IV. Environmental Impact Analysis

B. Air Quality

1. Introduction

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

2. Environmental Setting

a) Air Quality Background

(1) Air Quality and Public Health

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

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

part of setting and informing revisions to federal and state air quality standards.[2] The NAAQS and CAAQS are listed in Table IV.B-1 on pages IV.B-10 and IV.B-11.

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

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

(2) Local Air Quality and Air Pollution Sources

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

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

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

3 SCAQMD, *Map of Jurisdiction*, 1999.

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

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

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

(3) Air Pollutant Types

(a) Criteria Pollutants

The six principal pollutants for which national and State criteria and standards have been promulgated, known as “criteria pollutants”, and which are most relevant to current air quality planning and regulation in the Air Basin include ozone (O_3), respirable and fine particulate matter (PM10 and PM2.5, respectively), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), and lead (Pb). These pollutants are referred to as “criteria air pollutants” as a result of the specific standards, or criteria, which have been adopted for them.

(i) Ozone (O_3)

O_3 is a gas that is formed when volatile organic compounds (VOCs) and NO_X - both byproducts of internal combustion engine exhaust - undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are

favorable. An elevated level of O_3 irritates the lungs and breathing passages, causing coughing and pain in the chest and throat, thereby increasing susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to scarring of lung tissue and may lower lung efficiency.

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

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. Respirable and fine particulate matter, PM10 and PM2.5, consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, such as pollen and windstorms, are naturally occurring. However, in areas such as the City of Los Angeles, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities. The human body naturally prevents the entry of larger particles into the body. However, small particles can enter the body and become trapped in the nose, throat, and upper respiratory tract. These small particulates can potentially aggravate existing heart and lung diseases, change the body's defenses against inhaled materials, and damage lung tissue. The elderly, children, and those with chronic lung or heart disease are most sensitive to PM10 and PM2.5. Lung impairment can persist for two to three weeks after exposure to high levels of particulate matter. Some types of particulates can become toxic after inhalation due to the presence of certain chemicals and their reaction with internal body fluids.

(iii) Carbon Monoxide (CO)

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

(iv) Nitrogen Dioxide (NO_2)

NO_2 is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point

sources, especially power plants. Of the seven types of NO_X compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic areas, particularly in urban areas such as the City of Los Angeles, may be exposed to higher concentrations of NO_2 than those indicated by regional monitors. NO_2 absorbs blue light and results in a brownish-red cast to the atmosphere and reduced visibility. NO_2 also contributes to the formation of PM_{10}. NO_X irritate the nose and throat, and increase one's susceptibility to respiratory infections, especially in people with asthma. The principal concern of NO_X is as a precursor to the formation of O_3.

(v) Sulfur Dioxide (SO_2)

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

(vi) Lead (Pb)

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

(b) Additional Criteria Pollutants (California Only)

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

(i) Sulfates (SO_4^2)

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

(ii) Hydrogen Sulfide (H_2S)

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

(iii) Visibility-Reducing Particles

Visibility-reducing particles come from a variety of natural and manmade sources and can vary greatly in shape, size and chemical composition. Visibility reduction is caused by the absorption and scattering of light by the particles in the atmosphere before it reaches the observer. Certain visibility-reducing particles are directly emitted to the air, such as windblown dust and soot, while others are formed in the atmosphere through chemical transformations of gaseous pollutants (e.g., SO_4^2, nitrates, organic carbon particles) which are the major constituents of particulate matter. As the number of visibility-reducing particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range.[7] Exposure to some haze-causing pollutants have been linked to adverse health impacts similar to PM10 and PM2.5, as discussed above.[8]

4 CARB, Hydrogen Sulfide & Health, 2019.

5 CARB, Hydrogen Sulfide & Health, 2019.

6 CARB, Hydrogen Sulfide & Health, 2019

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

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

(iv) Vinyl Chloride

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

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

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

(i) *VOCs*

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

(ii) *Toxic Air Contaminants (TACs)*

TACs is a term used to describe airborne pollutants that may be expected to result in an increase in mortality or serious illness or which may pose a present or potential hazard to human health, and include both carcinogens and non-carcinogens. The California Air

