

IV. Environmental Impact Analysis

A. Air Quality

1. Introduction

This section evaluates the Project's potential impacts on air quality. This section estimates the air pollutant emissions generated by construction and operation of the Project and evaluates whether Project emissions would conflict with or obstruct implementation of the applicable air quality plan; result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard; expose sensitive receptors to substantial pollutant concentrations; or result in other emissions, such as those leading to odors, affecting a substantial number of people. This section relies on information included in the *Air Quality and Greenhouse Gas Technical Appendix* 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>, accessed April 2023.

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 page IV.A-10 of this Draft EIR.

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 (City) 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 is located within the Air Basin, which is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and San Diego County to the south. The Air Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the Coachella Valley area in Riverside County. The regional climate within the Air Basin is considered semi-arid and is characterized by warm summers, mild winters, infrequent seasonal rainfall, moderate daytime onshore breezes, and moderate humidity. The air quality within the Air Basin is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, and industry.

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

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

³ SCAQMD, *Map of Jurisdiction*, 1999.

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 O₃ irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

(ii) *Particulate Matter (PM10 and PM2.5)*

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 PM2.5, consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, such as pollen and windstorms, are naturally occurring. However, in urban areas such as the City of Los 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 PM2.5. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

(iii) *Carbon Monoxide (CO)*

CO is a colorless, odorless gas primarily emitted from combustion processes and motor vehicles due to incomplete combustion of carbon-containing fuels, such as gasoline or wood. In urban areas, such as the City of Los Angeles, automobile exhaust accounts for the majority of CO emissions. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike O₃, motor vehicles operating at slow speeds are the primary source of CO in the Air Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. Elevated concentrations of CO weaken the heart's contractions and lower the amount of oxygen carried by the blood. It is especially dangerous for people with chronic heart disease. Inhalation of CO can cause nausea, dizziness, and headaches at moderate concentrations and can be fatal at high concentrations.

(iv) *Nitrogen Dioxide (NO₂)*

NO₂ is a nitrogen oxide (NO_x) 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, NO₂ is the most abundant in the atmosphere. As ambient concentrations of NO₂ 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 NO₂ than those indicated by regional monitors. NO₂ absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO₂ also contributes to the formation of PM₁₀. 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 O₃.

(v) *Sulfur Dioxide (SO₂)*

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

(vi) *Lead (Pb)*

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

(b) *Additional Criteria Pollutants (California Only)*

In addition to the national standards, the State of California regulates State-identified criteria pollutants, including sulfates (SO₄²⁻), hydrogen sulfide (H₂S), visibility-reducing particles, and vinyl chloride. With respect to the State-identified criteria pollutants, most land use

development projects either do not emit them (i.e., H₂S [nuisance odor] and vinyl chloride), or otherwise account for these pollutants (i.e., SO₄²⁻ and visibility reducing particles) through other criteria pollutants. For example, SO₄²⁻ are associated with SO_x emissions, and visibility-reducing particles are associated with particulate matter emissions. A description of the health effects of the State-identified criteria air pollutants is provided below.

(i) *Sulfates (SO₄²⁻)*

SO₄²⁻ are the fully oxidized ionic form of sulfur. SO₄²⁻ occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. This sulfur is oxidized during the combustion process and subsequently converted to SO₄²⁻ 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. SO₄²⁻ are particularly effective in degrading visibility and, due to the fact that they are usually acidic, can harm ecosystems and damage materials and property.

(ii) *Hydrogen Sulfide (H₂S)*

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

(iii) *Visibility-Reducing Particles*

Visibility-reducing particles come from a variety of natural and manmade sources and can vary greatly in shape, size and chemical composition. Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles are directly emitted to the air, such as

⁴ California Air Resources Board (CARB), Hydrogen Sulfide & Health, Available at: <https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health>, accessed April 2023.

⁵ CARB, Hydrogen Sulfide & Health, Available at: <https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health>, accessed April 2023.

⁶ CARB, Hydrogen Sulfide & Health, Available at: <https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health>, accessed April 2023.

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 PM10 and PM2.5, as discussed above.⁸

(iv) *Vinyl Chloride*

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

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

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

⁷ CARB, Visibility-Reducing Particles and Health, ww2.arb.ca.gov/resources/visibility-reducing-particles-and-health, accessed April 2023.

⁸ CARB, Visibility-Reducing Particles and Health, ww2.arb.ca.gov/resources/visibility-reducing-particles-and-health, accessed April 2023.

⁹ CARB, Vinyl Chloride & Health, <https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health>, accessed April 2023.

¹⁰ CARB, Vinyl Chloride & Health, <https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health>, accessed April 2023.

¹¹ CARB, Vinyl Chloride & Health, <https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health>, accessed April 2023.

(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., includes chemically formulated products used by household and institutional consumers, architectural coatings, etc.).

(ii) TACs

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

b) Regulatory Framework

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

- Federal Clean Air Act
 - National Ambient Air Quality Standards
- California Clean Air Act
 - California Ambient Air Quality Standards
- California Code of Regulations
- State Programs for Toxic Air Contaminants

- Diesel Risk Reduction Program
- South Coast Air Quality Management District
 - Air Quality Management Plan and Regional Transportation Plan/Sustainable Communities Strategy
 - Air Quality Guidance Documents
 - Rules and Regulations
- City of Los Angeles Air Quality Element
- City of Los Angeles Plan for a Healthy LA

(1) Federal

(a) *Federal Clean Air Act*

The federal Clean Air Act (CAA) was enacted in 1970 and has been amended numerous times in subsequent years, with the latest amendments occurring in 1990.¹² The 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 the NAAQS, specifies future dates for achieving compliance, and requires the USEPA to designate areas as attainment, nonattainment, or maintenance. The CAA also mandates that each state submit and implement a State Implementation Plan (SIP) for each criteria pollutant for which the state has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met. The sections of the CAA most applicable to land use development projects include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).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. In addition, Los Angeles County fails to meet the national standard for lead and, therefore, is considered a federal non-attainment area for lead.

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	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 parts per million or micrograms per cubic meter and averaged over a specific time period (e.g., 1 hour). The different averaging times and concentrations are meant to protect against different exposure effects. Some ambient air quality standards are expressed as a concentration that is not to be exceeded. Others are 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 April 2023.

CARB, Ambient Air Quality Standards May 4, 2016.

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

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

(2) State

(a) *California Clean Air Act*

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practicable date. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, CARB conducts research, sets the CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. Table IV.A-1 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

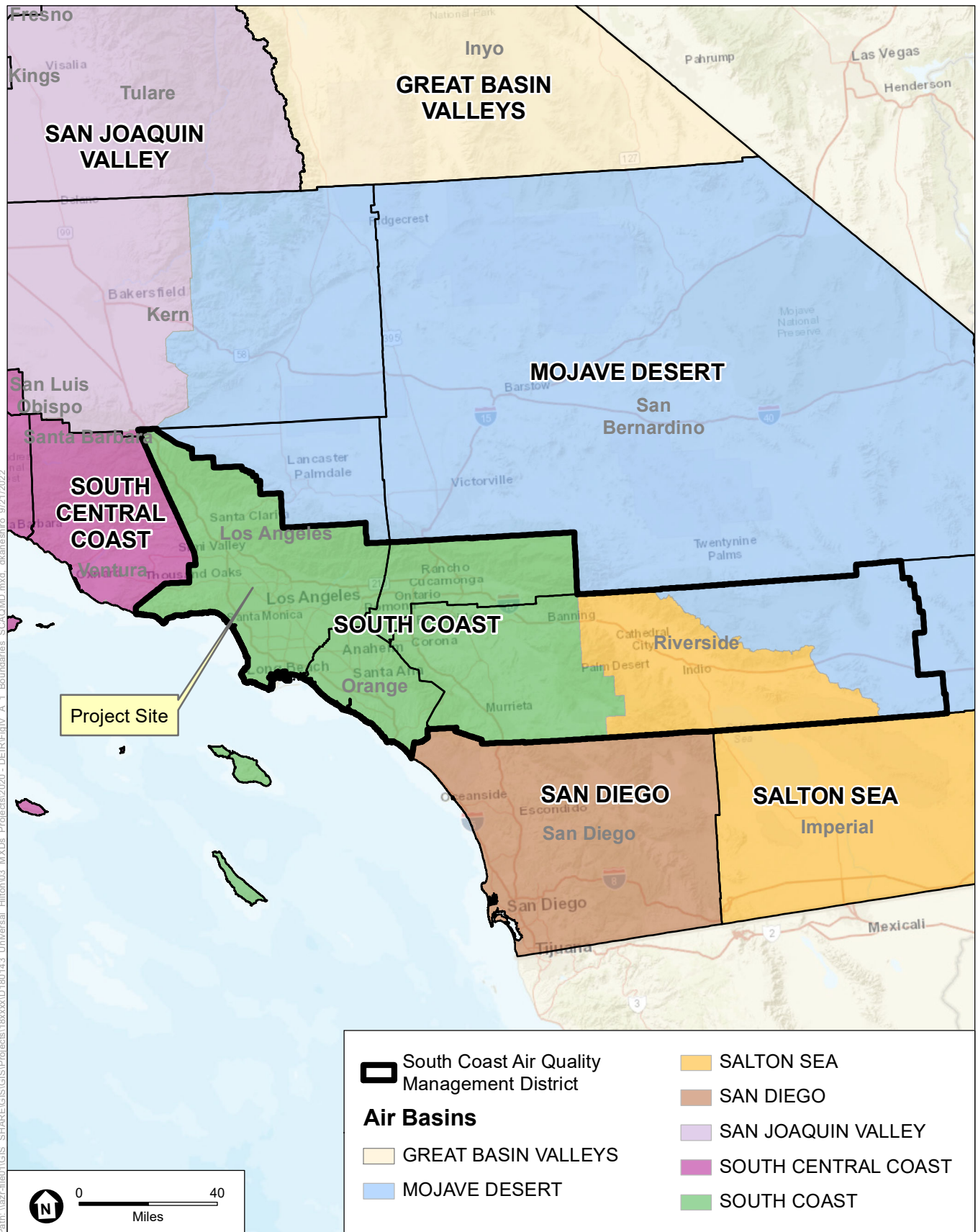
implementation of a risk management plan. SCAQMD has further adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air 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

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. **Figure IV.A-1**, *Boundaries of the South Coast Air Quality Management District*, illustrates the location of the Air Basin.



SOURCE: California Air Resources Board, March 2004.

