1.2	1.2
North (Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2)	24.1	69.3	0.7	0.6
West (Building Construction - Building -10 + Paving)	14.0	42.1	0.4	0.4
Subtotal	118.7	319.8	3.2	3.0
Foundations and Concurrent Construction on Remaining Sites				
Upper South (Building Construction - Building 3 + Architectural Coating – Building 3 + Building Construction – Building 4 + Building Construction – Building 5)	26.7	57.2	0.8	0.7
Lower South (Foundations + Building Construction - Building 6 + Building Construction - Building 7 + Building Construction - Building 8 + Building Construction - Building 9)	68.7	212.6	2.0	1.9
North (Building Construction - Building 1 + Architectural Coating - Building 1 + Building Construction - Building 2)	24.1	69.3	0.7	0.6
West (Building Construction - Building -10 + Paving)	14.0	42.1	0.4	0.4
Subtotal	133.4	381.3	3.9	3.7
Grading on Four Sites				
Upper South (Grading)	5.1	24.6	0.4	0.2
Lower South (Grading)	5.1	24.6	0.4	0.2
North (Grading)	5.8	28.0	3.0	1.5
West (Grading)	3.5	17.3	0.1	0.1
Subtotal	19.7	94.5	3.9	2.1

TABLE IV.A-31
ESTIMATED MAXIMUM MITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR MAXIMUM OVERLAPPING
OF CONSTRUCTION (POUNDS PER DAY) ^a

Source	NO _x	CO	PM10 ^b	PM2.5 ^b
Architectural Coating and Overlapping Phases on Four Sites				
Upper South (Building Construction - Building 3 + Building Construction - Building 4 + Architectural Coating - Building 4 + Building Construction - Building 5 + Architectural Coating - Building 5 + Paving)	31.4	76.9	0.8	0.8
Lower South (Building Construction - Building 6 + Architectural Coating - Building 6 + Building Construction - Building 7 + Architectural Coating - Building 7 + Building Construction - Building 8 + Architectural Coating - Building 8 + Building Construction - Building 9 + Architectural Coating - Building 9 + Paving)	49.2	131.4	1.2	1.2
North (Building Construction - Building 2 + Architectural Coating - Building 2 + Paving)	17.4	54.6	0.4	0.4
West (Building Construction - Building 10 + Architectural Coating - Building 10)	10.7	21.3	0.3	0.3
Subtotal	108.8	284.2	2.8	2.6
Maximum Daily Emissions	133.4	381.3	3.9	3.7
SCAQMD Thresholds of Significance	161.0	1,861.0	16.0	8.0
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 5-acre site with sensitive receptors conservatively assumed to be 25 meters to the construction area. The Project Site is 7.6 acres and conservatively uses the 5-acre screening criteria.

SOURCE: ESA, 2023.

(b) Operation

Impacts regarding the exposure of substantial pollutant concentrations on sensitive receptors during operations were determined to be potentially significant. With implementation of Mitigation Measure AQ-MM-3 and AQ-MM-4, impacts regarding the exposure of substantial pollutant concentrations on sensitive receptors during operation would be reduced to less than significant. Mitigated localized operations emissions are provided in **Table IV.A-32, Estimated Maximum Mitigated Localized Operations Emissions**

TABLE IV.A-32
ESTIMATED MAXIMUM MITIGATED LOCALIZED OPERATIONAL EMISSIONS – PROJECT
(POUNDS PER DAY) ^a

Source	NO _x	CO	PM ₁₀	PM _{2.5}
Existing				
Area	0	0	0.0	0.0
Energy (Natural Gas)	2	2	0.2	0.2
Emergency Generators	11	10	<0.1	<0.1
Total Existing	13	12	0.2	0.2
Project				
Area	0	0	0.0	0.0
Emergency Generators	50	29	0.2	0.2
Charbroilers	-	-	1.7	1.0
Cooling Towers	-	-	0.1	<0.1
Total Project	50	29	2.0	1.2
Net Increase				
Area	0	0	0.0	0.0
Energy	-2	-2	-0.2	-0.2
Emergency Generators	39	18	0.2	0.2
Charbroilers			1.7	1.0
Cooling Towers			0.1	<0.1
Net Total Regional Emissions	37	17	1.8	1.1
SCAQMD Thresholds of Significance	161	1,861	4.0	2.0
Exceeds Thresholds?	No	No	No	No

^a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

^b Area source VOC emissions are primarily emitted by consumer product usage as estimated in CalEEMod.

^c The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County) for a 5-acre site with sensitive receptors conservatively assumed to be 25 meters to the Project Site. The Project Site is 7.6 acres and conservatively uses the 5-acre screening criteria.

SOURCE: ESA, 2023.

