IV.A AIR QUALITY

Introduction

This section evaluates the Project's potential impacts on air quality. This section estimates the air pollutant emissions generated by demolition of the existing building and whether Project emissions would conflict with or obstruct implementation of the applicable air quality plan; result in a cumulatively considerable net increase of any criteria pollutant for which the project region is 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 Modeling* (*AQ Modeling*), provided in Appendix B of this Draft EIR.

1. 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 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.

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1 USEPA, NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed February 1, 2021.

2 SCAQMD, *Final 2022 AQMP, 2022.* Appendix I. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2022-air-quality-management-plan/final-2022-aqmp/appendix-i.pdf?sfvrsn=6.

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

To meet the air quality standards, regional plans are developed, including the SCAQMD's Air Quality Management Plan (AQMP), which incorporates regional demographic projections and integrated regional land use and transportation strategies from SCAG's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). These plans work together to examine multiple pollutants, cumulative effects, and transport issues related to attaining healthful air quality in the region. In addition, a host of regulatory standards at the federal, state, regional, and local level function to identify and limit exposure of air pollutants and toxic air contaminants (TACs).

(2) Local Air Quality and Air Pollution Sources

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

The Air Basin experiences a persistent temperature inversion (increasing temperature with increasing altitude) as a result of the Pacific high. This inversion limits the vertical dispersion of air contaminants, holding them relatively near the ground. As the sun warms the ground and the lower air layer, the temperature of the lower air layer approaches the temperature of the base of the inversion (upper) layer until the inversion layer finally breaks, allowing vertical mixing with the lower layer. This phenomenon is observed in mid to late afternoons on hot summer days. Winter inversions frequently break by midmorning.

[3] SCAQMD, *Map of Jurisdiction*, http://www.aqmd.gov/docs/default-source/default-document-library/map-of-jurisdiction.pdf. Accessed February 1, 2021.

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

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

(3) Air Pollutant Types

(a) Criteria Pollutants

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

(i) Ozone (O_3)

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

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

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Respirable and fine particulate matter, PM_{10} and $PM_{2.5}$, consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in areas like the City of Los Angeles, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. The human body naturally prevents the entry of larger particles into the body. However, small particles can enter the body and become trapped in the nose, throat, and upper respiratory tract. These small particulates can potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM_{10} and $PM_{2.5}$. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

(iii) Carbon Monoxide (CO)

CO is a colorless, odorless gas primarily emitted from combustion processes and motor vehicles due to incomplete combustion of carbon-containing fuels such as gasoline or wood. In urban areas, such as the City of Los Angeles, automobile exhaust accounts for the majority of CO emissions. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike O_3, motor vehicles operating at slow speeds are the primary source of CO in the Air Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections. Elevated concentrations of CO weaken the heart's contractions and lower the amount of oxygen carried by the blood. It is especially dangerous for people with chronic heart disease. Inhalation of CO can cause nausea, dizziness, and headaches at moderate concentrations and can be fatal at high concentrations.

(iv) Nitrogen Dioxide (NO_2)

Nitrogen dioxide is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. Of the seven types of NO_X compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic areas, such as urban areas like the City of Los Angeles, may be exposed to higher concentrations of NO_2 than those indicated by regional monitors. NO_2 absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10}. Nitrogen oxides irritate the nose and throat, and increase

one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_X is as a precursor to the formation of O_3.

(v) Sulfur Dioxide (SO_2)

Sulfur oxides (SO_X) are compounds of sulfur and oxygen molecules. SO_2 is the predominant form found in the lower atmosphere and is a product of burning sulfur or burning materials that contain sulfur. Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Generally, the highest levels of SO_2 are found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. Emissions of SO_2 aggravate lung diseases, especially bronchitis. It also constricts the breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of SO_2, and long-term exposures to both pollutants leads to higher rates of respiratory illness.

(vi) Lead (Pb)

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

(b) Additional Criteria Pollutants (California Only)

In addition to the national standards, the State of California regulates State-identified criteria pollutants, including sulfates (SO_4^2), hydrogen sulfide (H_2S), visibility-reducing particles, and vinyl chloride. With respect to the State-identified criteria pollutants, most land use development projects either do not emit them (i.e., hydrogen sulfide [nuisance odor] and vinyl chloride), or otherwise account for these pollutants (i.e., SO_4^2 and visibility reducing particles) through other criteria pollutants. For example, SO_4^2 are associated with SO_X emissions, and visibility-reducing particles are associated with particulate matter emissions. A description of the health effects of the State-identified criteria air pollutants is provided below.

(i) Sulfates (SO_4^2)

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

of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. SO_4^2 are particularly effective in degrading visibility, and, due to the fact that they are usually acidic, can harm ecosystems and damage materials and property.

(ii) Hydrogen Sulfide (H_2S)

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

(iii) Visibility-Reducing Particles

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

(iv) Vinyl Chloride

Vinyl chloride is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products and is generally emitted from industrial processes. Other major sources of vinyl chloride have been detected near landfills, sewage

4 California Air Resources Board, Hydrogen Sulfide & Health, https://ww2.arb.ca.gov/resources/hydrogen-sulfide-and-health, Accessed February 1, 2021.

5 California Air Resources Board, Hydrogen Sulfide & Health.

6 California Air Resources Board, Hydrogen Sulfide & Health.

7 California Air Resources Board, Visibility-Reducing Particles and Health, last reviewed October 11, 2016, https://www.arb.ca.gov/research/aaqs/common-pollutants/vrp/vrp.htm. Accessed February 1, 2021.

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

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

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

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

(i) VOCs

VOCs are organic chemical compounds of carbon and are not "criteria" pollutants themselves; however, VOCs are a prime component (along with NO_X) of the photochemical processes by which such criteria pollutants as O_3, NO_2, and certain fine particles are formed. They are therefore regulated as "precursors" to formation of these criteria pollutants. Some are also identified as TACs and have adverse health effects. VOCs are typically formed from combustion of fuels and/or released through evaporation of organic liquids, internal combustion associated with motor vehicle usage, and consumer products (e.g., architectural coatings, etc.).

(ii) Toxic Air Contaminants (TACs)

TACs is a term used to describe airborne pollutants that may be expected to result in an increase in mortality or serious illness or which may pose a present or potential hazard to human health, and include both carcinogens and non-carcinogens. The California Air Resources Board (CARB) and the California Office of Environmental Health Hazard Assessment (OEHHA) determine if a substance should be formally identified, or "listed," as a TAC in California. CARB has listed approximately 200 toxic substances, including those identified by the USEPA, which are identified on the California Air Toxics Program's TAC List. TACs are also not classified as "criteria" air pollutants. The greatest potential for TAC emissions during construction is related to diesel

9 California Air Resources Board, Vinyl Chloride & Health, https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed February 1, 2021.