Figure IV.A-1
Boundaries of the South Coast Air Quality Management District

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

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of AQMPs, which serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the area into attainment with the standards in a timely manner. The 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines for 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 2022 AQMP is focused on attaining the 2015 8-hour O₃ standard of 70 parts per billion. The 2022 AQMP builds upon measures already in place from previous AQMPs and includes a variety of additional strategies such as regulation, accelerated development of available clean technologies, incentives and other CAA measures to achieve this standard.

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 2022 AQMP is composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile source strategies, and reductions from federal sources, which include aircraft, locomotives and ocean-going vessels. These strategies are to be implemented in partnership with the CARB and USEPA.

The AQMP also incorporates the transportation strategy and transportation control measures from SCAG's 2020-2045 Regional Transportation Plan/Sustainable 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

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*, March 2017, page ES-2.

¹⁸ SCAG, *Final 2020-2045 RTP/SCS*, April 2016.

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 2020 AQMP, are based on SCAG's 2020-2045 RTP/SCS.

The 2022 AQMP forecasts the 2037 emissions inventories “with growth” based on SCAG's 2020-2045 RTP/SCS. The region is projected to see a 12-percent growth in population, a 17-percent growth in housing units, a 11-percent growth in employment, and an 5-percent growth in VMT between 2018 and 2037. Despite regional growth in the past, air quality has improved substantially over the years, primarily due to the effects of air quality control programs at the local, state, and federal levels.²⁰

(b) 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.²¹ The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses. However, the SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with the *Air Quality Analysis Guidance Handbook*. While this process is underway, the SCAQMD has provided supplemental guidance on the SCAQMD website.²²

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.²³ 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

¹⁹ SCAQMD, Final 2022 AQMP, March 2017, page ES-2.

²⁰ SCAQMD, Final 2022 AQMP, March 2017, Figure 1-4.

²¹ SCAQMD Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, 2005, <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4>. Accessed March 1, 2017.

²² SCAQMD, *Air Quality Analysis Handbook*, <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook#>. Accessed April 2023.

²³ SCAQMD Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005. <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4>. Accessed March 1, 2017.

evaluating the localized effects from mass emissions during construction or operation of a project.²⁴ 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*.²⁵ The latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and *Final Localized Significance Threshold Methodology*.

(c) *SCAQMD Rules and Regulations*

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

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

- **Rule 401 – Visible Emissions:** This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart²⁶ or of such opacity as to obscure an observer's view.
- **Rule 402 – Nuisance:** This rule states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- **Rule 403 – Fugitive Dust:** This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM₁₀ emissions to less than 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Best available control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by the USEPA.

²⁴ SCAQMD, *Final Localized Significance Threshold Methodology*, June 2003 (Revised July 2008).

²⁵ SCAQMD, *Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds*, October 2006.

²⁶ United States Department of Interior, Bureau of Mines, *Ringelmann Smoke Chart* (Revision of IC 7718), May 1967.

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

- **Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
- **Rule 1138 – Control of Emissions from Restaurant Operations:** This rule specifies PM and VOC emissions and odor control requirements for commercial cooking operations that use chain-driven charbroilers to cook meat.
- **Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters:** This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO_x emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.
- **Rule 1186 – 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 XIV – Toxics and Other Non-Criteria Pollutants: Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants or other non-criteria pollutants. The following is a list of rules which may apply to the Project:

- **Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities:** This rule requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.
- **Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines:** This rule applies to stationary compression ignition (CI) engines greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.

(4) Local

(a) *City of Los Angeles General Plan*

(i) *Air Quality Element*

Local jurisdictions, such as the City, have the authority and responsibility to reduce air pollution through their land use decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. In general, the City of Los Angeles' General Plan (including the Framework, Air Quality, Mobility 2035, and Health and Wellness Elements) and the City of Los Angeles' Green New Deal (Sustainability pLAn 2019) contain policies and programs for the protection of the environment and health through improved air quality. These serve to provide additional critical guidance for the betterment of public health for the region and the 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 that guide the City in its implementation of its air quality improvement programs and strategies. A number of these goals, objectives, and policies are relevant to land use development and relate to traffic mobility, minimizing particulate emissions from construction activities, discouraging single-occupancy vehicle trips, managing traffic congestion during peak hours, and increasing energy efficiency in City facilities and private developments.

The Air Quality Element establishes six goals:

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

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

synchronization of traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits, and monitors and enforces implementation of such mitigation measures.

(ii) *Plan for a Healthy Los Angeles*

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

c) Existing Conditions

(1) Regional 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.²⁷

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.²⁸ 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.²⁹

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 8 percent growth in VMT by year 2031. 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 1-6 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

²⁷ SCAQMD, Final 2016 AQMP, March 2017, page ES-2.

²⁸ SCAQMD, Final 2016 AQMP, March 2017, page ES-2.

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

it is possible to maintain a healthy economy while improving public health through air quality improvements.³⁰

As previously explained with regards to the 2016 AQMP, 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 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 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.³¹

(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

³⁰ SCAQMD, Final 2016 AQMP, March 2017, page 1-6.

³¹ SCAQMD, Final 2022 AQMP, December 2022, page 1-9.

particles.³² The Air Basin is currently in non-attainment for O₃, PM₁₀, and PM_{2.5} under the CAAQS. 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.

**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, Green Book Non-Attainment Areas for Criteria Pollutants, <https://www.epa.gov/green-book>, Green Book current as of March 31, 2023, accessed April 2023; CARB, Area Designations Maps/State and National, <http://www.arb.ca.gov/degis/adm/adm.htm>, last updated November 2022, accessed April 2023.

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.³³

³² Unclassified is the category designation of an area for a pollutant with insufficient data. California Health and Safety Code 39608.

³³ SCAQMD, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012.

As detailed in the AQMP, the major sources of air pollution in the Air Basin are divided into four major source classifications: point and area stationary sources, and on-road and off-road mobile sources. Point and area sources are the two major subcategories of stationary sources.³⁴ 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., water heaters, architectural coatings, consumer products, and permitted sources, such as large boilers) which are distributed across the region. Mobile sources consist of two main subcategories: On-road sources (e.g., cars and trucks) and off-road sources (e.g., 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).³⁵ 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 SCAQMD's programs such as permitting, Air Toxics Hot Spots (AB 2588), 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.³⁶ 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

³⁴ SCAQMD, 2016 AQMP, March 2017, p. 3-32.

³⁵ SCAQMD, 2021. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin MATES V, August 23, 2021.

³⁶ SCAQMD, 2021. Final Report Multiple Air Toxics Exposure Study in the South Coast Air Basin MATES V, August 2021.

and the ports areas; DPM is the main risk driver for air toxics cancer risk; goods movement and transportation corridors have the highest air toxics cancer risks; and the chronic non-cancer risk was estimated for the first time with a chronic hazard index of approximately 5 to 9 across all 10 fixed stations.^{37,38}

(2) Local Area Conditions

(a) 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 is the Burbank Monitoring Station; however, this station was discontinued in 2014. The SCAQMD Annual Air Quality Monitoring Network Plan for 2020 identified North Hollywood as the replacement location for the previous Burbank Monitoring Station. The North Hollywood Location, located at 10659 W. Delano Street North Hollywood, CA 91606, began operating in January 2020 and monitors O₃ and NO₂;³⁹ therefore, data for year 2020 for O₃ and NO₂ were provided by this station. The next nearest representative monitoring station with available data is the Central Los Angeles County Monitoring Station, located at 1630 North Main Street, Los Angeles, CA 90012. Criteria pollutants monitored at this station include ozone, NO₂, CO, SO₂, Pb, PM₁₀, and PM_{2.5}. The most recent data available from the SCAQMD for this monitoring station are from years 2019 to 2021.⁴⁰ 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 NAAQS were not exceeded in the Project Site vicinity for most pollutants between 2019 and 2021, except for O₃, PM₁₀, and PM_{2.5}.

³⁷ 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 April 2023.

³⁸ 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.

³⁹ SCAQMD, Annual Air Quality Monitoring Network Plan – July 1, 2020.

⁴⁰ SCAQMD, Historical Data by Year 2019-2021, <http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year>. Accessed April 2023.

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

Pollutant/Standard ^a	2019	2020	2021
Ozone, O₃ (1-hour)			
Maximum Concentration (ppm)	0.085	0.133	0.110
Days > CAAQS (0.09 ppm)	0	5	4
Ozone, O₃ (8-hour)			
Maximum Concentration (ppm)	0.080	0.108	0.089
4 th High 8-hour Concentration (ppm)	0.065	0.102	0.079
Days > CAAQS (0.070 ppm)	2	49	17
Days > NAAQS (0.070 ppm)	2	49	17
Nitrogen Dioxide, NO₂ (1-hour)			
Maximum Concentration (ppm)	0.070	0.060	0.065
Days > CAAQS (0.18 ppm)	0	0	0
98 th Percentile Concentration (ppm)	0.056	0.052	0.049
Days > NAAQS (0.100 ppm)	0	0	0
Nitrogen Dioxide, NO₂ (Annual)			
Annual Arithmetic Mean (0.030 ppm)	0.018	0.015	0.014
Carbon Monoxide, CO (1-hour)			
Maximum Concentration (ppm)	2.0	1.9	2.0
Days > CAAQS (20 ppm)	0	0	0
Days > NAAQS (35 ppm)	0	0	0
Carbon Monoxide, CO (8-hour)			
Maximum Concentration (ppm)	1.6	1.5	1.6
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9 ppm)	0	0	0
Sulfur Dioxide, SO₂ (1-hour)			
Maximum Concentration (ppm)	0.010	0.004	0.002
Days > CAAQS (0.25 ppm)	0	0	0
99 th Percentile Concentration (ppm)	0.002	0.003	0.002
Days > NAAQS (0.075 ppm)	0	0	0
Sulfur Dioxide, SO₂ (24-hour)			
Maximum Concentration (ppm)	0	0	0
Days > CAAQS (0.04 ppm)	0	0	0
Respirable Particulate Matter, PM₁₀ (24-hour)			
Maximum Concentration (µg/m ³)	62	77	64
Samples > CAAQS (50 µg/m ³)	3	24	3
Samples > NAAQS (150 µg/m ³)	0	0	0
Respirable Particulate Matter, PM₁₀ (Annual)			
Annual Arithmetic Mean (20 µg/m ³)	25.5	23.0	25.5

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

Pollutant/Standard ^a	2019	2020	2021
Fine Particulate Matter, PM_{2.5} (24-hour)			
Maximum Concentration ($\mu\text{g}/\text{m}^3$)	43.5	47.3	61.0
98th Percentile Concentration ($\mu\text{g}/\text{m}^3$)	28.3	28.0	44.8
Samples > NAAQS ($35 \mu\text{g}/\text{m}^3$)	1	2	12
Fine Particulate Matter, PM_{2.5} (Annual)			
Annual Arithmetic Mean ($12 \mu\text{g}/\text{m}^3$)	10.9	12.3	12.77
Lead			
Maximum 30-day average ($\mu\text{g}/\text{m}^3$)	0.012	0.013	0.012
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	0.011	0.012
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, <https://www.epa.gov/outdoor-air-quality-data>. Accessed April 2023.