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

As discussed in Chapter VI, *Other CEQA Considerations*, and in the Initial Study (Appendix A), of this Draft EIR, the Project would not create objectionable odors affecting According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The Project would not include any uses identified by the SCAQMD as being associated with substantial odors. As a result, the Project is not expected to

discharge contaminants into the air in quantities that would cause a nuisance, injury, or annoyance to the public or property pursuant to SCAQMD Rule 402. **Therefore, construction and operation of the Project would result in less-than-significant impacts with respect to other emissions, including those leading to odors.**

e) Cumulative Impacts

(1) Impact Analysis

The City has identified 39 related projects located in the Project Site area that have not yet been built or that are currently under construction. The 39 related projects are shown in Table III-1 of Chapter III, *Environmental Setting*, of this Draft EIR. Of the 39 total related projects, 11 related projects are located within 1,000 feet of the Project Site and are listed in **Table IV.A-33, Related Projects within 1,000 Feet of the Project Site**.

However, since both the specific timing and the sequencing of the construction of the related projects are unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative.

Accordingly, the SCAQMD recommends using two methodologies to assess the cumulative impact of air quality emissions: (1) a project's consistency with the current AQMP be used to determine its potential cumulative impacts, or (2) that project-specific air quality impacts be used to determine the project's potential cumulative impacts to regional air quality.¹⁰⁹

(a) Consistency with Air Quality Management Plan

The SCAQMD recommends assessing a project's cumulative impacts based on whether the project is consistent with the current AQMP. CEQA Guidelines Section 15064(h)(3) provides guidance in determining the significance of cumulative impacts. Specifically, CEQA Guidelines Section 15064(h)(3) states in part that:

"A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources

¹⁰⁹ SCAQMD, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, Appendix D, 1993, page D-3 ("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.").

through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency...”

TABLE IV.A-33
RELATED PROJECTS WITHIN 1,000 FEET OF THE PROJECT SITE

No.	Address	Distance to Project Site (ft)	Use	Size
5	1129 & 1101 ^E 5th St, 445-457 S. Colyton St, 450-456 S. Seaton St	345	Commercial	81,326 sf
			Hotel	113 rooms
			Apartment	129 du
9	719 ^E 5th St	275	Hotel	42 rooms
17	527 S. Colyton St	875	Apartments	310 du
			Commercial	11,375 sf
			Production Space	11,736 sf
18	713 ^E 5th St	370	Apartments	51 du
19	508 ^E 4th St	600	Apartments	41 du
20	405 S Hewitt St	780	Office	255,514 sf
			Retail	4,970 sf
			Restaurant	9,940 sf
			Museum	7,800 sf
22	1100 ^E 5th St	375	Live/Work	218 du
			Open Space/Recreation	21,975 sf
23	414 S Crocker St	435	Apartments	175 du
			Commercial	8,691 sf
24	400 S. Alameda Street	95	Hotel	66 rooms
			Restaurant/Retail	5,400 sf
27	501 E. 5 th Street	1,000	Apartments	98 du
29	803 E. 5 th Street	105	Apartments	95 du
			Commercial	9,210 sf

NOTES

du = dwelling unit; sf = square feet

SOURCE: Gibson Transportation Inc., 2022.

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Project's cumulative air quality impacts are determined not to be significant based on its consistency with the SCAQMD's adopted 2016 and 2022 AQMPs, as discussed above. As is also discussed above, the Project's increase in population,

housing, and employment would be consistent with both the 2016-2040 and 2020-2045 RTP/SCS growth projections, upon which the 2016 AQMP and 2022 AQMP are based. Related projects would also be required to assess consistency with 2016 and 2022 AQMPs transportation control strategies, as well as with population, housing, and employment growth projections in the most recent RTP/SCS and provide mitigation measures if significant impacts are identified. As discussed in Threshold (a), the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for ozone. Therefore, the Project would be consistent with and would not conflict with or obstruct implementation of the applicable AQMP. **Accordingly, Project air quality impacts are not cumulatively considerable and cumulative impacts are less than significant.**

(b) *Project-Specific Impacts*

As stated in the 2006 L.A. CEQA Thresholds Guide, the “City of Los Angeles has not adopted specific Citywide significance thresholds for air quality impacts. However, because of the SCAQMD’s regulatory role in the Air Basin, the 2006 L.A. CEQA Thresholds Guide references the screening criteria, significance thresholds and analysis methodologies in the CEQA Air Quality Handbook to assist in evaluating projects proposed within the City.”¹¹⁰ The SCAQMD CEQA Air Quality Handbook states that the “Handbook is intended to provide local governments, project proponents, and consultants who prepare environmental documents with guidance for analyzing and mitigating air quality impacts of projects.”¹¹¹ The SCAQMD CEQA Air Quality Handbook also states that “[f]rom an air quality perspective, the impact of a project is determined by examining the types and levels of emissions generated by the project and its impact on factors that affect air quality. As such, projects should be evaluated in terms of air pollution thresholds established by the District.”¹¹² The SCAQMD has provided guidance on addressing the cumulative impacts for air quality. as discussed below:¹¹³

“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.”