10 California Air Resources Board, Vinyl Chloride & Health.

11 California Air Resources Board, Vinyl Chloride & Health.

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

b) Regulatory Framework

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

- Federal Clean Air Act (CCA)
  - National Ambient Air Quality Standards (NAAQS)
- California Clean Air Act (CCAA)
  - California Ambient Air Quality Standards (CAAQS)
- California Code of Regulations (CCR)
- State Programs for Toxic Air Contaminants
- Diesel Risk Reduction Program
- South Coast Air Quality Management District (SCAQMD)
  - 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 most recent 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 federal 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

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

[13] United States Environmental Protection Agency, Summary of the Clean Air Act, https://www.epa.gov/laws-regulations/summary-clean-air-act. Accessed February 1, 2021.

criteria pollutant for which the state has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met. The sections of the CAA most applicable to land use development projects include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).[14]

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

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

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

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		
	1-hour	35 ppm	20 ppm	Attainment	Attainment

[14] United States Environmental Protection Agency, Clean Air Act Overview, Clean Air Act Table of Contents by Title, Last Updated January 3, 2017, https://www.epa.gov/clean-air-act-overview/clean-air-act-text. Accessed February 1, 2021. As shown therein, Title I addresses nonattainment areas and Title II addresses mobile sources.

Pollutant	Averaging Period	Federal Standard[a,b]	California Standard[a,b]	South Coast Air Basin Attainment Status[c]	
				Federal Standard[d]	California Standard[d]
Carbon Monoxide (CO)		(40 mg/m^3)	(23 mg/m^3)		
	8-hour	9 ppm (10 mg/m^3)	9.0 ppm (10 mg/m^3)		
Nitrogen Dioxide (NO_2)	1-hour	0.10 ppm (188 µg/m^3)	0.18 ppm (339 µg/m^3)	Unclassified/ Attainment	Attainment
	Annual	0.053 ppm (100 µg/m^3)	0.030 ppm (57 µg/m^3)		
Sulfur Dioxide (SO_2)	1-hour	0.075 ppm (196 µg/m^3)	0.25 ppm (655 µg/m^3)	Unclassified/ Attainment	Attainment
	3-hour	0.5 ppm (1,300 µg/m^3)	—		
	24-hour	0.14 ppm (365 µg/m^3)	0.04 ppm (105 µg/m^3)		
	Annual	0.03 ppm (80 µg/m^3)	—		
Lead (Pb)	30-day average	—	1.5 µg/m^3	Partial Non-Attainment[e]	Attainment
	Rolling 3-month average	0.15 µg/m^3	—		
Sulfates	24-hour	—	25 µg/m^3	—	Attainment
Hydrogen Sulfide (H2S)	1-hour	—	0.03 ppm (42 µg/m^3)	—	Unclassified

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

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

[b] *Ambient Air Quality Standards based on the 2016 AQMP.*

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

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

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

Sources: United States Environmental Protection Agency, NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed February 1, 2021.
CARB, Ambient Air Quality Standards May 4, 2016, https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed February 1, 2021.

(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 O_3, PM_{10}, and $PM_{2.5}$ and, therefore, is considered "non-attainment" for these pollutants.

(b) California Code of Regulations

The California Code of Regulations (CCR) is the official compilation and publication of regulations adopted, amended or repealed by state agencies pursuant to the Administrative Procedure Act. The CCR includes regulations that pertain to air quality emissions. Specifically, Section 2485 in Title 13 of the CCR states that the idling of all diesel-fueled commercial vehicles (weighing over 10,000 pounds) during construction shall be limited to five minutes at any location. In addition, Section 93115 in Title 17 of the CCR states that operations of any stationary, diesel-fueled, compression-ignition engines shall meet specified fuel and fuel additive requirements and emissions standards.

(c) State Programs for Toxic Air Contaminants

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

plan. SCAQMD has further adopted two rules to limit cancer and non-cancer health risks from facilities located within its jurisdiction. Rule 1401 (New Source Review of Toxic Air Contaminants) regulates new or modified facilities, and Rule 1402 (Control of Toxic Air Contaminants from Existing Sources) regulates facilities that are already operating. Rule 1402 incorporates requirements of the AB 2588 program, including implementation of risk reduction plans for significant risk facilities.

(d) Diesel Risk Reduction Program

CARB identified particulate emissions from diesel-fueled engines as TACs in August 1998. Following the identification process, CARB was required by law to determine if there is a need for further control, which moved us into the risk management phase of the program. CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines* and the *Vehicles and the Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines*. The Diesel Advisory Committee approved these documents on September 28, 2000, paving the way for the next step in the regulatory process: the control measure phase. During the control measure phase, specific statewide regulations designed to further reduce DPM emissions from diesel-fueled engines and vehicles have and continue to be evaluated and developed. The goal of each regulation is to make diesel engines as clean as possible by establishing state-of-the-art technology requirements or emission standards to reduce DPM emissions.

(3) Regional

(a) South Coast Air Quality Management District

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

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

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of AQMPs, which serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the area into attainment with the standards in a timely manner. The 2022 AQMP includes strategies to ensure that approaching attainment deadlines for O_3 and $PM_{2.5}$ are met and that public health is protected to the maximum extent feasible.

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 2022 AQMP also incorporates the transportation strategy and transportation control measures from SCAG's latest 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Plan.[15] SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG coordinates with various air quality and transportation stakeholders in Southern California to ensure compliance with the federal and state air quality requirements. Pursuant to California Health and Safety Code Section 40460, SCAG has the responsibility of preparing and approving the portions of the AQMP relating to the regional demographic projections and integrated regional land use, housing, employment, and transportation programs, measures, and strategies. SCAG is required by law to ensure that transportation activities "conform" to, and are supportive of, the goals of regional and state air quality plans to attain the NAAQS. The RTP/SCS includes transportation programs, measures, and strategies generally designed to reduce vehicle miles traveled (VMT), which are contained in the AQMP. The SCAQMD combines its portion of the AQMP with those prepared by SCAG. The RTP/SCS and Transportation Control Measures, included as Appendix IV-C of the 2022 AQMP for the Air Basin, are based on SCAG's 2020-2045 RTP/SCS.

The 2022 AQMP forecasts future emissions inventories ''with growth'' based on SCAG's 2020-2045 RTP/SCS. The region is projected to see a 12 percent growth in population, 17 percent growth in housing units, 11 percent growth in employment, and an 8 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[16].

(ii) SCAQMD Air Quality Guidance Documents

The SCAQMD published the *CEQA Air Quality Handbook* (approved by the SCAQMD's Governing Board in 1993) to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.[17] 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*

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

16 SCAQMD, Table 3-3 of the Final 2022 AQMP.

17 South Coast Air Quality Management District, CEQA Air Quality Handbook 1993, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ceqa-air-quality-handbook-(1993). Accessed February 3, 2021.