(b) 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 is estimated at 447 in one million (compared to an overall Air Basin-wide risk of 455 in one million for the average of 10 fixed monitoring sites).⁴¹ 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, and ports).

(c) Existing Project Site Development and Emissions

The Project Site is developed with the Universal City Hotel (Hotel), which is comprised of a 24-story hotel building containing 495 guestrooms (Existing Hotel Building), an attached ancillary hotel building providing meeting/banquet rooms and ancillary hotel uses (Existing Ancillary Hotel Building), a three-level parking garage, vehicular circulation facilities (i.e., internal driveway and service road), an outdoor pool area (Existing Outdoor Pool Area), and pedestrian walkways and landscaped areas in both the north and south plazas on the main Hotel entry level. Overall, the Project Site currently has 652 vehicle

⁴¹ SCAQMD, Multiple Air Toxics Exposure Study, MATES V Data Visualization Tool, Cancer Risk. MATES Data Visualization (arcgis.com), accessed April 2023.

parking spaces. The Existing Outdoor Pool Area is the southernmost improvement on the Project Site, and consists of a pool, pool deck, spa, pool bar and grill, and ornamental landscaping. Air quality emissions are currently associated with vehicle trips to and from the Project Site, on-site combustion of fossil fuels for an existing emergency generator, combustion of natural gas for heating and cooking, on-site combustion emissions from landscaping equipment treatment, and fugitive emissions of VOCs from the use of aerosol products and coatings on-site.

The Project would expand the existing Hotel; thus, the emissions associated with the existing Hotel would remain since the existing hotel facilities that will remain under the Project are not considered new Project emissions. The existing Hotel components that would be demolished, such as hardscape (i.e., asphalt, paving, curbing, etc.) and walls to accommodate the proposed development for the Project, do not emit operational emissions.⁴² Existing emissions from the Existing Outdoor Pool Area (including the bar and grill and for pool heating) are considered negligible and are not calculated as existing operational emissions that would be removed by the Project. Therefore, the analysis provides a conservative assessment by not analyzing existing operational emissions to be removed and only considers additional emissions from Project construction (including demolition of existing uses) and operation of the Project. Existing hotel facility emissions are not subtracted from the Project construction or operational emissions.

(d) *Sensitive Receptors and Locations*

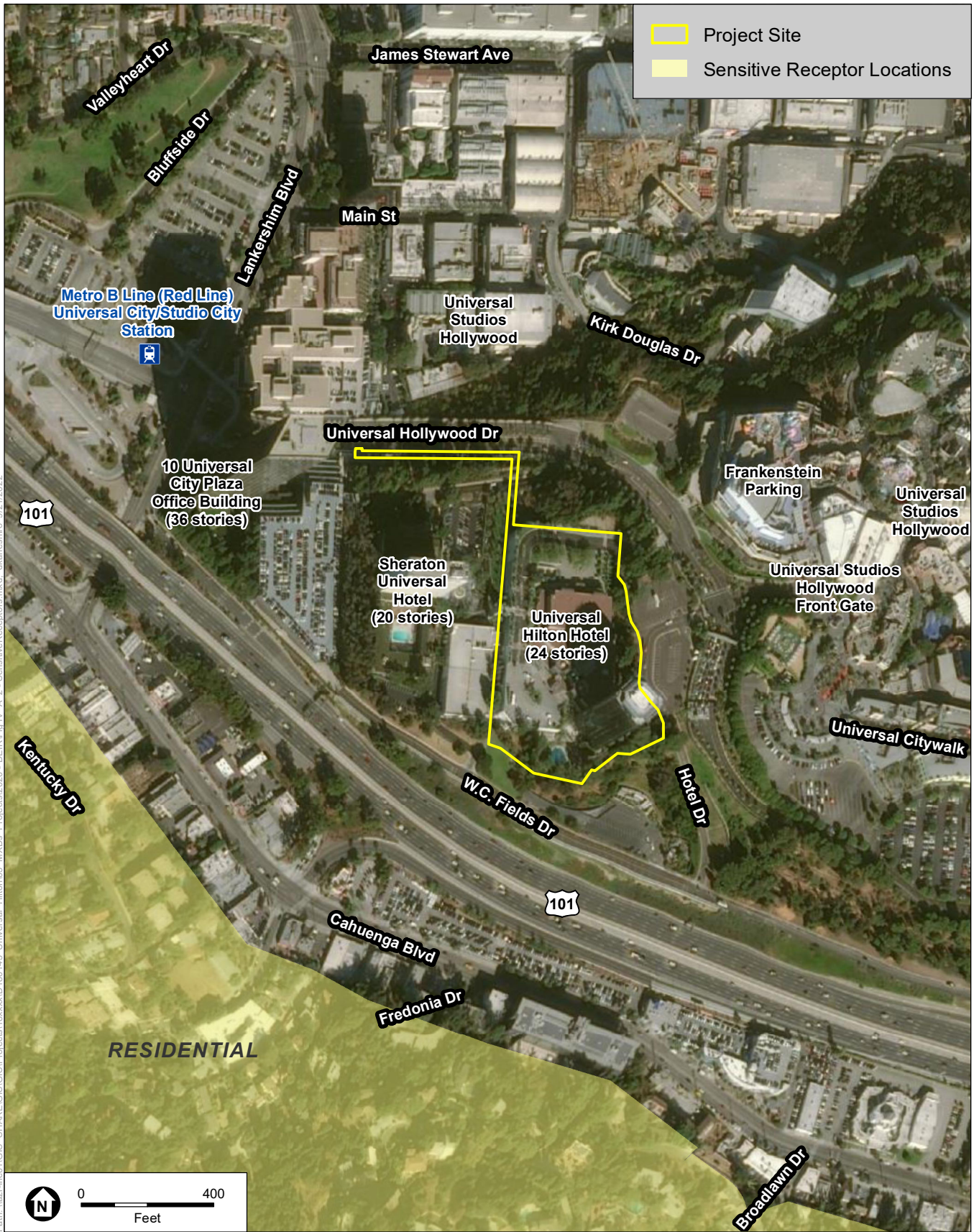
Certain population groups, such as children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to the potential effects of air pollution than others. As a result, certain land uses that are occupied by these population groups, such as residences, hospitals, and schools, are considered to be air quality-sensitive land uses. The Existing Hotel Building is not considered a sensitive receptor because it is located on the Project Site and is a part of the Project (e.g., the Project proposes improvements to the existing uses on the Project Site). In addition, the Existing Hotel Building and the adjacent Sheraton Hotel are not considered sensitive receptors as a hotel use is not considered an air quality-sensitive land use under the SCAQMD guidance because hotels do not generally serve as a long-term residence for populations that are particularly susceptible to adverse effects of air pollution.⁴³ The Project Site is in an active area that serves as both a commercial center for Studio City and the surrounding communities, and as a tourist and entertainment center, offices, and hotels. The Project Site is bordered on the north by an undeveloped parcel (periodically used for the temporary storage of trailers) and Universal Hollywood Drive; on the east by a surface parking lot operated by Universal Studios Hollywood, Hotel Drive, an undeveloped hillside parcel, and Universal Studios Hollywood; on the south by an undeveloped parcel and a shuttle parking lot (both owned and maintained by Universal

⁴² Hardscape and infrastructure are not sources of existing emissions as they do not off-gas any criteria air pollutants or GHGs once constructed.

⁴³ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

Studios Hollywood); and on the west by the Sheraton Universal Hotel. Universal Studios Hollywood and Universal CityWalk are located across Universal Hollywood Drive from the Project Site. Both entertainment venues are part of the larger Universal City, which consists of a number of interrelated entities that have evolved because of their association with the entertainment industry, including Universal Studios Hollywood, Universal CityWalk, and the facilities that comprise Universal Studios, with soundstages, backlot sets, and offices largely occupied by entertainment-related companies. The majority of Universal City is located within unincorporated Los Angeles County, generally just north and east of the Project Site, which is also generally north and east of Universal Hollywood Drive. There are no existing air quality-sensitive land uses adjacent or in the immediate vicinity of the Project Site per the SCAQMD guidance.⁴⁴ The closest air quality sensitive receptors are the single-family and multi-family residential uses located approximately 750 feet west and south of the Project Site as shown in **Figure IV.A-2, Sensitive Receptor Locations Nearest to the Project Site**.

⁴⁴ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.



SOURCE: DigitalGlobe, 2016

Hilton Universal City Project

Figure IV.A.2
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:

- a) ***Conflict with or obstruct implementation of the applicable air quality plan;***
- 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;***
- c) ***Expose sensitive receptors to substantial pollutant concentrations; or***
- 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 (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 most recent 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.⁴⁵ 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 commercial land use projects such as the Project.⁴⁶ As a result, lead emissions are not further evaluated in this Draft EIR.

Conflict with Applicable Air Quality Plans. CEQA Guidelines Section 15125 requires an analysis of a project's potential conflict 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 potential conflict with the SCAQMD's 2016 AQMP, 2022 AQMP, and the City's 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 conflict with the SCAQMD's 2016 AQMP, 2022 AQMP, and applicable City Air Quality

⁴⁵ As stated above, 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 not exceed the significance thresholds for lead. Unleaded fuel and unleaded paints have virtually eliminated lead emissions from commercial land use projects such as the Project. As a result, lead emissions are not further evaluated in this Draft EIR.

⁴⁶ Pursuant to the Consumer Product Safety Act, the U.S. Consumer Product Safety Commission passed regulations prohibiting the use of lead-containing paints for products manufactured after February 27, 1978. Effective January 1, 1996, the Clean Air Act banned the sale of all leaded fuel for use in on-road vehicles.