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

10 California Air Resources Board, Vinyl Chloride & Health.

11 California Air Resources Board, Vinyl Chloride & Health.

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

b) Regulatory Framework

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

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

(1) Federal

(a) Federal Clean Air Act

The Federal Clean Air Act (CAA) was enacted in 1970 and has been amended numerous times in subsequent years, with the latest amendments occurring in 1990.[12] The CAA is the comprehensive federal law that regulates air emissions in order to protect public health and welfare.[13] The USEPA is responsible for the implementation and enforcement of the CAA, which establishes NAAQS, specifies future dates for achieving compliance, and requires the USEPA to designate areas as attainment, nonattainment, or maintenance. The CAA also mandates that each state submit and implement a State Implementation Plan (SIP) for each criteria pollutant for which the state has not achieved the applicable NAAQS. The SIP includes pollution control measures that demonstrate how the standards for those pollutants will be met. The sections of the CAA most applicable to land use development projects include Title I (Nonattainment Provisions) and Title II (Mobile Source Provisions).[14]

Title I requirements are implemented for the purpose of attaining NAAQS for criteria air pollutants. **Table IV.B-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.

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

13 USEPA, Clean Air Act, 1963.

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

TABLE IV.B-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 (PM10)	24-hour	150 µg/m^3	50 µg/m^3	Attainment	Non-Attainment
	Annual	—	20 µg/m^3		
Fine Particulate Matter (PM2.5)	24-hour	35 µg/m^3	—	Non-Attainment (Serious)	Non-Attainment
	Annual	12 µg/m^3	12 µg/m^3		
Carbon Monoxide (CO)	1-hour	35 ppm (40 mg/m^3)	20 ppm (23 mg/m^3)	Attainment	Attainment
	8-hour	9 ppm (10 mg/m^3)	9.0 ppm (10 mg/m^3)		
Nitrogen Dioxide (NO_2)	1-hour	0.10 ppm (188 µg/m^3)	0.18 ppm (339 µg/m^3)	Unclassified/ Attainment	Attainment
	Annual	0.053 ppm (100 µg/m^3)	0.030 ppm (57 µg/m^3)		
Sulfur Dioxide (SO_2)	1-hour	0.075 ppm (196 µg/m^3)	0.25 ppm (655 µg/m^3)	Unclassified/ Attainment	Attainment
	3-hour	0.5 ppm (1,300 µg/m^3)	—		
	24-hour	0.14 ppm (365 µg/m^3)	0.04 ppm (105 µg/m^3)		
	Annual	0.03 ppm (80 µg/m^3)	—		
Lead (Pb)	30-day average	—	1.5 µg/m^3	Partial Non-Attainment[e]	Attainment
	Rolling 3-month average	0.15 µg/m^3	—		
Sulfates (SO_4^2)	24-hour	—	25 µg/m^3	—	Attainment
Hydrogen Sulfide (H2S)	1-hour	—	0.03 ppm (42 µg/m^3)	—	Unclassified

TABLE IV.B-1
AMBIENT AIR QUALITY STANDARDS

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

ppm = parts per million by volume

$\mu g/m^3$ = micrograms per cubic meter

[a] An ambient air quality standard is a concentration level expressed in either ppm or $\mu g/m^3$ and averaged over a specific time period (e.g., 1 hour). The different averaging times and concentrations are meant to protect against different exposure effects. Some ambient air quality standards are expressed as a concentration that is not to be exceeded. Others are expressed as a concentration that is not to be equaled or exceeded.

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

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

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

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

SOURCES: United States Environmental Protection Agency, NAAQS Table, https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed February 3, 2022.

CARB, Ambient Air Quality Standards May 4, 2016, https://ww3.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed February 3, 2022.

(2) State

(a) California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the CAAQS by the earliest practicable date. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both State and federal air pollution control programs within California. In this capacity, CARB conducts research, sets the CAAQS, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. Table IV.B-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.B-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 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 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines for O_3 and PM2.5 are met and that public health is protected to the maximum extent feasible. The most significant air quality challenge in the Air Basin is to reduce NO_X emissions[15] sufficiently to meet the upcoming O_3standard deadlines, as NO_X plays a critical role in the creation of O_3. The AQMP's strategy to meet the 8-hour O_3 standard in 2023 should lead to sufficient NO_X emission reductions to attain the 1-hour O_3 standard by 2022. Since NO_X emissions also lead to the formation of PM2.5, the NO_X reductions needed to meet the O_3 standards will likewise lead to improvement of PM2.5 levels and attainment of PM2.5 standards.[16] [17]

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

The AQMP also incorporates the transportation strategy and transportation control measures from SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Plan.[18] SCAG is the regional planning agency for Los

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

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

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

[18] SCAG, Final 2016 RTP/SCS, 2016.