Guidance Handbook. While this process is underway, the SCAQMD has provided supplemental guidance on the SCAQMD website.[18]

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

The SCAQMD has published a guidance document called the *Final Localized Significance Threshold Methodology* for CEQA evaluations that is intended to provide guidance when evaluating the localized effects from mass emissions during construction or operation of a project.[20] The SCAQMD adopted additional guidance regarding $PM_{2.5}$ emissions in a document called *Final Methodology to Calculate Particulate Matter (PM)2.5 and PM2.5 Significance Thresholds*.[21] The latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and *Final Localized Significance Threshold Methodology*.

(iii) SCAQMD Rules and Regulations

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

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

- **Rule 401 – Visible Emissions:** This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a

[18] SCAQMD, *Air Quality Analysis Guidance,* http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook#. Accessed February 1, 2021.

[19] South Coast Air Quality Management District, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, 2005, http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4. Accessed February 1, 2021.

[20] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, 2008, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed February 1, 2021.

[21] South Coast Air Quality Management District, Final Methodology to Calculate Particulate Matter (PM)2.5 and PM2.5 Significance Thresholds, 2006, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/final_pm2_5methodology.pdf?sfvrsn=2. Accessed February 1, 2021.

period or periods aggregating more than three minutes in any one hour which is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart or of such opacity as to obscure an observer's view.

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

- **Rule 403 – Fugitive Dust:** This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM_{10} emissions to less than 50 micrograms per cubic meter (µg/m3) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Best available control measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities. Finally, a contingency plan may be required if so determined by the USEPA.

Regulation 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.

(4) Local

(a) City of Los Angeles General Plan

(i) Air Quality Element

Local jurisdictions, such as the City, have the authority and responsibility to reduce air pollution through their land use decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. In general, the City of Los Angeles' General Plan (including the Framework, Air Quality, Mobility 2035, and Health and Wellness Elements) and the City of Los Angeles' Green New Deal (Sustainable pLAn 2019)

contain policies and programs for the protection of the environment and health through improved air quality. These serve to provide additional critical guidance for the betterment of public health for the region and City.

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

The Air Quality Element establishes six goals:

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

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

The topography and climate of Southern California combine to make the Air Basin an area of high air pollution potential. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cooler surface layer, which inhibits the pollutants from dispersing upward. Light winds during the summer further limit ventilation. Additionally, abundant sunlight triggers photochemical reactions, which produce O_3 and the majority of particulate matter. As shown in Table IV.A-1, the Air Basin is currently in non-attainment with regard to federal O_3 and $PM_{2.5}$ standards and state O_3, PM_{10}, and $PM_{2.5}$ standards. Lead (Pb) levels are also in partial non-attainment with regard to federal standards, though a re-designation request is pending.

(2) Air Quality Monitoring Data

The SCAQMD monitors air quality conditions at 38 source receptor areas (SRA) throughout the Air Basin. The Project Site is located in SCAQMD's Northwest Coastal LA County SRA No. 2. Historical data from the area was used to characterize existing conditions in the vicinity of the Project area. Table IV.A-2 shows pollutant levels, state and federal standards, and the number of exceedances recorded in the area from 2018 through 2020. The one-hour state standard for O_3 was not exceeded during this three-year period, though the daily federal standard was exceeded 11 times. CO and NO_2 levels did not exceed the CAAQS from 2018 through 2020 for the 1-hour averaging period (and 8-hour for CO). Other pollutant data is not available for SRA No. 2 during this three-year period.

Table IV.A-2
Ambient Air Quality Data for SRA No. 2 "Northwest Coastal LA County"

Pollutants and State and Federal Standards	Maximum Concentrations and Frequencies of Exceedance Standards		
	2018	2019	2020
Ozone (O_3)			
Maximum 1-hour Concentration (ppm)	0.094	0.086	0.134
Days > 0.09 ppm (State 1-hour standard)	0	0	6
Days > 0.070 ppm (Federal 8-hour standard)	2	1	8
Carbon Monoxide (CO_2)			
Maximum 1-hour Concentration (ppm)	1.6	1.9	2.0
Days > 20 ppm (State 1-hour standard)	0	0	0
Maximum 8-hour Concentration (ppm)	1.3	1.2	1.2
Days > 9.0 ppm (State 8-hour standard)	0	0	0
Nitrogen Dioxide (NO_2)			
Maximum 1-hour Concentration (ppm)	0.0647	0.0488	0.0766
Days > 0.18 ppm (State 1-hour standard)	0	0	0
PM_{10}			
Maximum 24-hour Concentration (µg/m^3)	N/A	N/A	N/A
Days > 50 µg/m^3 (State 24-hour standard)	N/A	N/A	N/A
$PM_{2.5}$			
Maximum 24-hour Concentration (µg/m^3)	N/A	N/A	N/A
Days > 35 µg/m^3 (Federal 24-hour standard)	N/A	N/A	N/A
Sulfur Dioxide (SO_2)			
Maximum 24-hour Concentration (ppb)	N/A	N/A	N/A
Days > 0.04 ppm (State 24-hour standard)	N/A	N/A	N/A

ppm = parts by volume per million of air.
µg/m^3 = micrograms per cubic meter.
N/A = not available at this monitoring station.
Source: SCAQMD annual monitoring data (http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year) accessed September 17, 2021.

(3) Existing Health Risk in the Surrounding Area

The Multiple Air Toxics Exposure Study V (MATES V) is the latest air toxics monitoring and evaluation study conducted in the Air Basin. In short, MATES V is a modeling effort to characterize risk from air toxics across the Air Basin. Based on the MATES V model, the calculated cancer risk from air toxics in the Project's zip code (90049) is approximately 409 in one million, which is

below the Air Basin's average risk of 454 per one million. The air toxics risk in the Project's zip code is higher than it is for 33.0% of the population within the Air Basin.[22]

The Office of Environmental Health Hazard Assessment (OEHHA), on behalf of the California Environmental Protection Agency (CalEPA), provides a screening tool called CalEnviroScreen that identifies which California communities are disproportionately burdened by, and vulnerable to, multiple sources of pollution. The tool ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors, and prevalence of certain health conditions. According to the CalEnviroScreen 4.0, the Project's census tract is ranked 21st percentile. The tract's pollution-specific burden, irrespective of other factors, is ranked 45th percentile.[23]