Element plans and policies (See IV.A.3.d)(1)(a)(ii)(a) *Air Quality – Conflict with the Air Quality Management Plan*).

Construction and Operational Emissions. 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 ozone, PM10, and PM2.5. 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.⁴⁷ 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 SCAQMD CEQA Air Quality Significance Thresholds,⁴⁸ the Project would potentially result in a significant impact of a federal or State non-attainment pollutant if emissions of ozone precursors (VOC and NO_x), PM10, or PM2.5 would exceed the values shown in **Table IV.A-4, SCAQMD Regional Emissions Thresholds**.

TABLE IV.A-4
SCAQMD REGIONAL EMISSIONS THRESHOLDS (POUNDS PER DAY)

Activity	VOC	NO _x	CO	SO ₂	PM10	PM2.5
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.⁴⁹

⁴⁷ SCAQMD, CEQA Air Quality Handbook, April 1993.

⁴⁸ SCAQMD, Air Quality Significance Thresholds, April 2019.

⁴⁹ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

- 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 ambient concentrations in the vicinity of the Project Site to exceed 2.5 µg/m³ over 24 hours (SCAQMD Rule 1303 allowable change in concentration).
- 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, a 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.⁵⁰ 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:⁵¹

- 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,⁵² the Project would potentially result in a significant impact of an attainment, maintenance, or unclassified pollutant if emissions of CO or SO₂ would exceed the values shown in Table IV.A-4.

⁵⁰ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

⁵¹ SCAQMD, CEQA Air Quality Handbook, April 1993.

⁵² SCAQMD, CEQA Air Quality Handbook, April 1993.

b) Methodology

The methodology used for 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.

(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.⁵³ 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. However, the 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 other approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (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.⁵⁴ 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*.⁵⁵ This latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and Final Localized Significance Threshold Methodology.

⁵³ SCAQMD, CEQA Air Quality Handbook, April 1993.

⁵⁴ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

⁵⁵ SCAQMD, Final Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds, 2006.

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.⁵⁶ SCAQMD's general land use 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, a 1,000-foot siting distance for sensitive land uses proposed in proximity to a major service and maintenance rail yard, 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 reduce emissions and lower potential health risk. SCAQMD's guidelines are voluntary initiatives recommended for consideration by local planning agencies. The Project Site is within 1,000 feet of the Hollywood Freeway (US-101); however, a hotel is not considered an air quality-sensitive land use under the SCAQMD guidance because hotels do not generally serve as a long-term residence for populations that are particularly susceptible to adverse effects of air pollution, such as children and the elderly.⁵⁷ Therefore, emissions from the freeway are not analyzed in this Draft EIR.

(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., ozone and PM_{2.5}).⁵⁸ The SCAQMD's 2016 and 2022 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving five NAAQS related to these pollutants, including transportation control strategies from the 2016-2040 and 2020-2045 RTP/SCS designed to reduce VMT.⁵⁹ The 2016 and 2022 AQMP control strategies were developed, in part, based on regional growth projections prepared by SCAG through 2045.⁶⁰ 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

⁵⁶ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 2005.

⁵⁷ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

⁵⁸ 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.

⁵⁹ SCAQMD, Final 2016 AQMP, March 2017, pp. ES-6 and 4-42; SCAQMD, Final 2022 AQMP, December 2022, pp. ES-5 and 4-51.

⁶⁰ SCAQMD, Final 2016 AQMP, March 2017, pp. 4-42 to 4-44; SCAQMD, Final 2022 AQMP, December 2022, pp. 4-51 to 4-54.

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's thresholds of significance.⁶¹ As noted above, the 2016 and 2022 AQMPs have been adopted by the SCAQMD and CARB. Therefore, this analysis considers whether the Project would be in conflict with the 2016 and 2022 AQMPs based on the Project's consistency with applicable growth projections and emission control strategies developed for the AQMP.

(3) Conflict with General Plan – Air Quality Element

As discussed previously, in subsection IV.A.2.b(4)(a)(i), *Air Quality - Air Quality Element*, 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

As discussed above, in subsection IV.A.2.c(2)(c), *Air Quality - Existing Project Site Development and Emissions*, the Project would expand the Existing Hotel by demolishing hardscape to accommodate the proposed development. Emissions associated with the Existing Hotel would remain since the existing components that would be demolished for the Project do not emit operational emissions. No existing emissions credit are applied to Project emissions. Therefore, existing operational air quality emissions are not required to be calculated, and the Project's air quality emissions are considered new.

(5) Construction Emissions Methodology

Construction air quality impacts were assessed based on the incremental increase in emissions compared to baseline conditions. Project construction activities that would have the potential to create regional air quality impacts include vehicle trips generated by construction workers, vendor trucks, concrete 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) and applying the mobile source and fugitive dust emissions factors. The emissions have been estimated using the CalEEMod software (version 2022.1.1), an emissions inventory software program recommended by the SCAQMD, and the CARB on-road vehicle EMFAC2021 model.

⁶¹ SCAQMD, CEQA Air Quality Handbook, April 1993, p. 12-1.

The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule provided by the Project's construction representative. 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 construction representative. Emissions from worker trips, haul truck trips, concrete truck trips and vendor truck trips were estimated outside of CalEEMod to account for the CARB on-road vehicle emissions factor EMFAC2021 (EMFAC) model because it has not yet been incorporated in the current version of CalEEMod. Haul truck trip estimates were based on excavation volumes obtained from the Project's construction representative, 12 cubic yard debris capacity haul trucks and 15 cubic yard soil capacity haul trucks; cement truck trip estimates were based on the Project's construction representative and 10 cubic yard concrete capacity concrete trucks. Emissions from haul trucks and concrete trucks were also estimated outside of CalEEMod using EMFAC2021 emission factors for haul 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 hauling activities and haul 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, and foundations/concrete pour phases. 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 excavate approximately 87,850 cubic yards of soil, with a net of export of 87,000 cubic yards of soil during the grading phase and the remaining 850 cubic yards of soil would be reused on site as fill. Approximately 10,000 cubic yards of demolition debris and 100 cubic yards of site preparation debris (asphalt, earthwork, and general construction debris).

Emissions from these Project activities were estimated by construction phase. The maximum daily emissions were predicted values for the worst-case day and do not represent the emissions that would occur daily 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 *Air Quality and Greenhouse Gas Technical Appendix* in Appendix B of this Draft EIR.⁶²

⁶² 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.

Project construction activities that would have the potential to create local air quality impacts include fugitive dust from grading and demolition 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.⁶³ 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 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 in the SCAQMD's East San Fernando Valley Source Receptor Area 7 and is approximately 7.26 acres, which includes the Existing Hotel Building and Existing Ancillary Hotel Building. The construction area is approximately 4.94⁶⁴ acres in size (the Hotel Expansion Building construction area is approximately 4.54 acres in size and the proposed parking garage construction areas, including the Meeting Room Addition, is approximately 0.5 acres in size), with the nearest off-site sensitive receptors (i.e., residential uses) located approximately 750 feet southwest of the Project Site along Fredonia Drive. To provide a conservative assessment of localized construction and operational emissions, the screening criteria used in the analysis were linearly interpolated based on those applicable to 1, 2 and 5-acre sites in the East San Fernando Valley area with sensitive receptors located 200 meters (660 feet) away. This approach is conservative because it utilizes screening thresholds based on a sensitive receptor distance of 200 meters, which is less than the actual distance from the Project Site to sensitive receptors, instead of the alternative higher thresholds based on a sensitive receptor distance of 500 meters. The maximum daily emissions from construction of the Project were compared to these screening criteria.

Project construction is estimated to start in 2024, 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)(c), *Air Quality - On-Road and Off-Road Vehicle Rules*, for additional details). As a result, should Project construction commence at a later date than analyzed in this Draft EIR, construction emissions would be lower than those presented below, and air quality impacts would be similar to, if not less than, the impacts disclosed herein.

⁶³ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

⁶⁴ This acreage excludes the Existing Hotel Building and Existing Ancillary Hotel Building that would remain.

(6) Operational Emissions Methodology

Project operational emissions were estimated using CalEEMod (version 2022.1.1) to forecast the daily regional criteria pollutant emissions from on-site area and stationary sources that would occur during long-term Project operations. For purposes of the air quality modeling, the Project is assumed to be operational in 2027 based on the Project buildout year.

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 *2023 Updated Transportation Assessment Addendum* (2023 Updated TA Addendum, Appendix K-4) where the VMT analysis used the City's VMT analysis procedures and LA VMT Calculator.⁶⁵ The VMT Calculator is based on Institute of Transportation Engineers (ITE) trip generation rates that implements the mixed-use trip generation model methodology from the USEPA, and utilizes socioeconomic, transit, and trip length data from the Los Angeles citywide travel demand model that is calibrated to Los Angeles conditions in order to adjust the trips for internalization, transit, and walkability.^{66,67} 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 annual VMT is based on the sum of the estimated daily VMT (365 days out of a year). Total daily VMT are provided in the 2023 Updated TA Addendum prepared for the Project where adjustments were made to account for the TDM Program.⁶⁸ Based on the Project's 2023 Updated TA Addendum (Appendix K-4), 4,309 daily vehicle trips for a total of 29,995 daily VMT are estimated under the Project scenario.

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 area and stationary sources that would occur during long-term Project operations. Emissions would result from area sources located on-site, such as natural gas combustion from water heaters, boilers, space heating and cooking stoves, landscaping equipment, and use of consumer products.⁶⁹ The Project would not contain any large

⁶⁵ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

⁶⁶ USEPA, Mixed-Use Trip Generation Model, Accessed June 11, 2020. <https://www.epa.gov/smartgrowth/mixed-use-trip-generation-model>

⁶⁷ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

⁶⁸ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

⁶⁹ CalEEMod calculates emissions from consumer products defined as chemically formulated products used by household and institutional consumers, including, but not limited to, detergents; cleaning

stationary combustion equipment, such as large boilers or combustion turbines. Natural gas usage factors in CalEEMod are based on the CEC's (2020, 2021) 2018–2030 Uncalibrated Commercial Sector Forecast (Commercial Forecast) and the 2019 Residential Appliance Saturation Survey (RASS). The Project would be required to comply with applicable Title 24 Building Energy Efficiency Standards at the time of the building permit application (which would be the 2019 Title Standards as the Project building permit application was filed in 2022 and the 2022 Title 24 Building are effective for building permit applications that are applied for on or after January 1, 2023). The CalEEMod software, version 2022.1.1, includes building energy efficiency factors for the 2019 Title 24 Building Energy Efficiency Standards.