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

The 2016 AQMP forecasts the 2031 emissions inventories ''with growth'' based on SCAG's 2016-2040 RTP/SCS. The region is projected to see a 12 percent growth in population, 16 percent growth in housing units, 23 percent growth in employment, and 8 percent growth in VMT between 2012 and 2031. Despite regional growth in the past, air quality has improved substantially over the years, primarily due to the effects of air quality control programs at the local, State and federal levels.[20]

On September 3, 2020, SCAG's Regional Council adopted the 2020-2045 RTP/SCS. The 2020-2045 RTP/SCS was determined to conform to the federally-mandated State implementation plan (SIP), for the attainment and maintenance of NAAQS standards. On October 30, 2020, CARB also accepted SCAG's determination that the SCS met the applicable future State GHG reduction targets of 19 percent. The 2020-2045 RTP/SCS will be incorporated into the forthcoming 2022 AQMP.

(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.[21] The *CEQA Air Quality Handbook* provides standards, methodologies, and procedures for conducting air quality analyses. However, the SCAQMD is currently in the process of replacing the *CEQA Air Quality Handbook* with

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

20 SCAQMD, Figure 1-4 of the Final 2016 AQMP.

21 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 2022.

the *Air Quality Analysis Guidance Handbook*. While this process is underway, the SCAQMD has provided supplemental guidance on the SCAQMD website.[22]

The SCAQMD has also adopted land use planning guidelines in its *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, which considers impacts to sensitive receptors from facilities that emit TAC emissions.[23] SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities). The SCAQMD's document introduces land use-related policies that rely on design and distance parameters to minimize emissions and lower potential health risk. 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.[24] The SCAQMD adopted additional guidance regarding $PM_{2.5}$ emissions in a document called *Final Methodology to Calculate Particulate Matter (PM)2.5 and PM2.5 Significance Thresholds*.[25] The latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and *Final Localized Significance Threshold Methodology*.

(iii) SCAQMD Rules and Regulations

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

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

- **Rule 401 – Visible Emissions:** This rule states that a person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any

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

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

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

[25] SCAQMD, Final Methodology to Calculate Particulate Matter (PM)2.5 and PM2.5 Significance Thresholds, 2006.

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

- **Rule 1113 – Architectural Coatings:** This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.
- **Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters:** This rule requires manufacturers, distributors, retailers, refurbishers, installers, and operators of new and existing units to reduce NO_X emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.
- **Rule 1186 – PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations:** This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Regulation XIII – New Source Review (NSR): Regulation XIII sets requirements for preconstruction review required under both federal and state statutes for new and modified sources located in areas that do not meet the Clean Air Act standards ("non-attainment" areas). NSR applies to both individual permits and entire facilities. Any permit that has a net increase in emissions is required to apply Best Available Control Technology (BACT). Facilities with a net increase in emissions are required to offset the

emission increase by use of Emission Reduction Credits (ERCs). The regulation provides for the application, eligibility, registration, use and transfer of ERCs. For low emitting facilities, the SCAQMD maintains an internal bank that can be used to provide the required offsets. In addition, certain facilities are subject to provisions that require public notice and modeling analysis to determine the downwind impact prior to permit issuance.

Regulation XIV – Toxics and Other Non-Criteria Pollutants: Regulation XIV sets requirements for new permit units, relocations, or modifications to existing permit units which emit toxic air contaminants or other non-criteria pollutants. The following is the only rule under Regulation XIV which may apply to the Project:

- **Rule 1403 – Asbestos Emissions from Demolition/Renovation Activities:** This rule requires owners and operators of any demolition or renovation activity and the associated disturbance of asbestos-containing materials, any asbestos storage facility, or any active waste disposal site to implement work practice requirements to limit asbestos emissions from building demolition and renovation activities, including the removal and associated disturbance of asbestos-containing materials.