(4) Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. Generally speaking, sensitive land uses, or sensitive receptors, are those where sensitive individuals are most likely to spent time. Individuals most susceptible to poor air quality include children, the elderly, athletes, and those with cardiovascular and chronic respiratory diseases. As a result, land uses sensitive to air quality may include schools (i.e., elementary schools or high schools), child care centers, parks and playgrounds, long-term health care facilities, rehabilitation facilities, convalescent facilities, retirement facilities, residences, and athletic facilities. For the purposes of CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where it is possible that an individual could remain for 24 hours. The SCAQMD does not consider commercial and industrial facilities to be sensitive receptors because employees do not typically remain onsite at such facilities for 24 hours, but are present for shorter periods (such as eight-hour shifts). However, the SCAQMD suggests that Localized Significance Thresholds (LSTs) based on shorter averaging periods, such as the NO_2 and CO LSTs, may also be applied to receptors such as commercial and industrial facilities since it is reasonable to assume that workers at these sites may be present for up to eight hours.[24]

The Project Site is located on a major arterial with commercial uses along San Vicente Boulevard and residential neighborhoods to the north and south. Sensitive receptors within 1,000 feet of the Project Site include residences on Saltair Terrace that are approximately 175 feet north and greater from the Project Site (see Figure IV.A-1 for a map of surrounding sensitive receptors), as well as residences on Saltair Avenue and Westgate Avenue. Other nearby receptors where workers or other users may be present for one to eight or more hours include a multitude of

22 SCAQMD, Multiple Air Toxics Exposure Study V, MATES Data Visualization Tool, https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/home/?data_id=dataSource_105-a5ba9580e3aa43508a793fac819a5a4d%3A47&views=view_1, accessed September 17, 2021.

23 Office of Environmental Health Hazard Assessment, CalEnviroSCreen 4.0 Tool, https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/Draft-CalEnviroScreen-4.0/, accessed January 20, 2022.

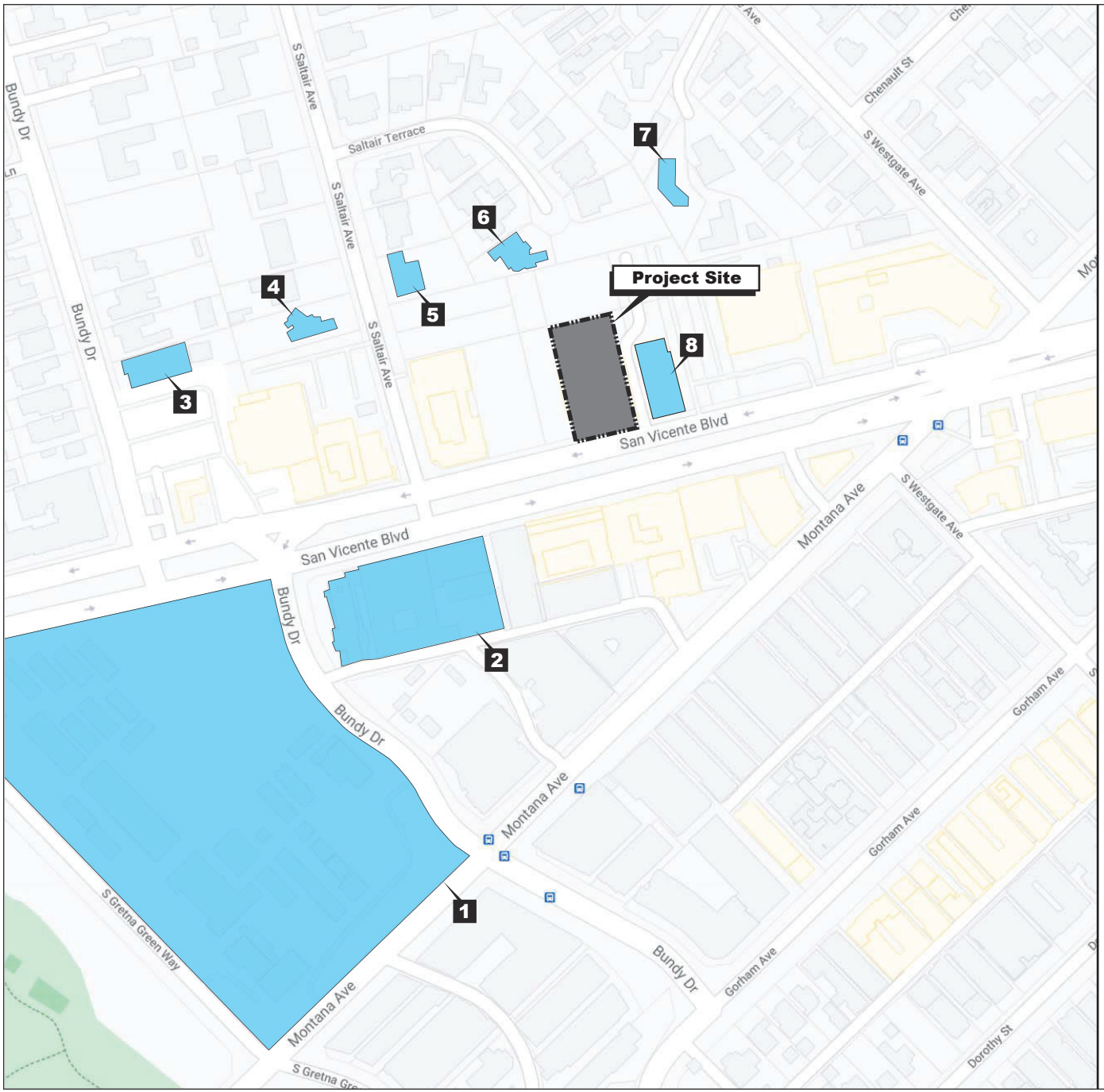
24 SCAQMD, Final Localized Significance Threshold Methodology, June 2003. Revised July 2008.

commercial and other land uses surrounding the Project Site. The nearest such land use to the Project is a commercial building located at 11961 San Vicente Boulevard, approximately 20 feet to the east of the Barry Building. Although 11961 San Vicente Boulevard is a commercial building and not a traditional sensitive recepor, as discussed above, SCAQMD suggests that LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, may also be applied to receptors such as commercial and industrial facilities since it is reasonable to assume that workers at these sites may be present for up to eight hours.[25] Thus, to be conservative, 11961 San Vicente Boulevard is identified as the nearest sensitive receptor. Other more distant receptors include, but are not limited to, Brentwood Presbyterian Church and School (12000 San Vicente Boulevard), Brentwood Science Magnet School (740 S. Gretna Green Way), Chabad Jewish Center of Brentwood (644 Bundy Drive), and Gan Chaya Jewish Early Childhood Center (647 S. Saltair Avenue).

(5) Existing Project Site Emissions

The Project Site is currently vacant and therefore generates nominal, if any, anthropogenic pollutant emissions.