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 the 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 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 include an on-site emergency generator with a capacity estimated at approximately 450 kilowatts (603 hp). The emergency generator 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 SCAQMD Rule 1470. For the purposes of estimating maximum daily emissions, it is estimated that the emergency generator would operate for two hours a day, with a maximum annual operation of 50 hours, for maintenance and testing purposes.

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.⁷⁰ 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.

compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products; but does not include other paint products, furniture coatings, or architectural coatings. The amount of consumer products used in CalEEMod is determined by land use and size.

⁷⁰ SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

(7) 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 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.

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

The greatest potential for TAC emissions during Project construction would be related to DPM emissions associated with heavy-duty equipment during excavation and grading activities. Construction activities associated with the Project would be sporadic, transitory, and short-term in nature (approximately 30 months). As further described below, the City is not required to conduct a quantified health risk assessment (HRA) for development projects that include hotel, recreational 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),⁷¹ 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

⁷¹ Office of Environmental Health Hazard Assessment, Air Toxics Hot Spots Program, Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments, February 2015.

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 considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime.”⁷²

The Project is not a “Hot Spots” Program project but rather involves the construction and operation of a development that includes hotel, recreational and restaurant uses. The OEHHA Guidance Manual applies to stationary source operations which have no applicability to projects that consist of hotel, recreational and restaurant uses, including 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.”⁷³ Furthermore, in comments presented to the SCAQMD Governing Board⁷⁴ relating to TAC exposures associated with Rules 1401, 1401.1, 1402 and 212

⁷² 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.

⁷³ 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.

⁷⁴ 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.

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.

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 development projects that include hotel, recreational 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 OEHHA 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 facility maintenance operations, from routine cleaning, from periodic painting, etc., and from periodic visits from delivery trucks and service vehicles. However, facility maintenance operations would only occur periodically and would result in minimal emissions and minimal exposures to off-site sensitive receptors, which are located approximately 750 feet from the Project. As the Project consists of hotel, recreational and restaurant uses the Project would not include sources of substantial TAC emissions identified by the SCAQMD or CARB siting recommendations.^{75,76} 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 IV.H, *Land Use and Planning*, of this Draft EIR.

c) Project Design Features

See Project Design Feature GHG-PDF-1 in Section IV.F, *Greenhouse Gas Emissions*, of this Draft EIR. Per Project Design Feature GHG-PDF-1, the Project would be designed to achieve the equivalent of the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Gold Certification level or equivalent for new buildings and includes optimization of building energy performance,

⁷⁵ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, 2005, Table 2-3.

⁷⁶ CARB, Air Quality and Land Use Handbook: A Community Health Perspective, 2005, Table 1-1.

which would reduce building energy demand and associated air pollutant emissions.⁷⁷ See Project Design Feature WS-PDF-1 (Water Conservation Features) in Section IV.M.2, *Utilities and Service Systems – Water Supply*, of this Draft EIR, which includes water conservation features, which would reduce energy required for domestic/potable water supply and for water associated with landscaping, and associated pollutant emissions. Also, see Project Design Feature TRAF-PDF-1 in Section IV.K. *Transportation*, of this Draft EIR, that would require implementation of a TDM Program to reduce Project VMT and related vehicular exhaust emissions (see Section IV.K for additional details).

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 and potential conflicts with applicable SCAQMD and SCAG policies, inclusive of regulatory compliance. In accordance with SCAQMD's CEQA Air Quality Handbook, Chapter 12, the following criteria are required to be addressed to determine the Project's consistency and potential conflicts 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.

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

- 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?

⁷⁷ For the purposes of this analysis, no quantitative energy efficiency credits were applied to the Project's energy use beyond regulatory requirements within CalEEMod since the specific number of LEED points that the Project would achieve in the Energy and Atmosphere category is not yet known.

(i) *Criterion 1*

With respect to the first criterion, as discussed in more detail under the analysis for Threshold (b) below, regional concentrations of NO_x, VOC, SO₂, CO, PM₁₀, and PM_{2.5} have been analyzed for the Project. As shown in **Table IV.A-5, *Estimated Maximum Regional Construction Emissions (pounds per day)***, below, regional maximum daily Project construction emissions would exceed the SCAQMD regional construction emissions thresholds for NO_x, resulting in a potentially significant impact. However, with implementation of Mitigation Measure AQ-MM-1, which includes utilization of Tier 4 Final off-road emissions standards or equivalent for equipment rated at 50 horsepower (hp) or greater, limits on haul truck idling, an inventory of all off-road construction equipment and discontinuation of construction activities during second-stage smog alerts, as shown in Table IV.A-7 in Threshold (b) below, regional construction NO_x emissions would be mitigated to below SCAQMD regional construction emissions thresholds and impacts from construction emissions would be less than significant. As shown in Table IV.A-6 in Threshold (b) below, regional maximum daily Project operations emissions would not exceed the SCAQMD regional operations emissions thresholds. Therefore, the Project would not increase in the frequency or severity of existing air quality violations, cause or contribute to new air quality violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

As discussed under the analysis for Threshold (c) below, localized concentrations of NO_x, CO, PM₁₀, and PM_{2.5} have been analyzed for the Project. There is no threshold for SO₂. However, SO₂ emissions would be less than one pound per day for construction and operation (as shown in Tables IV.A-5 and IV.A-6 below, respectively) and, therefore, would not have the potential to cause or effect a violation of the SO₂ ambient air quality standard as discussed above. 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 to (1) ascertain potential effects on localized concentrations; and (2) 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 Table IV.A-8 for Project construction and Table IV.A-9 for Project operations, the increases in localized emissions of NO_x, CO, PM₁₀, and PM_{2.5} during Project construction and operation, would not exceed the SCAQMD-recommended localized significance thresholds at sensitive receptors in proximity to the Project Site.

TABLE IV.A-5
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Hotel						
Demolition	3	30	33	<1	5	2
Site Preparation	1	10	13	<1	1	1
Grading	3	50	40	<1	8	3
Trenching	2	14	17	<1	1	1
Foundations/Concrete Pour	6	70	67	<1	7	3
Building Construction	4	35	46	<1	5	2
Paving	3	21	28	<1	1	1
Architectural Coating	29	5	8	<1	1	<1
Parking Garage/Meeting Room Addition						
Demolition	2	14	19	<1	7	1
Grading	2	41	30	<1	7	2
Foundations	2	22	23	<1	2	1
Building Construction	2	17	24	<1	2	1
Paving	1	10	15	<1	1	<1
Architectural Coating	2	2	4	<1	<1	<1
Overlapping Phases						
Hotel: Demolition + Parking Garage/Meeting Room Addition: Demolition	5	45	53	<1	12	3
Hotel: Demolition + Parking Garage/Meeting Room Addition: Grading	5	72	63	<1	12	4
Hotel: Site Preparation + Parking Garage/Meeting Room Addition: Grading	3	51	43	<1	8	3
Hotel: Grading + Trenching + Parking Garage/Meeting Room Addition: Grading	7	106	87	1	15	6
Hotel: Grading + Trenching + Parking Garage/Meeting Room Addition: Foundations	7	86	80	<1	11	5
Hotel: Grading + Parking Garage/Meeting Room Addition: Building Construction	5	68	64	<1	10	4
Hotel: Foundations + Paving + Parking Garage/Meeting Room Addition: Building Construction	11	108	118	<1	10	5

**TABLE IV.A-5
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) ^a**

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Hotel: Building Construction + Parking Garage/Meeting Room Addition: Building Construction + Architectural Coating	9	54	74	<1	7	3
Hotel: Building Construction + Parking Garage/Meeting Room Addition: Paving	6	44	61	<1	6	3
Maximum Daily Emissions	29	108	118	1	15	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 and fugitive VOC control measures consistent with SCAQMD Rule 1113.

SOURCE: ESA, 2023.

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 air pollution control measures listed in the 2022 AQMP and therefore would not delay attainment of the air quality standards.

Because the Project would not introduce any substantial stationary sources of emissions, CO is the appropriate benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.⁷⁸ As indicated below in 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. Therefore, 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 air quality violation or cause or contribute to new air quality violations. As construction of the Project would exceed the SCAQMD threshold for

⁷⁸ SCAQMD, CEQA Air Quality Handbook, Chapter 12, Assessing Consistency with Applicable Regional Plans, April 1993.

NO_x and could potentially exceed 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 in Threshold (b) below, this impact would be reduced to less than significant with implementation of mitigation measure AQ-MM-1. Operation of the Project would not exceed SCAQMD thresholds and in response to Criterion 1, Project operations would not increase the frequency or severity of an existing air quality violation or cause or contribute to new air quality violations. Therefore, impacts would be less than significant.

(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 the 2016-2040 and 2020-2045 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the 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 criteria.

(a) *Conflict with 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 IV.A.3.(b), *Air Quality - 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 it 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 PM_{2.5}),⁷⁹ or to cause the Air Basin to deteriorate from its current attainment status with respect to any other criteria pollutant emissions.

⁷⁹ 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.

As further discussed below under Subsection IV.A.3.d)(1)(a)(ii)(b), *Air Quality – Control Strategies*, the Project is also consistent with the 2016 AQMP as the Project would incorporate into its design appropriate control strategies set forth in the 2016 AQMP for achieving its emission reduction goals and would be consistent with the demographic and economic assumptions upon which the plan is based.

With respect to the determination of consistency with or potential conflicts 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 or conflict 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 or would the Project conflict 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 relatively small in number and temporary in nature, lasting at a maximum of approximately 30 months for the entire duration of the construction period, but would likely be shorter due to varying construction phases. **Therefore, the Project's construction jobs would not conflict with the employment or population projections upon which the 2016 and 2022 AQMP forecasted emissions levels are based.**

(ii) *Operations Growth Projections*

As stated above, for purposes of the air quality modeling, the Project is assumed to be operational in 2027 to provide a conservative estimate of emissions. However, if the Project buildout occurs at a later time, the emissions would be less than disclosed herein. As discussed in Chapter II, *Project Description*, of this Draft EIR, the Project's growth would fall within the growth projections contained in the 2016-2040 and 2020-2045 RTP/SCS, which 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 increase in the number of employees on the Project Site of approximately 321 new full-time equivalent (FTE) employees, would comprise approximately 0.38 percent of SCAG's year 2027 estimated increase of 84,411 employees within the City and approximately

0.11 percent of SCAG's 2040 estimated increase of 303,879 employees within the City.⁸⁰ Further, based on the 2020-2045 RTP/SCS growth projections, which forms the basis of the growth projections in the 2022 AQMP, the Project's 321 new full-time equivalent (FTE) employees, which would comprise approximately 0.3 percent of SCAG's year 2027 estimated increase of 108,800 employees within the City and approximately 0.08 percent of SCAG's 2045 estimated increase of 391,680 employees within the City.⁸¹ The Project's contribution to employment would be consistent with SCAG employment projections for the City and would be consistent and not conflict 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 IV.A.3.(b), *Air Quality - 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.⁸² 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 AQMPs. Impacts would be less than significant.**

- Does the Project include air quality mitigation measures?