The SCAQMD recommends evaluating cumulative impacts for individual projects based on whether the project exceeds the SCAQMD’s recommended daily thresholds for

¹¹⁰ City of Los Angeles, 2006 L.A. CEQA Thresholds Guide, 2006, page B-1.

¹¹¹ SCAQMD, CEQA Air Quality Handbook, April 1993, page iii.

¹¹² SCAQMD, CEQA Air Quality Handbook, April 1993, page 6-1.

¹¹³ SCAQMD, White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, 2003, Appendix D.

project-specific impacts for those pollutants for which the Air Basin is in non-attainment. Thus, the cumulative analysis of air quality impacts follows SCAQMD's guidance such that construction or operational Project emissions would be considered cumulatively considerable if Project-specific emissions exceed an applicable SCAQMD recommended significance threshold.

The City has determined to rely on thresholds established by the SCAQMD (refer to CEQA Guidelines Section 15064.7) to assess the Project's cumulative impacts. Regional emissions from a project have the potential to affect the Air Basin as a whole, and, unlike other environmental issues areas, such as aesthetics or noise, it is not possible to establish a geographical radius from a specific project site where potential cumulative impacts from regional emissions would be limited. Meteorological factors, such as wind, can disperse pollutants, often times tens of miles downwind from a project site. Therefore, consistent with accepted and established SCAQMD cumulative impact evaluation methodologies, the potential for the Project to result in cumulative impacts from regional emissions is assessed based on the SCAQMD thresholds.

For construction, as shown in Tables IV.A-27 through IV.A-31, the Project would not result in an exceedance of localized significance thresholds with the implementation of Mitigation Measure AQ-MM-1. However, as shown in Tables IV.A-14 through Table IV.A-18, with implementation of Mitigation Measures AQ-MM-1 and AQ-MM-2, regional emissions of NO_x and CO for construction would still exceed the significance thresholds. **Therefore, cumulative impacts related to regional NO_x and CO construction emissions would be significant and unavoidable.**

For interim operations with concurrent construction activities, as shown in Tables IV.A-12 and Table IV.A-19, with implementation of Mitigation Measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4 and AQ-MM-5 regional emissions of CO for interim operations with concurrent construction activities, would exceed the significance thresholds. **Therefore, cumulative impacts related to regional CO operations emissions would be significant and unavoidable.**

For operations, as shown in Table IV.A-26 and IV.A-32, the Project would not result in an exceedance of localized significance thresholds, and with implementation of Mitigation Measure AQ-MM-3, AQ-MM-4 and AQ-MM-5. In addition, as shown in Table IV.A-20, with implementation of Mitigation Measures AQ-MM-3, AQ-MM-4, AQ-MM-5, regional VOC emissions during Project operations would be reduced to below the regional threshold. **Therefore, cumulative impacts related to operational regional and localized VOC emissions would be less than significant with mitigation.**

(2) Mitigation Measures

(a) *Construction*

Refer to Mitigation Measures AQ-MM-1 and AQ-MM-2 to reduce cumulative regional VOC, NO_x and CO emissions and cumulative localized NO_x and PM_{2.5} emissions during construction. No additional mitigation measures are feasible.

(b) *Operations*

Refer to Mitigation Measures AQ-MM-1, AQ-MM-2, AQ-MM-3, AQ-MM-4 and AQ-MM-5 to reduce cumulative regional VOC and NO_x emissions during cumulative regional and cumulative localized NO_x emissions. No additional mitigation measures are required.

(3) Level of Significance after Mitigation

(a) *Construction*

Cumulative air quality impacts would be significant and unavoidable for construction regional NO_x and CO emissions. Localized construction NO_x and PM_{2.5} emissions would be mitigated to less than significant. Therefore, when considered together with related projects, construction air quality impacts would result in a cumulatively considerable impact after mitigation.

(b) *Operations*

Cumulative air quality impacts would be mitigated to less than significant for regional and localized operational VOC and NO_x emissions with implementation of Mitigation Measure AQ-MM-3, AQ-MM-4 and AQ-MM-5. However, cumulative air quality impacts would be significant and unavoidable for interim operations with concurrent construction activities CO emissions. Therefore, when considered together with related projects, operations air quality impacts would result in a cumulatively considerable impact after mitigation.

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