[25] SCAQMD, Final Localized Significance Threshold Methodology, June 2003. Revised July 2008.



Legend

1 Brentwood Science Magnet School
740 Gretna Green Way
Los Angeles, CA 90049

2 Brentwood Presbyterian Church and School
12000 San Vicente Boulevard
Los Angeles, CA 90049

3 Chabad Jewish Center of Brentwood
644 Bundy Drive
Los Angeles, CA 90049

4 Gan Chaya Jewish Early Childhood Center
647 Saltair Avenue
Los Angeles, CA 90049

5 Residence
640 Saltair Avenue
Los Angeles, CA 90049

6 Residence
11900 Saltair Terrace
Los Angeles, CA 90049

7 Residence
529 Westgate Avenue
Los Angeles, CA 90049

8 Commercial building
11961 San Vicente Boulevard
Los Angeles, CA 90049

Sensitive Receptor Location

NORTH

0 100 200
Scale (Feet)

Figure IV.A-1
Sensitive Receptor Location Map

Source: CAJA Environmental Services LLC.

2. Project Impacts

a) Thresholds of Significance

(1) State CEQA Guidelines Appendix G

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

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

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

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

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

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

(2) 2006 L.A. CEQA Thresholds Guide

The *LA. CEQA Threshold Guide* identifies the following factors to evaluate air quality impacts.

(a) Construction

The Thresholds Guide states that the determination of significance shall be made on a case-by-case basis, considering the following criteria to evaluate construction-related air emissions:

(i) Combustion Emissions from Construction Equipment

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

(ii) Fugitive Dust—Grading, Excavation and Hauling

- Amount of soil to be disturbed on-site or moved off-site;

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

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

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

(*iv) Other Mobile Source Emissions*

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

While the Project does not include an operational component it should be noted that the *2006 L.A. CEQA Threshold Guide* does include operational criteria.

(b) Toxic Air Contaminants

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

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

(3) SCAQMD CEQA Air Quality Handbook

To assist in answering the Appendix G questions and thresholds provided by the SCAQMD, the City of Los Angeles utilizes SCAQMD's *CEQA Air Quality Handbook* and the thresholds of

significance below as the guidance document for the environmental review of development proposals within the Air Basin. It should be noted that while the *CEQA Air Quality Handbook* includes both construction and operation thresholds, as the Project is proposing demolition of the existing use and would not result in the construction of an operational component, the SCAQMD thresholds below solely focus on construction. Under these construction thresholds, a significant impact would occur when:[26]

- Regional emissions from both direct and indirect sources would exceed any of the following SCAQMD prescribed threshold levels: (1) 100 pounds per day for NO_X; (2) 75 pounds a day for VOC; (3) 150 pounds per day for PM_{10} or SO_X; (4) 55 pounds per day for $PM_{2.5}$; and (5) 550 pounds per day for CO.

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

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

(a) Toxic Air Contaminants[27]

A significant TAC would occur if the Project results in the exposure of sensitive receptors to carcinogenic or toxic air contaminants that exceed the maximum incremental cancer risk of 10 in one million or an acute or chronic hazard index of 1.0.[28] For projects with a maximum incremental cancer risk between 1 in one million and 10 in one million, a project would result in a significant impact if the cancer burden exceeds 0.5 excess cancer cases.

(b) Consistency with Applicable Air Quality Plans

CEQA Guidelines Section 15125 requires an analysis of project consistency with applicable governmental plans and policies. This analysis is conducted to assess potential project impacts

[26] SCAQMD, SCAQMD Air Quality Significance Thresholds, http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed February 3, 2021.

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

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

under Threshold (a) from the Appendix G thresholds. In accordance with the SCAQMD's CEQA Air Quality Handbook, the following criteria shall be used to evaluate a project's consistency with SCAQMD and SCAG regional plans and policies, including the AQMP, consistent with the Appendix G thresholds:[29]

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

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

(c) Cumulative Impacts

With regard to determining the significance of the Project's contribution to regional emissions, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-specific impacts. Therefore, according to the SCAQMD, an individual project that generates construction or operational emissions that exceed the SCAQMD recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment.

b) Methodology

The air quality analysis conducted for the Project is consistent with the methods described in the SCAQMD CEQA Air Quality Handbook (1993 edition), as well as the updates to the CEQA Air Quality Handbook, as provided on the SCAQMD website. The SCAQMD recommends the use of

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

the California Emissions Estimator Model (CalEEMod, version 2020.4.0) as a tool for quantifying emissions of air pollutants that will be generated by constructing and operating development projects. The analyses focus on the potential change in air quality conditions due to Project implementation. Air pollutant emissions would result only from demolition of the existing building. Specific methodologies used to evaluate these emissions are discussed below.

(1) Construction

Sources of air pollutant emissions associated with construction activities include heavy-duty off-road diesel equipment and vehicular traffic to and from the Project Site. Project-specific information was provided including the schedule of construction activities as well as the equipment inventory and haul trip length. Details pertaining to the schedule and equipment can be found in Appendix B of this Draft EIR.

The SCAQMD recommends that air pollutant emissions be assessed for both regional scale and localized impacts. The regional emissions analysis includes both on-site and off-site sources of emissions, while the localized emissions analysis focuses only on-site emissions sources.

Localized impacts were analyzed in accordance with the SCAQMD LST methodology.[30] The localized effects from on-site portion of daily emissions were evaluated according to the SCAQMD's LST methodology, which uses on-site mass emission look-up tables and Project-specific modeling, where appropriate.[31] SCAQMD provides LSTs applicable to the following criteria pollutants: NO_X, CO, PM_{10}, and $PM_{2.5}$. SCAQMD does not provide an LST for SO_2 since land use development projects typically result in negligible construction and long-term operation emissions of this pollutant. Since VOCs are not a criteria pollutant, there is no ambient standard or SCAQMD LST for VOCs. Due to the role VOCs play in O_3 formation, it is classified as a precursor pollutant, and only a regional emissions threshold has been established.

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each SRA and distance to the nearest sensitive receptor. The mass rate look-up tables were developed for each SRA and can be used to determine whether or not a project may generate significant adverse localized air quality impacts. SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to five acres. If the project exceeds the LST look-up values, then the SCAQMD recommends that project-specific air quality modeling must be performed. Please refer to Threshold b), further below, for the analysis of localized impacts from on-site construction activities. For the Project, maximum daily emissions

30 SCAQMD, Final Localized Significance Methodology, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2. Accessed February 3, 2021.