As further discussed below, see under Threshold (b) IV.A.3.d)(2), *Air Quality – Mitigation Measures*, 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, with implementation of Mitigation Measure AQ-MM-1 (Refer to Mitigation Measures AQ-MM-1 below for additional information) to reduce the Project's construction emissions of NO_x, regional air quality impacts would be reduced to less than significant. As further discussed below, see under Threshold (b) IV.A.3.d)(2), *Air Quality – Mitigation Measures*, Project operational emissions are below regional thresholds and the Project would not require implementation of mitigation measures during operations. **As such the Project is consistent with this AQMP consistency criterion.**

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

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

⁸¹ Southern California Association of Governments, *Final 2020-2045 RTP/SCS, Demographics and Growth Forecast*, May 7, 2020.

⁸² SCAQMD, CEQA Air Quality Handbook, April 1993, page 12-1.

(b) Control Strategies

(i) Construction

During its construction phase, the Project is required to comply with CARB's requirements to reduce 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 is also required to 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. As discussed above, the Project would temporarily exceed the NO_x threshold during construction which could potentially conflict with or obstruct implementation of the applicable AQMP. With implementation of Mitigation Measure AQ-MM-1, potential significant impacts would be reduced to less than significant. Therefore, the Project implements feasible air quality mitigation which reduces Project impacts to less than significant. As the achievement and maintenance of NAAQS and CAAQS is the goal of the 2016 and 2022 AQMPs, the Project would therefore not interfere with air pollution control strategies listed in the 2016 and 2022 AQMPs. **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.**

(ii) Operations

The Project's location, design, and land uses would be consistent with both the 2016 and 2022 AQMPs 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 patrons and employees by increasing hotel, and restaurant density near public transit. The Project, which has an FAR of greater than 0.75 and is located on an infill site, qualifies as an employment center project per the definition provided by the City's Department of City Planning. Given its proximity to regional transportation facilities in the Project vicinity, including the Metro B Line (Red Line) Universal City/Studio City Station, located at the intersection of Lankershim Boulevard and Universal Hollywood Drive, approximately 0.25 mile to the west, the

Project Site is located entirely within a Transit Priority Area (TPA) and High Quality Transit Area (HQTA), as defined by the City.^{83,84} Transit options that service the Project Site include the Metro B Line (Red Line) provides direct linkages to downtown Los Angeles, as well as other rail lines within the Metro Rail system, including a connection with the Metro G Line (Orange Line) in North Hollywood and a connection with the Metro D Line (Purple Line) in Koreatown. The Metro B Line (Red Line) terminates at Union Station, a major hub for public transportation, including Amtrak, Metrolink, and bus lines providing national, regional, and local access. During the AM and PM peak hours, the Metro B Line (Red Line) provides headways of approximately 10 minutes per train (i.e., five trains per hour). Metro also operates bus lines along Lankershim Boulevard in the Project vicinity. Specifically, bus stops for Metro Local 155, Local 222, and Local 224 are maintained at the intersection of Lankershim Boulevard and Universal Hollywood Drive. Metro Local 155 provides local service between Sherman Oaks and Burbank, Metro Local 222 provides service between Hollywood and Sun Valley, and Metro Local 224 provides local service between Sylmar and the Metro B Line (Red Line) Universal City/Studio City Station. The Metro B Line (Red Line) Universal City/Studio City Station acts as a transfer hub for these local bus lines. Metro Local 240, as well as the BurbankBus Pink Route, also stop off-street at the Universal/Studio City Station. As previously mentioned, Universal Studios Hollywood also provides a complimentary shuttle service from the Hotel to Universal Studios Hollywood and Universal CityWalk and a complimentary tram from the Metro B Line (Red Line) Universal City/Studio City Station to the theme park entrances. In addition, a pedestrian bridge over Lankershim Boulevard provides safe and convenient pedestrian access surrounding the Metro B Line (Red Line) Universal City/Studio City Station and the Universal Studios Tram Stop.

As described above, by locating employment opportunities, restaurants, and entertainment, all within walking distance of each other, and by including features that support and encourage pedestrian activity and other non-vehicular transportation and increased transit use in the Studio City neighborhood of Los Angeles, the Project would reduce vehicle trips and VMT, and achieve a 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 2023 Updated TA Addendum,⁸⁵ which takes into account the Project Site's location within the City and incorporates VMT reductions

⁸³ SCAG. 2022. Priority Growth Areas. SCAG Region. Priority Growth Areas (PGA) - SCAG Region | Regional Data Platform (RDP) Home Southern California Association of Governments Accessed September 19, 2022.

⁸⁴ Transit Priority Areas (TPAs) are defined by SCAG as an area within one-half mile of a major transit stop that is existing or planned. High Quality Transit Areas (HQTAs) are defined by SCAG as generally a walkable transit village or corridor, consistent with the adopted RTP/SCS, and is within one half-mile of a well-served transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.

⁸⁵ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

from the land use characteristics, as well as a Project-specific TDM Program (refer to Section IV.K, *Transportation*, for a discussion of the TDM Program features). **Thus, Project development is consistent with either the 2016 and 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.**

Based on the above, the Project is consistent with the criteria identified in SCAQMD's CEQA Air Quality Handbook and would not conflict with or obstruct the implementation of both the 2016 and 2022 AQMP. Therefore, Project impacts related to the 2016 and 2022 AQMP would be less than significant.

(b) General Plan Air Quality Element

The Project would promote the General Plan Air Quality Element goals, objectives and policies as listed in Subsection IV.A.2.b)(4)(a), *Air Quality - City of Los Angeles Air Quality Element* (see Appendix B, Table 1, *Consistency with Applicable Air Quality Policies of the General Plan*, of this Draft EIR for additional details). In particular, the Project location and characteristics, as discussed above, would achieve several goals, policies and objectives of the Air Quality Element by locating development within an urban infill area and by establishing a land use pattern that promotes sustainability and minimization of VMT. The Project would achieve LEED Gold Certification or equivalent, which includes improving building energy efficiency above regulatory requirements that would reduce emissions from area sources located on-site, such as natural gas combustion from water heaters, boilers, space heating and cooking stoves. The Project would also support clean transportation technologies by providing a minimum of 8 percent (approximately 47 spaces) 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 Code LAMC-required electric vehicle parking spaces, with 10 percent of the Code LAMC-required spaces further improved with electric vehicle charging stations, which would encourage reduced emissions from mobile sources. Furthermore, as described above, the Project would support and encourage pedestrian activity in the Universal City Plan area as the Project is designed to be pedestrian-friendly and promote access from the nearby transit and commercial uses, which would encourage non-automotive transportation and reduce mobile source emissions. Primary pedestrian access to the buildings on the Project Site would continue to be provided from the South Plaza, which would continue to serve as the pick-up/drop-off area for the complimentary Universal Studios Hotel Shuttle. Pedestrian access would also continue to be provided from the parking garage with elevator access. Walkways would be provided around the building perimeters to provide safe pedestrian access through the Project Site to the building entrances. At the same time, the Project would reduce vehicle trips and air pollutant emissions generated by the proposed development by increasing hotel and employment opportunities within an identified TPA and HQTAs that has multiple public transit options as described above (with access to existing regional bus and rail service and local shuttles), and restaurants and entertainment, all within walking distance. 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, and consequently, a reduction in air pollutants from vehicle emissions.

As described in Section IV.F, *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 and TPA and HQTAs 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 environments similar to the Project Site. In 2019, the USEPA 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.⁸⁶ The LADOT VMT Calculator incorporates the USEPA MXD model and accounts for project land use characteristics 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 Technical Appendix*, and the Project's 2023 Updated TA Addendum, included as **Appendix K** of this Draft EIR,^{87,88} incorporation of USEPA MXD VMT reduction features applicable to the Project as well as Project Design Feature TRAF-PDF-1 (TDM Program) results in a 19.5 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.

⁸⁶ USEPA, Mixed-Use Trip Generation Model, www.epa.gov/smartgrowth/mixed-use-trip-generation-model, accessed on April 2023.

⁸⁷ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

⁸⁸ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

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

(2) Mitigation Measures

As discussed above, the Project has the potential to conflict with or obstruct the implementation of the applicable air quality plan as the Project's regional construction emissions of NO_x would potentially exceed the SCAQMD regional significance threshold. As such, as shown in Table IV.A-7, implementation of Mitigation Measure AQ-MM-1 would reduce the NO_x emissions to less than the threshold of significance. Therefore, Mitigation Measure AQ-MM-1 would be required to reduce potentially significant impacts regarding conflicts the AQMP. Mitigation Measure AQ-MM-1 is provided in Threshold (b) below.

(3) Level of Significance After Mitigation

Potentially significant Project impacts related to the potential to conflict with or obstruct the implementation of the applicable air quality plan would be reduced to less than significant with implementation of Mitigation Measure AQ-MM-1.

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 excavators 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. As described in Chapter II, *Project Description*, of this Draft EIR, approval of the haul route will be sought from the Los Angeles Department of Building and Safety.

The maximum daily construction emissions for the Project were estimated for each construction phase. During construction some individual construction phases could potentially occur concurrently; therefore, the estimated maximum daily emissions include these potentially concurrent construction phases by combining the relevant construction phase emissions. The maximum daily emissions take into account overlapping

construction phases for the Project. The maximum daily emissions are predicted values for a representative worst-case day and do not represent the actual emissions that would occur for every day of construction, which would likely be lower on many days. As stated above, in order to provide a conservative emissions analysis, for modeling purposes, construction emissions were modeled under the overlapping construction scenario assuming all construction occurs at the earliest feasible date beginning in 2024 with construction completed in 2026. 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-5. The calculations in Table IV.A-5 incorporate compliance with dust control measures required to be implemented during each phase of construction by SCAQMD Rule 403 (Control of Fugitive Dust) and fugitive VOC control measures required to be implemented by architectural coating emission factors based on SCAQMD Rule 1113 (Architectural Coatings).