(4) Local

(a) City of Los Angeles General Plan

(i) Air Quality Element

Local jurisdictions, such as the City, have the authority and responsibility to reduce air pollution through their land use decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. In general, the City of Los Angeles' General Plan (including the Framework, Air Quality, Mobility 2035, and Health and Wellness Elements) and the City of Los Angeles' Green New Deal (Sustainability pLAn 2019) contain policies and programs for the protection of the environment and health through improved air quality. These serve to provide additional critical guidance for the betterment of public health for the region and City.

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

The Air Quality Element establishes six goals:

- Good air quality in an environment of continued population growth and healthy economic structure;
- Less reliance on single-occupant vehicles with fewer commute and non-work trips;

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

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

(ii) Plan for a Healthy Los Angeles

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

c) Existing Conditions

(1) Regional Context

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

accumulation and dispersion of air pollutants throughout the Air Basin, making it an area of high pollution potential.

The greatest air pollution throughout the Air Basin occurs from June through September that is generally attributed to light winds, shallow vertical atmospheric mixing, as well as the large amount of pollutant emissions. This frequently reduces pollutant dispersion, resulting in elevated air pollution levels. In addition, pollutant concentrations in the Air Basin vary with location, season, and time of day. For instance, O_3 concentrations tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert. While substantial progress has been made in reducing air pollution levels in Southern California, the Air Basin still fails to meet the national standards for O_3 and PM2.5 and, therefore, is considered a federal "non-attainment" area for these pollutants. In addition, Los Angeles County still fails to meet the national standard for Pb and, therefore, is considered a federal "non-attainment" area for Pb.

As described above, at the regional level, SCAQMD is the regulatory agency responsible for improving air quality for large areas of Los Angeles, Orange County, Riverside and San Bernardino Counties. Specifically, the SCAQMD has the responsibility for ensuring that all national and State ambient air quality standards are achieved and maintained throughout the Air Basin. To meet the standards, SCAQMD has adopted a series of AQMPs. The 2016 AQMP includes strategies to ensure that rapidly approaching attainment deadlines are met and that public health is protected to the maximum extent feasible where reducing NO_X emissions sufficiently to meet the upcoming O_3 standard deadlines is the most significant air quality challenge in the Air Basin. The 2016 AQMP reported a baseline year 2012 inventory of 512 tons per day (tpd) of NO_X and based on modeling results show that NO_X emissions are estimated to be 214 tpd in the 8-hour ozone attainment year of 2031, due to continued implementation of already adopted regulatory actions ("baseline emissions"). The 2016 AQMP states that total Air Basin emissions of NO_X must be reduced to 96 tpd by 2031 to attain the 8-hour O_3 standard. However, while existing air regulations and programs will continue to lower NO_X emissions in the region, an additional 55 percent reduction in the year 2031 are necessary to attain the 8- hour O_3 standard.[26]

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

[26] SCAQMD, Final 2016 AQMP, March 2017, page ES-2.

measures, and strategies in the 2016-2040 RTP/SCS that are generally designed to reduce VMT. [27]

The 2016 AQMP also forecasts the 2031 emissions inventories ‘‘with growth’’ based on the 2016-2040 RTP/SCS where the region was projected from baseline year 2012 to see a 12 percent growth in population, 16 percent growth in housing units, 23 percent growth in employment, and 8 percent growth in VMT by year 2031. Appendix IV-C, Regional Transportation Plan/Sustainable Communities Strategy and Transportation Control Measures, of the 2016 AQMP describes the regional land use and transportation strategies and the transportation control measures in RTP/SCS that are included in the 2016 AQMP. [28]

Despite the projected growth in the region, air quality has improved substantially over the years. This is largely due to the effects of local, State and federal air quality control programs as described above. As seen in Figure IV.A-1 on page IV.A-18 of the AQMP, the percent change in air quality is shown along with demographic data for the 4-county region from the 2016 AQMP where in particular, the trends since 1990 of the 8-hour O_3 levels, the 1-hour O_3 levels, and annual average PM2.5 concentrations (since 1999), compared to the regional gross domestic product, total employment and population. In addition, the O_3 and particulate matter levels continue to trend downward as the economy and population increase, demonstrating that it is possible to maintain a healthy economy while improving public health through air quality improvements. [29]