31 SCAQMD, LST Methodology Appendix C-Mass Rate LST Look-Up Table, revised October 2009, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2. Accessed February 3, 2021.

of NO_X, CO, PM_{10}, and $PM_{2.5}$ from on-site sources during each construction activity were compared to LST values for a 1-acre site with 25-meter (82 feet) receptor distance. This is the smallest project size used for analysis in the LST guidance document, and is also the shortest receptor distance.[32]

The Air Basin is divided into 38 SRAs, each with its own set of maximum allowable LST values for on-site emissions sources during construction based on locally monitored air quality. Maximum on-site emissions resulting from construction activities were quantified and assessed against the LST values for a 1-acre site with 25-meter receptor distance, as noted above.

The significance criteria and analysis methodologies in the SCAQMD's CEQA Air Quality Handbook were used in evaluating impacts in the context of the CEQA significance criteria listed below. The SCAQMD localized significance thresholds (LSTs) for NO_2, CO, and PM_{10} were initially published in June 2003 and revised in July 2008.[33] The LSTs for $PM_{2.5}$ were established in October 2006.[34] Updated LSTs were published on the SCAQMD website on October 21, 2009.[35] Table IV.A-3 presents the significance criteria for construction emissions.

[32] SCAQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf. Accessed February 3, 2021.

[33] SCAQMD, Fact Sheet for Applying CalEEMod to Localized Significance Thresholds, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf. Accessed February 3, 2021.

[34] SCAQMD, Final – Methodology to Calculate Particulate Matter (PM) 2.5 and PM 2.5 Significance Thresholds, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/final_pm2_5methodology.pdf?sfvrsn=2. Accessed February 3, 2021.

[35] SCAQMD, Final Localized Significance Threshold Methodology Appendix C – Mass Rate LST Look-Up Table, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2. Accessed February 3, 2021.

Table IV.A-3
SCAQMD Emissions Thresholds

Criteria Pollutant	Construction Emissions (pounds per day)	
	Regional	Localized[A]
Volatile Organic Compounds (VOC)	75	--
Nitrogen Oxides (NO_X)	100	103
Carbon Monoxide (CO)	550	562
Sulfur Oxides (SO_X)	150	--
Respirable Particulates (PM_{10})	150	4
Fine Particulates ($PM_{2.5}$)	55	3

[A] Localized significance thresholds (LSTs) assumed the following:
- 1-acre project size, which is the smallest project size used for analysis in the LST guidance document.
- 25-meter (82-foot) receptor distance, which is the shortest distance used for analysis in the LST guidance document.
- The Project is located in SRA No. 2, "Northwest Coastal LA County."

Source: SCAQMD, Air Quality Significance Thresholds, revised April 2019; SCAQMD, LST Methodology Appendix C – Mass Rate LST Look-Up Table, revised October 2009.

(a) Toxic Air Contaminants

Potential TAC impacts are evaluated by conducting a qualitative analysis consistent with the CARB Handbook followed by a more detailed analysis (i.e., dispersion modeling), as necessary. The qualitative analysis consists of reviewing the Project to identify any new or modified TAC emissions sources. If the qualitative evaluation does not rule out significant impacts from a new source, or modification of an existing TAC emissions source, a more detailed analysis is conducted.

(2) Operation

The Project consists of the demolition of the existing commercial building; the surface parking lot would not be demolished as part of the Project. No future development of the Project Site is proposed and/or considered as part of the Project. The Project does not include an operational component besides the creation of a modest landscaped buffer, which would require a timed irrigation system and occasional landscaping maintenance. Any daily emissions associated with these operational features would be de minimis. Therefore, no analysis of operational impacts is required.

c) Project Design Features

No specific project design features (PDFs) are proposed with regard to air quality.

d) Analysis of Project Impacts

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

(1) Impact Analysis

Under the previous 2016 AQMP, the SCAQMD issued guidance on determining Project consistency with the AQMP. Consistency is based on the following:

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

(a) Criterion 1

The 2022 AQMP is the current management plan for continued progression toward clean air and compliance with state and federal requirements. 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 NAAQS. The Project would be required to comply with all new and existing regulatory measures set forth by the SCAQMD. Implementation of the Project would not interfere with air pollution control measures listed in the 2022 AQMP.

As discussed in greater detail below under Threshold (b), the Project's air quality emissions would not exceed any state or federal standards. Therefore, the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for these

pollutants. As the Project would not exceed any of the state and federal standards, the Project would also not delay timely attainment of air quality standards or interim emission reductions specified in the AQMP.

(b) Criterion 2

With respect to the determination of consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in the SCAG 2020–2045 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of three criteria: (1) consistency with applicable population, housing, and employment growth projections; (2) project mitigation measures; and (3) appropriate incorporation of AQMP land use planning strategies. The following discussion provides an analysis with respect to each of these three criteria.

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

A project is consistent with the AQMP, in part, if it is consistent with the population, housing, and employment assumptions that were used in the development of the AQMP. The Project includes the demolition of the existing building but no future development of the Project Site is proposed and/or considered as part of the Project. Therefore, the Project would not generate any population, housing, or permanent employment growth, and would not conflict with or obstruct implementation of the AQMP.

- Does the project implement feasible air quality mitigation measures?

As discussed below under Thresholds (b), (c), and (d), the Project would not result in any significant air quality impacts and therefore would not require mitigation. In addition, the Project would comply with all applicable regulatory standards as required by SCAQMD. As such, the Project meets this AQMP consistency criterion.

- To what extent is project development consistent with the AQMP control measures, as implemented by SCAG?

As demonstrated below under Thresholds (b) and (c), the Project would not exceed any applicable regional thresholds and LSTs. These SCAQMD thresholds represent the maximum emissions that would not be expected to cause or materially contribute to an exceedance of NAAQS or CAAQS. As the achievement and maintenance of NAAQS and CAAQS is the goal of the 2022 AQMP, the Project would therefore not interfere with air pollution control measures listed in the 2022 AQMP.

In addition, the Project would be consistent with applicable policies contained in the City's Air Quality Element. For example, Policy 1.3.1 and Policy 1.3.2 instruct that particulate emissions from construction sites, unpaved roads, and parking lots should be minimized. The Project would

be consistent with Policy 1.3.1 and Policy 1.3.2, as the Project would minimize particulate emissions during demolition activities through compliance with SCAQMD rules, such as SCAQMD Rule 403 for managing fugitive dust emissions. Policy 4.1.2 and Policy 4.2.4 instruct that project-level review and the approval of land use development projects should remain at the local level, and that consideration of air quality impacts be required in the review and approval of all discretionary projects. The Project would be consistent with Policy 4.1.2 and Policy 4.2.4, as the Project's air quality impacts are being analyzed as part of the environmental review process, and as demonstrated below under Thresholds (b) and (c), would be less than significant.

Therefore, the Project would have a less than significant impact on the region's attainment of the 2022 AQMP.

(2) Mitigation Measures

No significant impacts related to implementation of the applicable air quality plan have been identified, and no mitigation measures are required.