As shown in Table IV.A-5, construction-related daily emissions of NO_x would exceed the SCAQMD thresholds of significance. Emissions of other criteria pollutants would be below SCAQMD thresholds. The NO_x 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. **Therefore, the Project's temporary impact related to regional NO_x construction emissions would be potentially significant.**

(b) Operations

Mobile, stationary, and area source operational regional criteria pollutant emissions were conservatively calculated for the Project for full buildout by year 2027. Operational emissions estimates include compliance with SCAQMD Rule 1113 (Architectural Coatings), which limits the VOC content of architectural coatings, which would be applied during typical building maintenance activities. Detailed emissions calculations are provided in Appendix B of this Draft EIR.

Daily trip generation rates and VMT for the Project were provided in the 2023 Updated TA Addendum⁸⁹ and include trips associated with the proposed restaurants, as well as hotel uses under the Project. The VMT calculations include reductions attributable to the Project characteristics, as shown in the Project's 2023 Updated TA Addendum, included as Appendix K of this Draft EIR that incorporates of USEPA MXD VMT reduction features applicable to the Project as well as Project Design Feature TRAF-PDF-1 (TDM Program).^{90,91}

⁸⁹ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

⁹⁰ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

⁹¹ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

Natural gas usage factors are based on commercial data from the California Energy Commission, and 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.

The results of the regional criteria pollutant emission calculations for VOC, NO_x, CO, SO₂, PM₁₀, and PM_{2.5} are presented in **Table IV.A-6, Estimated Maximum Regional Operational Emissions for the Project (pounds per day)**. As shown, operational-related daily emissions would not exceed the SCAQMD thresholds of significance and emissions levels would be below the applicable thresholds of significance. **As the Project's maximum regional emissions from operations would not exceed the regional thresholds of significance, regional operational emissions impacts would be less than significant.**

TABLE IV.A-6
ESTIMATED MAXIMUM REGIONAL OPERATIONAL EMISSIONS FOR THE PROJECT
(POUNDS PER DAY)^a

Source	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Project						
Area (Coating, Consumer Products, Landscaping)	12	<1	25	<1	<1	<1
Stationary (Emergency Generators)	<1	6	5	<1	<1	<1
Charbroilers	<1	-	-	-	2	1
Energy (Natural Gas)	<1	2	2	<1	<1	<1
Mobile	8	12	75	<1	22	5
Total Project	21	20	107	<1	23	7
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.

SOURCE: ESA, 2023.

(2) Mitigation Measures

(a) Construction

The following mitigation measure 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.
- During plan check, the Project's representative shall make available to the lead agency and South Coast Air Quality Management District (SCAQMD) a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that shall be used during any of the construction phases. The inventory shall include the horsepower rating, engine production year, and certification of the specified Tier standard. A copy of each such unit's certified tier specification, best available control technology (BACT) documentation, and CARB or SCAQMD operating permit shall be maintained on-site at the time of mobilization of each applicable unit of equipment.
- During demolition, site preparation, and grading and excavation activities, the contractor shall provide notification and documentation that haul truck drivers have received training regarding idling limitations specified in Title 13 California Code of Regulations, Section 2485, and that haul trucks limit idling for loading and unloading activities to 5 minutes at a location.
- 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.
- Construction activities shall be discontinued during second-stage smog alerts. A record of any second-stage smog alerts and of discontinued construction activities as applicable shall be maintained by the Contractor on-site.

(a) Operations

Project impacts regarding 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 during operation would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

(a) Construction

Construction of the Project would result in emissions that exceed the NO_x regional threshold, and, as such, impacts would be potentially significant prior to mitigation. Implementation of Mitigation Measure AQ-MM-1 would reduce short-term and temporary NO_x emissions, including from haul trucks during the grading activities, as shown in **Table IV.A-7, Estimated Maximum Mitigated Regional Construction Emissions (pounds per day)**. With implementation of Mitigation Measure AQ-MM-1, short-term construction NO_x emissions would be reduced to below the regional emission significance threshold for NO_x. Therefore, short-term and temporary impacts related to regional NO_x construction emissions would be less than significant with mitigation.

TABLE IV.A-7
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) ^a

Source	VOC	NO _x	CO	SO ₂	PM10 ^b	PM2.5 ^b
Construction Phases						
Hotel						
Demolition	2	20	38	<1	5	1
Site Preparation	1	4	13	<1	1	<1
Grading	2	38	45	<1	7	2
Trenching	1	10	17	<1	1	<1
Foundations/Concrete Pour	5	48	74	<1	6	2
Building Construction	3	23	50	<1	4	2
Paving	2	11	32	<1	1	<1
Architectural Coating	29	5	8	<1	1	<1
Parking Garage/Meeting Room Addition						
Demolition	1	10	23	<1	6	1
Grading	2	35	34	<1	6	2
Foundations	2	17	26	<1	2	1
Building Construction	2	12	27	<1	2	1
Paving	1	8	16	<1	1	<1
Architectural Coating	2	2	4	<1	<1	<1
Overlapping Phases						
Hotel: Demolition + Parking Garage/Meeting Room Addition: Demolition	4	30	61	<1	11	3
Hotel: Demolition + Parking Garage/Meeting Room Addition: Grading	4	55	72	<1	11	3
Hotel: Site Preparation + Parking Garage/Meeting Room Addition: Grading	2	39	47	<1	7	2
Hotel: Grading + Trenching + Parking Garage/Meeting Room Addition: Grading	5	83	96	1	14	5

TABLE IV.A-7
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) ^a

Source	VOC	NO_x	CO	SO₂	PM10 ^b	PM2.5 ^b
Hotel: Grading + Trenching + Parking Garage/Meeting Room Addition: Foundations	5	64	87	<1	10	3
Hotel: Grading + Parking Garage/Meeting Room Addition: Building Construction	4	50	71	<1	9	3
Hotel: Foundations + Paving + Parking Garage/Meeting Room Addition: Building Construction	8	71	133	<1	9	4
Hotel: Building Construction + Parking Garage/Meeting Room Addition: Building Construction + Architectural Coating	7	37	81	<1	6	2
Hotel: Building Construction + Parking Garage/Meeting Room Addition: Paving	4	31	66	<1	5	2
Maximum Daily Emissions	29	83	133	1	14	5
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 and fugitive VOC control measures consistent with SCAQMD Rule 1113.

SOURCE: ESA, 2023.

(b) Operations

Project impacts regarding 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 during operation would be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

(a) Localized Construction Emissions

As explained above in Subsection IV.A.3.(b), *Air Quality - Methodology*, the localized construction air quality analysis was conducted using the methodology prescribed in the SCAQMD Final Localized Significance Threshold Methodology.⁹² The screening criteria provided in the Final Localized Significance Threshold Methodology were used to determine localized construction emissions thresholds for the Project. The maximum daily localized emissions for each of the construction phases and the localized significance

⁹² SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

thresholds are presented in **Table IV.A-8, Estimated Maximum Localized Construction Emissions (pounds per day)**. The same phasing and equipment assumptions, and compliance with SCAQMD Rule 403 and Rule 1113, were used as for the regional emissions calculations discussed above.

**TABLE IV.A-8
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS (POUNDS PER DAY)^a**

Source	NO_x	CO	PM10^b	PM2.5^b
Construction Phases				
Hotel				
Demolition	24.0	28.3	3.7	1.4
Site Preparation	9.6	11.8	0.7	0.5
Grading	19.9	23.6	1.5	1.0
Trenching	13.9	16.1	0.6	0.5
Foundations/Concrete Pour	46.9	49.6	1.9	1.7
Building Construction	28.1	30.2	1.1	1.1
Paving	20.5	26.0	0.9	0.8
Architectural Coating	4.6	6.0	0.1	0.1
Parking Garage/Meeting Room Addition				
Demolition	14.0	17.1	5.9	1.3
Grading	10.9	13.4	0.5	0.4
Foundations	14.8	16.7	0.6	0.5
Building Construction	16.2	18.8	0.6	0.5
Paving	10.1	13.4	0.4	0.4
Architectural Coating	2.4	3.1	0.1	0.1
Overlapping Phases				
Hotel: Demolition + Parking Garage/Meeting Room Addition: Demolition	37.9	45.4	9.7	2.7
Hotel: Demolition + Parking Garage/Meeting Room Addition: Grading	34.8	41.7	4.2	1.8
Hotel: Site Preparation + Parking Garage/Meeting Room Addition: Grading	20.5	25.1	1.2	0.9
Hotel: Grading + Trenching + Parking Garage/Meeting Room Addition: Grading	44.8	53.0	2.5	1.9
Hotel: Grading + Trenching + Parking Garage/Meeting Room Addition: Foundations	48.7	56.3	2.6	2.0
Hotel: Grading + Parking Garage/Meeting Room Addition: Building Construction	36.1	42.3	2.0	1.5

TABLE IV.A-8
ESTIMATED MAXIMUM LOCALIZED CONSTRUCTION EMISSIONS (POUNDS PER DAY)^a

Source	NO_x	CO	PM10^b	PM2.5^b
Hotel: Foundations + Paving + Parking Garage/Meeting Room Addition: Building Construction	83.6	94.4	3.3	3.1
Hotel: Building Construction + Parking Garage/Meeting Room Addition: Building Construction + Architectural Coating	46.7	52.1	1.8	1.7
Hotel: Building Construction + Parking Garage/Meeting Room Addition: Paving	38.3	43.6	1.6	1.4
Maximum Daily Emissions	83.6	94.4	9.7	3.1
SCAQMD Thresholds of Significance^c	193.0	4,092.3	83.6	27.9
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 7 (East San Fernando Valley) for a 4.94-acre site with sensitive receptors conservatively assumed to be located 200 meters (approximately 660 feet) away from the construction area.

SOURCE: ESA, 2023.