(a) Criteria Pollutants

The extent and severity of pollutant concentrations in the Air Basin are a function of the area’s natural physical characteristics (weather and topography) and man-made influences (development patterns and lifestyle). Factors, such as wind, sunlight, temperature, humidity, rainfall, and topography, all affect the accumulation and dispersion of pollutants throughout the Air Basin, making it an area of high pollution potential. The Air Basin’s meteorological conditions, in combination with regional topography, are conducive to the formation and retention of ozone, which is a secondary pollutant that forms through photochemical reactions in the atmosphere. Thus, the worst air pollution conditions throughout the Air Basin typically occur from June through September. These conditions are generally attributed to the seasonally light winds and shallow vertical atmospheric mixing, which reduce the potential for the dispersal of air pollutant emissions, thereby causing elevated air pollutant levels. Pollutant concentrations in the Air Basin vary with location, season, and time of day. Concentrations of ozone, for example, tend to be lower along the coast, higher in the near inland valleys, and lower in the far inland areas of the Air Basin and adjacent desert.[30] **Table IV.B-2**, *South Coast Air Basin Attainment Status*

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

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

[29] SCAQMD, Final 2016 AQMP, March 2017, page 1-6.

[30] SCAQMD, Final 2016 AQMP, March 2017.

(Los Angeles County), shows the attainment status of the Air Basin for each criteria pollutant with respect to the State and Federal standards. The Air Basin is designated as attainment for the California standards for sulfates and unclassified for hydrogen sulfide and visibility-reducing particles.[31] The Air Basin is currently in non-attainment for O_3, PM10, and PM2.5 under the CAAQS and O_3, and PM2.5 under the NAAQS. Since vinyl chloride is a carcinogenic toxic air contaminant, CARB does not classify attainment status for this pollutant. Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria.

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

Pollutant	National Standards (NAAQS)	California Standards (CAAQS)
O_3 (1-hour standard)	N/A [a]	Non-attainment – Extreme
O_3 (8-hour standard)	Non-attainment – Extreme	Non-attainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
PM10	Attainment	Non-attainment
PM2.5	Non-attainment – Serious	Non-attainment
Lead (Pb)	Non-attainment (Partial) [b]	Attainment
Visibility Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment
Hydrogen Sulfide	N/A	Unclassified
Vinyl Chloride [c]	N/A	N/A

N/A = not applicable

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

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

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

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

The Los Angeles County portion of the Air Basin is designated as nonattainment for the federal lead standard; however, this is due to localized emissions from two lead-acid

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

battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating.[32]

As detailed in the AQMP, the major sources of air pollution in the Air Basin are divided into four major source classifications: point, and area stationary sources, and on-road and off-road mobile sources. Point and area sources are the two major subcategories of stationary sources.[33] Point sources are permitted facilities that contain one or more emission sources at an identified location (e.g., power plants, refineries, emergency generator exhaust stacks). Area sources consist of many small emission sources (e.g., water heaters, architectural coatings, consumer products, and fireplaces), which are distributed across the region. Mobile sources consist of two main subcategories: On-road sources (such as cars and trucks) and off-road sources (such as heavy construction equipment and landscaping equipment).

(b) Toxic Air Contaminants

In addition to criteria pollutants, the SCAQMD periodically assesses levels of TACs in the Air Basin. The greatest potential for TAC emissions during construction is related to DPM emissions associated with heavy-duty equipment. During long-term operations, sources of DPM may include heavy duty diesel-fueled delivery trucks and stationary emergency generators.

In August 2021, the SCAQMD released the Final Multiple Air Toxics Exposure Study V (MATES V).[34] The MATES V study includes a fixed site monitoring program with 10 stations, an updated emissions inventory of TACs, and a modeling effort to characterize risk across the Air Basin. The purpose of the fixed site monitoring is to characterize long-term regional air toxics levels in residential and commercial areas. In addition to new measurements and updated modeling results, several key updates were implemented in MATES V. First, MATES V estimates cancer risks by taking into account multiple exposure pathways, which includes inhalation and non-inhalation pathways. This approach is consistent with how cancer risks are estimated in South Coast AQMD's programs such as permitting, Air Toxics Hot Spots (AB2588), and CEQA. Previous MATES studies quantified the cancer risks based on the inhalation pathway only. Second, along with cancer risk estimates, MATES V includes information on the chronic non-cancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic non-cancer risks from MATES II through IV measurements have been re-examined using current OEHHA and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time. This has led to a reduction of the Air Basin average air toxics cancer risk in MATES V of 455 in one million, compared

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

[33] SCAQMD, Final 2016 AQMP, March 2017, page 3-32.