(3) Level of Significance After Mitigation

Project impacts related to implementation of the applicable air quality plan would be less than significant.

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

(1) Impact Analysis

A significant impact would occur if a project would result in a cumulatively considerable net increase in a federal or state non-attainment pollutant. With regard to determining the significance of the Project's contribution to regional emissions, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-specific impacts. Therefore, according to the SCAQMD, an individual project that generates construction or operational emissions that exceed the SCAQMD recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. The Project would demolish the existing commercial building and install a landscape buffer along the southern boundary of the Project Site; the surface parking lot would not be demolished as part of the Project. No future development of the Project Site is proposed and/or considered as part of the Project. The Project does not include an operational component besides the creation of the modest landscaped buffer, which would require a timed irrigation system and occasional landscaping maintenance. Any emissions associated with these operational features would be de minimis.

(a) Construction

(i) Regional Emissions

As described in Section II, Project Description, of this Draft EIR, the Project is estimated to require approximately 36 working days for demolition, with one additional day to plant the landscape buffer. Phases of demolition would include asbestos abatement (an estimated 10 working days), building demolition (an estimated 16 working days), and utilities removal (an estimated 10 working days). Upon completion of this demolition work, a landscape buffer would be created along the Project Site's frontage (an estimated 1 working day). Demolition of the building would result in the removal of approximately 4,174 cubic yards of debris from the Project Site. The following analysis conservatively assumes a single-trip haul distance of up to 42 miles (one way) for the asbestos-containing material (approximately 130 cubic yards), which would be transported to the Azusa Land Reclamation Management Facility, and a single-trip haul distance of up to 40 miles (one way) for all other demolition material (approximately 4,044 cubic yards), which could be transported to the Chiquita Canyon Landfill or another facility at a similar distance from the Project Site, although the exported debris could be hauled to sites that are closer to the Project Site than these conservative ("worst-case") estimates. The analysis also assumes haul trucks with a capacity of 15 cubic yards.[36]

The assessment of the Project's construction air quality impacts considers potential sources that could increase the daily amount of each criteria pollutant listed in Table IV.A-4, below. Asbestos abatement for the Project would require the use of powered hand tools such as electric or pneumatic equipment, but no heavy-duty off-road construction vehicles. Subsequent building demolition would require an excavator and two loaders. After the Barry Building structure has been demolished, a backhoe would be utilized to dig and backfill trenches in order to facilitate removal of the building's underground utilities. Installation of the modest landscaped buffer is unlikely to require off-road construction vehicles, but it has been conservatively assumed that trenching for a timed irrigation system may require a small grading vehicle such as a backhoe or skid steer loader. It should be noted that construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, the prevailing weather conditions.

The emission levels shown in Table IV.A-4 represent the highest daily emissions projected to occur during the construction activities. The Project's construction activities would produce VOC, NO_X, CO, SO_X, PM_{10} and $PM_{2.5}$ emissions that, as shown in Table IV.A-4, do not exceed the SCAQMD's regional daily thresholds.

As noted above, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-specific impacts.

[36] The CalEEMod software uses a default assumption of trucks with a 16 cubic yard capacity. However, to present a more conservative analysis, the modeling included in Appendix B of this Draft EIR assumes haul trucks with a capacity of 15 cubic yards.

Therefore, since the Project's emissions during construction would not exceed the SCAQMD's recommended daily thresholds for Project-specific impacts, it would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment (i.e., ozone, PM_{10}, $PM_{2.5}$). As such, regional emissions generated by the Project's construction activities would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard and impacts would be less than significant.

(ii) Localized Emissions

LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards. The localized demolition air quality analysis was conducted using the methodology promulgated by the SCAQMD, as the SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate area of the Project Site. Look-up tables provided by the SCAQMD were used to determine localized construction (demolition) emissions thresholds for the Project.[37]

Localized (on-site) emissions were quantified for the Project's construction activities. Maximum on-site daily demolition emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ were calculated using CalEEMod and compared to the applicable SCAQMD LSTs for the Northwest Coastal LA County SRA No. 2 based on construction site acreage that is less than or equal to one acre. Potential impacts were evaluated at the minimum receptor distance of 25 meters (82 feet).

As also shown in Table IV.A-4, on-site emissions generated during the Project's construction activities would not exceed the localized thresholds for NO_2, CO, $PM_{10,}$ and/or $PM_{2.5}$ emissions. Therefore, localized air quality emissions from Project construction activities would be less than significant.

As discussed above, the SCAQMD recommends that a project's potential contribution to cumulative impacts be assessed utilizing the same significance criteria as those for project-specific impacts. Therefore, since the Project's emissions during construction would not exceed the SCAQMD's recommended daily thresholds for Project-specific impacts, it would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment (i.e., ozone, PM_{10}, $PM_{2.5}$). As such, localized emissions generated by the Project's construction activities would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard and impacts would be less than significant.

[37] SCAQMD, Final Localized Significance Threshold Methodology Appendix C – Mass Rate LST Look-Up Table, revised October 2009, http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2. Accessed February 3, 2021.

Table IV.A-4
Estimated Daily Construction Emissions

Demolition Phase Year	Daily Emissions (Pounds Per Day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Regional Emissions						
Asbestos Abatement	0.7	5.6	7.0	<0.1	0.6	0.4
Building Demolition	1.2	18.6	9.8	0.1	3.0	0.9
Utilities Removal	0.2	2.4	2.8	<0.1	0.3	0.1
Landscape Buffer	0.2	1.8	2.7	<0.1	0.2	0.1
Maximum Regional Emissions	1.2	18.6	9.8	0.1	3.0	0.9
Regional Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Localized Emissions						
Asbestos Abatement	0.6	4.8	6.1	<0.1	0.3	0.3
Building Demolition	0.9	7.4	6.9	<0.1	1.6	0.4
Utilities Removal	0.2	1.7	2.2	<0.1	0.1	0.1
Landscape Buffer	0.2	1.7	2.2	<0.1	0.1	0.1
Maximum Localized Emissions	0.9	7.4	6.9	<0.1	1.6	0.4
Localized Significance Threshold	N/A	103	562	N/A	4	3
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Note: The CalEEMod 2020.4.0 model runs did not assume the implementation of SCAQMD Rule 403 "Best Available Control Measures" ("BACMs") or additional Rule 403 requirements. For example, Rule 403 BACM 06-3 would require the Project to stabilize loose soil and demolition debris (typically by watering) to prevent the generation of visible dust plumes. Because these mandatory Rule 403 BACMs and requirements that would reduce the Project's fugitive dust emissions from particulate matter have not been accounted for, the CalEEMod 2020.4.0 model runs and the emissions shown in this table are therefore conservative.