As shown in Table IV.A-8 above, the Project's maximum localized construction emissions would be below the localized screening thresholds for NO_x, CO, PM10, and PM2.5 for the closest air quality sensitive receptors are the single-family and multi-family residential uses located west and south of the Project Site approximately 750 feet away (refer to Figure IV.A-2 above for the location of sensitive receptors). As discussed above in Section IV.A.2.c)(2)(d), there are no existing air quality-sensitive land uses adjacent or in the immediate vicinity of the Project Site as hotels are not considered sensitive receptors per the SCAQMD guidance.⁹³ **Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations during construction and impacts would be less than significant.**

(b) Localized Operational Emissions

The localized operational air quality analysis was conducted using the methodology prescribed in the SCAQMD Localized Significance Threshold Methodology. The screening criteria provided in the Localized Significance Threshold Methodology were used to determine the localized operational emissions thresholds of significance for the Project. The same assumptions, including compliance with the Title 24 Energy Efficiency

⁹³ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

Standards for Nonresidential Buildings, the CALGreen Code, and City of Los Angeles Green Building Code, were used in the analysis.

The maximum daily localized emissions and the localized significance thresholds are presented in **Table IV.A-9, Estimated Maximum Localized Operational Emissions for the Project Buildout (pounds per day)**. As shown in Table IV.A-9, the Project's maximum localized operational emissions would be below the localized significance thresholds. **Therefore, the Project would not expose sensitive receptors to substantial pollutant concentrations during operation and impacts would be less than significant.**

TABLE IV.A-9
ESTIMATED MAXIMUM LOCALIZED OPERATIONAL EMISSIONS FOR THE PROJECT BUILDOUT
(POUNDS PER DAY) ^a

Source	NO_x	CO	PM10	PM2.5
Area (Coating, Consumer Products, Landscaping)	0.2	24.9	<0.1	<0.1
Stationary (Emergency Generators)	5.6	5.1	<0.1	<0.1
Charbroilers	-	-	1.5	0.9
Energy	2.3	1.9	0.2	0.2
Total Localized (On-Site) Emissions	8.1	31.9	1.8	1.2
SCAQMD Screening Thresholds of Significance ^b	193.0	4,092.3	20.9	7.0
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 The SCAQMD LSTs are based on Source Receptor Area 7 (East San Fernando Valley) for a 4.94-acre site with sensitive receptors conservatively assumed to be located 200 meters away to the Project Site for operational emissions for LST purposes.

SOURCE: ESA, 2023.

(c) Carbon Monoxide Hotspots

The potential for the Project to cause or contribute to CO hotspots was evaluated by comparing Project intersection 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 (2019–2021) were 2.0 ppm (one-hour average) and 1.6 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 for some time,⁹⁴ 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 include: (a) Wilshire Boulevard and Veteran Avenue; (b) Sunset Boulevard and Highland Avenue; (c) La Cienega Boulevard and Century Boulevard; and (d) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP CO attainment demonstration, the SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day.⁹⁵ 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 shows 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.⁹⁶

Based on the Project's 2023 Updated TA Addendum,⁹⁷ the intersection of Barham Boulevard and Cahuenga Boulevards would have a maximum traffic volume of approximately 54,240 average daily trips (ADT) under the Project buildout scenario based on future year 2027 traffic volumes, and is assumed to operate at very low or idling speeds as a congested roadway intersection. 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 4.5 ppm (one-hour average) and 3.3 ppm (eight-hour average) under the Project,⁹⁸ which would not exceed the thresholds of significance. Total traffic volumes at the most impacted intersection would likely have to more than quadruple 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

⁹⁴ SCAQMD, Final 2012 AQMP, February 2013, pp. 2-22.

⁹⁵ SCAQMD, 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations, August 2003, pp. V-4 through V-24.

⁹⁶ The eight-hour average is based on a 0.7 persistence factor, as recommended by the SCAQMD.

⁹⁷ Linscott Law & Greenspan Engineers, 2023 Transportation Analysis Addendum for the Hilton Universal City Project, April 2023. Appendix K of this Draft EIR.

⁹⁸ Traffic volumes attributable to the Project contribute approximately 2% of the future year 2025 traffic volumes at the maximum traffic volume intersection of Lankershim Boulevard and Campo de Cahuenga Way.

attainment demonstration modeling.⁹⁹ **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 be 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 construction activities. According to OEHHA and SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis,¹⁰⁰ 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 of approximately 30 months, the Project would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities.

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 would reduce emissions of TACs from diesel-powered vehicles. Although not anticipated, the Project would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the demolition and construction activities. 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 must be inspected and/or tested 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. In addition, the closest air quality sensitive receptors are the single-family and multi-family residential uses located approximately 750 feet to the southwest of Project Site, which provides a substantial buffer distance for the atmospheric dispersion of emissions from the Project Site minimizing the concentrations at these sensitive receptor locations (refer to Figure IV.A-2 above for the location of sensitive receptors). As discussed above in Section IV.A.2.c)(2)(d), there are no existing air quality-sensitive land uses adjacent or in the immediate vicinity of the Project Site as hotels are not considered sensitive receptors per the SCAQMD guidance.¹⁰¹ Based on the short-term duration of Project construction, substantial distance to sensitive receptors, and

⁹⁹ SCAQMD, 2003 AQMP, Chapter 6 Clean Air Act Requirements, August 2003.

¹⁰⁰ SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003.

¹⁰¹ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 6, 2005.

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 Measure AQ-MM-1 to reduce regional NO_x emissions. Mitigation Measure AQ-MM-1 would have co-benefits of reducing emissions of PM₁₀ and PM_{2.5} from heavy-duty diesel construction equipment (see Table IV.A-7), further reducing the less-than-significant levels of TAC emissions during construction activities. **Therefore, construction of the Project would not expose sensitive receptors to substantial concentrations of TACs and impacts would be less than significant.**

(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.¹⁰² 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 a substantial source of DPM.

With respect to the use of consumer products, including hotel cleaning products, and architectural coatings, the hotel, recreational and restaurant uses associated with the Project would be expected to generate minimal emissions from these sources. As a result, toxic or carcinogenic air pollutants are not expected to occur in any substantial amounts in conjunction with operation of the proposed land uses within the Project Site. Based on the uses expected on the Project Site, potential long-term operational impacts associated with the release of TACs would be minimal and would not be expected to exceed the SCAQMD thresholds of significance.

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 Table IV.A-9) by approximately 83 percent,¹⁰³ such that charbroiling would not cause or

¹⁰² SCAQMD, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003.

¹⁰³ USEPA, Methods for Developing a National Emission Inventory for Commercial Cooking Processes: Technical Memorandum, 2003.

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 Table IV.A-9, PM10 and PM2.5 emissions (i.e., DPM emissions) from the emergency generator would be less than 0.1 pounds per day. 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, the emissions would not pose a health risk to sensitive receptors.

Furthermore, the nearest air quality sensitive receptors are the single-family and multi-family residential uses located approximately 750 feet to the southwest of Project Site, which provides a substantial buffer distance for the atmospheric dispersion of emissions from the Project Site minimizing the concentrations at these sensitive receptor locations. Additionally, the Project's land uses would not include sources of substantial TAC emissions identified by the SCAQMD or CARB siting recommendations, such as installation of industrial-sized paint booths, dry cleaning operations, and printing shops.^{104,105} **Based on the uses expected on the Project Site, operation of the Project would not expose sensitive receptors to substantial TAC concentrations, and operational impacts would be less than significant.**

(2) Mitigation Measures

(a) *Construction*

Impacts regarding exposure of sensitive receptors to substantial pollutant concentrations would be less than significant. Therefore, no mitigation measures are required.

(e) *Operations*

Impacts regarding exposure of sensitive receptors to substantial pollutant concentrations would be less than significant. Therefore, no mitigation measures are required.

¹⁰⁴ SCAQMD, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, May 2005, Table 2-3.

¹⁰⁵ CARB, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005, Table 1-1.

(3) Level of Significance After Mitigation

(a) Construction

Impacts regarding the exposure of sensitive receptors to substantial pollutant concentrations during construction would be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

(b) Operation

Impacts regarding the exposure of sensitive receptors substantial pollutant concentrations during operation would be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

Threshold d) Would the Project result in other emissions (such as those leading to odors) 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 a substantial number of people. 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 would not 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. In addition, as shown in Table IV.A-5 and Table IV.A-7, construction and operational emissions would not exceed the SCAQMD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO₂). **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

Based on the established methodology to analyze cumulative impacts, project-level impacts are considered when determining cumulative impacts, as detailed below. Cumulative impact significance findings for the Project are presented below.

(1) Impact Analysis

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.¹⁰⁶

¹⁰⁶ 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

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

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 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

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.”).

proposed within the City.”¹⁰⁷ 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.”¹⁰⁸ 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.”¹⁰⁹ The SCAQMD has provided guidance on addressing the cumulative impacts for air quality. as discussed below:¹¹⁰

“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 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 relies 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.

¹⁰⁷ City of Los Angeles, 2006 L.A. CEQA Thresholds Guide, 2006, page B-1.

¹⁰⁸ SCAQMD, CEQA Air Quality Handbook, April 1993, page iii.

¹⁰⁹ SCAQMD, CEQA Air Quality Handbook, April 1993, page 6-1.

¹¹⁰ SCAQMD, White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, 2003, Appendix D.

For construction, as shown in Table IV.A-5, the Project would result in an exceedance of the regional significance threshold for NO_x. Therefore, construction of the Project, with construction of the other related projects, would contribute to a cumulative exceedance of regional significance thresholds for NO_x. **Cumulative construction impacts for regional construction emissions would be potentially significant.**

As shown in Table IV.A-8, the Project would not result in an exceedance of localized significance thresholds for construction. **Therefore, cumulative impacts related to localized construction emissions would be less than significant.**

For operations, as shown in Table IV.A-6 and IV.A-9, the Project would not result in an exceedance of regional or localized significance thresholds. **Therefore, cumulative impacts related to regional operational emissions would be less than significant.**

(2) Mitigation Measures

(a) Construction

Refer to Mitigation Measure AQ-MM-1, which would reduce cumulative regional NO_x emissions during construction. No additional mitigation measures are required.

Cumulative impacts related to localized construction emissions would be less than significant. Therefore, no mitigation measures are required.

(b) Operations

Cumulative impacts regarding operational air quality emissions were determined to be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance after Mitigation

(a) Construction

Implementation of Mitigation Measure AQ-MM-1 would reduce regional NO_x emissions to below applicable significance thresholds. Cumulative air quality impacts would be less than significant with mitigation. **Therefore, with implementation of Mitigation Measure AQ-MM-1 no additional mitigation measures are required or included, and the impact level would be less than significant with mitigation.**

(b) Operations

Cumulative impacts regarding operational air quality emissions were determined to be less than significant without mitigation. **Therefore, no mitigation measures were required or included, and the impact level remains less than significant.**