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

to MATES IV of 997 in one million.[35] The key takeaways from the MATES V study: air toxics cancer risk has decreased by about 50 percent since MATES IV based on modeling data; MATES V Air Basin average multi-pathway air toxics cancer risk is 455 in one million, with the highest risk locations being in the Los Angeles International Airport, downtown and the ports areas; diesel particulate matter is the main risk driver for air toxics cancer risk; goods movement and transportation corridors have the highest air toxics cancer risks; and the chronic non-cancer risk was estimated for the first time with a chronic hazard index of approximately 5 to 9 across all 10 fixed stations.[36,37]

(2) Local Area Conditions

(a) Local Air Pollution Sources

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

(b) Existing Ambient Air Quality in the Surrounding Area

The SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient pollutant concentrations. The monitoring station most representative of the Project Site for ozone, NO_2, CO, and PM2.5 is the West San Fernando Valley Monitoring Station, located at 18330 Gault Street in Reseda as it is the SCAQMD monitoring station nearest to the Project Site that measures the ambient concentrations of these pollutants.[38] The West San Fernando Valley Monitoring Station does not measure

---

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

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

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

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

concentrations of PM10, SO_2, or Pb. The Santa Clarita Valley Monitoring Station located at 22224 Placerita Canyon in Santa Clarita was used to report concentration data for PM10 as it is the next closest SCAQMD monitoring station to the Project Site that measures PM10 concentrations. The Central Los Angeles County Monitoring Station located at 1630 North Main Street in Los Angeles was used to report concentration data for SO_2 and Pb as it is the next closest SCAQMD monitoring station to the Project Site that measures SO_2 and Pb concentrations. The most recent data available from the SCAQMD for these monitoring stations are from years 2018 to 2020.[39] The pollutant concentration data for these years are summarized in **Table IV.B-3,** *Ambient Air Quality in the Project Vicinity*. As shown in Table IV.B-3, the CAAQS and NAAQS were not exceeded in the Project Site vicinity for most pollutants between 2017 and 2019, except for O_3, PM10, and PM2.5.

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

Pollutant/Standard [a]	2018	2019	2020
Ozone, O_3 (1-hour)			
Maximum Concentration (ppm)	0.120	0.101	0.142
Days > CAAQS (0.09 ppm)	14	1	14
Ozone, O_3 (8-hour)			
Maximum Concentration (ppm)	0.101	0.087	0.115
4th High 8-hour Concentration (ppm)	0.094	0.076	0.097
Days > CAAQS (0.070 ppm)	49	6	49
Days > NAAQS (0.070 ppm)	49	6	49
Nitrogen Dioxide, NO_2 (1-hour)			
Maximum Concentration (ppm)	0.057	0.064	0.057
Days > CAAQS (0.18 ppm)	0	0	0
98th Percentile Concentration (ppm)	0.050	0.044	0.050
Days > NAAQS (0.100 ppm)	0	0	0
Nitrogen Dioxide, NO_2 (Annual)			
Annual Arithmetic Mean (0.030 ppm)	0.012	0.011	0.012
Carbon Monoxide, CO (1-hour)			
Maximum Concentration (ppm)	3.4	2.6	2.0
Days > CAAQS (20 ppm)	0	0	0
Days > NAAQS (35 ppm)	0	0	0
Carbon Monoxide, CO (8-hour)			
Maximum Concentration (ppm)	2.1	2.2	1.7
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9 ppm)	0	0	0

[39] SCAQMD, Historical Data by Year, 2018-2020, http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year, accessed February 4, 2022.