Source: NTEC, September 2021, based on CalEEMod 2020.4.0 model runs.

As discussed, SCAQMD thresholds represent the maximum emissions that would not be expected to cause or materially contribute to an exceedance of NAAQS or CAAQS, which themselves represent the maximum concentrations of pollutants that can be present in outdoor air without any harmful effects on people or the environment. Therefore, the Project's construction-related emissions of criteria pollutants would not be expected to cause or measurably contribute to adverse health impacts.

(b) Operation

The Project consists of the demolition of the existing commercial building and the installation of a landscape buffer along the southern boundary of the Project Site; the surface parking lot would not be demolished as part of the Project. No future development of the Project Site is proposed and/or considered as part of the Project. The Project does not include an operational component besides the creation of the modest landscaped buffer, which would require a timed irrigation

system and occasional landscaping maintenance. Any daily emissions associated with the landscape buffer would be de minimis and this impact would be less than significant.

(2) Mitigation Measures

No significant impacts related to a cumulatively considerable net increase of any criteria pollutant have been identified, and no mitigation measures are required.

(3) Level of Significance After Mitigation

Project impacts related to a cumulatively considerable net increase of any criteria pollutant would be less than significant without mitigation.

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

(1) Impact Analysis

The SCAQMD has categorized the following land uses as sensitive to air pollution: hospitals, schools, residences, playgrounds, childcare centers, athletic facilities, and retirement homes.[38] The location of sensitive receptors in the Project vicinity are shown in Figure IV.A-1.

(a) Construction

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

Potential impacts to sensitive receptors were conservatively evaluated at a distance of 25 meters (82 feet), which is significantly less than distances to residences along Saltair Terrace, which are no less than approximately 175 feet north of the Project Site.

As demonstrated in Table IV.A-4, above, the Project's construction activities would not result in pollutant emissions that exceed the maximum SCAQMD's LSTs. The Project's on-site construction activities would not expose sensitive receptors to substantial criteria pollutant concentrations and impacts would be less than significant.

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

During Project construction, the greatest potential for TAC emissions would be from diesel particle matter (DPM) associated with the combustion of diesel fuels, which produce exhaust-related particulate matter that is considered a TAC by CARB based on chronic exposure to these emissions[39] According to SCAQMD methodology, health effects from carcinogenic air toxics are

38 South Coast Air Quality Management District, CEQA Air Quality Handbook, Figure 5-1, April 1993.

39 California Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. www.http://oehha.ca.gov/public_info/facts/dieselfacts.html. Accessed February 3, 2021.

usually described in terms of individual cancer risk. “Individual Cancer Risk” is the likelihood that a person exposed to concentrations of TACs over a 70-year period will contract cancer, based on the use of standard risk-assessment methodology. Construction activities are temporary and short-term events. Given the short-term construction schedule of approximately 37 working days, the Project would not result in long-term (70-year) source of TAC emissions. Additionally, the SCAQMD CEQA guidance does not require a health risk assessment for short-term construction emissions.[40] It is therefore not meaningful to evaluate long-term cancer impacts from construction activities, which occur over relatively short durations. In addition, there would be no residual emissions or corresponding individual cancer risk after construction. Therefore, Project’s off-site construction activities would not expose sensitive receptors to substantial pollutant concentrations of TACs and impacts would be less than significant.

(b) Operation

The Project consists of the demolition of the existing commercial building and the installation of a landscape buffer along the southern boundary of the Project Site, and would not facilitate the construction or development of a larger project. As explained earlier, the Project does not include an operational component besides the creation of the modest landscaped buffer, which would require a timed irrigation system and occasional landscaping maintenance. Any emissions associated with this landscape buffer would be de minimis. Therefore, Project would not have the potential to expose any sensitive receptors to substantial pollutant concentrations and this impact would be less than significant.

(2) Mitigation Measures

No significant impacts to sensitive receptors have been identified, and no mitigation measures are required.

(3) Level of Significance After Mitigation

Project impacts to sensitive receptors would be less than significant without mitigation.

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

As discussed in the Initial Study (refer to Appendix A-1 of this Draft EIR), and in Section VI (Other CEQA Considerations) of this Draft EIR, Project contractors would comply with applicable SCAQMD rules related to the use of construction materials that do not cause substantial odor impacts. Any odors that may be generated during demolition would be localized and temporary in nature, and would not have the potential to affect a substantial number of people or result in a

[40] SCAQMD calls for HRAs for facilities under the requirements of AB 2588. Construction projects are not regulated under this State law. http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/health-risk-assessment. Accessed February 23, 2021.

nuisance as defined by SCAQMD Rule 402. Accordingly, impacts with regard to odors would be less than significant ad no further analysis is required.

c) Cumulative Impacts

(1) Impact Analysis

SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified above also be considered cumulatively considerable.[41] Individual projects that generate emissions not in excess of SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

Based on SCAQMD guidance, individual construction projects that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would cause a cumulatively considerable increase in emissions for those pollutants for which the Air Basin is in non-attainment. As shown in Table IV.A-4 and discussed in detail above, construction daily emissions generated by the Project would not exceed any of the SCAQMD's regional or localized significance thresholds and would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the Project's contribution to cumulative air quality impacts during construction would not be cumulatively considerable and impacts would be less than significant.

Similar to the Project, the greatest potential for TAC emissions at each related project would generally involve diesel particulate emissions associated with heavy equipment operations during grading and excavation activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year period will contract cancer, based on the use of standard risk-assessment methodology. Construction activities are temporary and short-term events, thus construction activities at each related project would not result in a long-term substantial source of TAC emissions. Additionally, the SCAQMD CEQA guidance does not require a health risk assessment for short-term construction emissions. It is therefore not meaningful to evaluate long-term cancer impacts from construction activities, which occur over relatively short durations. Therefore, the Project's constribution to cumulative impacts from the generation of TACs during construction activities would not be cumulatively considerable and impacts would be less than significant.

As discussed above, the Project consists of the demolition of the existing commercial building and the installation of a landscape buffer along the southern boundary of the Project Site; the

[41] SCAQMD, White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf. Accessed February 3, 2021.

surface parking lot would not be demolished as part of the Project. No future development of the Site is proposed and/or considered as part of the Project. The Project does not include an operational component besides the creation of the modest landscaped buffer, which would require a timed irrigation system and occasional landscaping maintenance. Any emissions associated with the landscape buffer would be de minimis and less than significant. Therefore the Project would not contribute to cumulative operational air quality impacts and cumulative impacts would be less than significant.

(2) Mitigation Measures

No significant cumulative impacts to air quality have been identified, and no mitigation measures are required.

(3) Level of Significance After Mitigation

Cumulative impacts related to air quality would be less than significant prior to mitigation.