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

Pollutant/Standard [a]	2018	2019	2020
Sulfur Dioxide, SO_2 (1-hour)			
Maximum Concentration (ppm)	0.018	0.010	0.004
Days > CAAQS (0.25 ppm)	0	0	0
99th Percentile Concentration (ppm)	0.003	0.002	0.003
Days > NAAQS (0.075 ppm)	0	0	0
Sulfur Dioxide, SO_2 (24-hour)			
Maximum Concentration (ppm)	0.001	0.001	0.001
Days > CAAQS (0.04 ppm)	0	0	0I
Respirable Particulate Matter, PM10 (24-hour)			
Maximum Concentration (µg/m³)	49	62	48
Samples > CAAQS (50 µg/m³)	0	1	0
Samples > NAAQS (150 µg/m³)	0	0	0
Respirable Particulate Matter, PM10 (Annual)			
Annual Arithmetic Mean (20 µg/m³)	23.4	18.4	22.5
Fine Particulate Matter, PM2.5 (24-hour)			
Maximum Concentration (µg/m³)	31.0	30.0	27.6
98th Percentile Concentration (µg/m³)	22.6	26.3	26.4
Samples > NAAQS (35 µg/m³)	0	0	0
Fine Particulate Matter, PM2.5 (Annual)			
Annual Arithmetic Mean (12 µg/m³)	10.3	9.2	10.1
Lead, Pb			
Maximum 30-day average (µg/m³)	0.011	0.012	0.013
Samples > CAAQS (1.5 µg/m³)	0	0	0
Maximum 3-month rolling average (µg/m³)	0.010	0.010	0.011
Days > NAAQS (0.15 µg/m³)	0	0	0

[a] ppm = parts per million; µg/m³ = micrograms per cubic meter

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

(c) Existing Health Risk in the Surrounding Area

The SCAQMD has prepared a series of maps that show regional trends in estimated outdoor inhalation cancer risk from toxic emissions, as part of an ongoing effort to provide insight into relative risks. The maps represent the estimated number of potential cancers per million people associated with a lifetime of breathing air toxics (24 hours per day outdoors for 70 years). The background potential cancer risk per million people in the Project Site area using the updated OEHHA methodology is estimated at 422 in one million (compared to an overall Air Basin-wide risk of 455 in one million for the average

of 10 fixed monitoring sites).[40] Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, rail yards and ports).

(d) Existing Site Emissions

Existing on-site facilities include a clubhouse and café, a tennis shack, and 16 tennis courts. A nine-hole, 27-par golf course, a 25-stall driving range, and a putting green are also located on the Project Site. The clubhouse and café, an existing putting green to the northeast of the clubhouse, six existing golf ball-shaped light standards, and the low brick retaining wall along the northeastern edge of the property, would remain as would numerous mature trees located on the Project Site. The putting green would remain and be available for public use and enjoyment. The clubhouse and the café it contains, with some interior renovations to improve its usability and address deferred maintenance, would remain as part of the Project and function as a visitor center. While the clubhouse would function as a visitor center, operation of the building would not materially change compared to existing conditions, and as such, this analysis assumes these uses would generate similar operational air quality emissions without or with the Project, and were, therefore, not included in existing or operational emissions modeling. The other existing structures and facilities on the Project Site would be demolished and removed to allow for development of the Project. Existing site emissions are associated with vehicle trips to and from the Project Site, landscaping equipment, on-site combustion of natural gas for heating, and fugitive emissions of VOCs from the use of aerosol products and coatings.

California Emissions Estimator Model (CalEEMod) software was used to estimate the existing site emissions from vehicle trips, natural gas appliances and equipment, and fugitive VOC emissions. Building natural gas usage rates have been adjusted to account for prior Title 24 Building Energy Efficiency Standards.[41,42] Mobile source emissions have been estimated based on CARB's on-road vehicle emissions factor (EMFAC) model. A detailed discussion of the methodology used to estimate the existing Project Site emissions is provided below. The existing Project Site emissions are summarized in **Table IV.B-4**, *Estimated Existing Site Regional Operational Emissions (Pounds Per Day)*. Detailed emissions calculations are provided in Appendix C of this Draft EIR.

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

41 CAPCOA, CalEEMod Version 2016.3.2, 2016, https://www.aqmd.gov/caleemod/archive/download-version-2016-3-2, accessed September 2021.

42 CAPCOA, CalEEMod User's Guide, Appendix E, Section 5, September 2016. Factors for the prior Title 24 standard are extrapolated based on the technical source documentation.

TABLE IV.B-4
EXISTING SITE OPERATIONAL EMISSIONS (POUNDS PER DAY) [a]

Source	VOC	NO_X	CO	SO_2	PM10	PM2.5
Area	<1	<1	<1	0	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Motor Vehicles	2	5	20	<1	5	1
Total Existing Emissions	**2**	**5**	**20**	**<1**	**5**	**1**

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

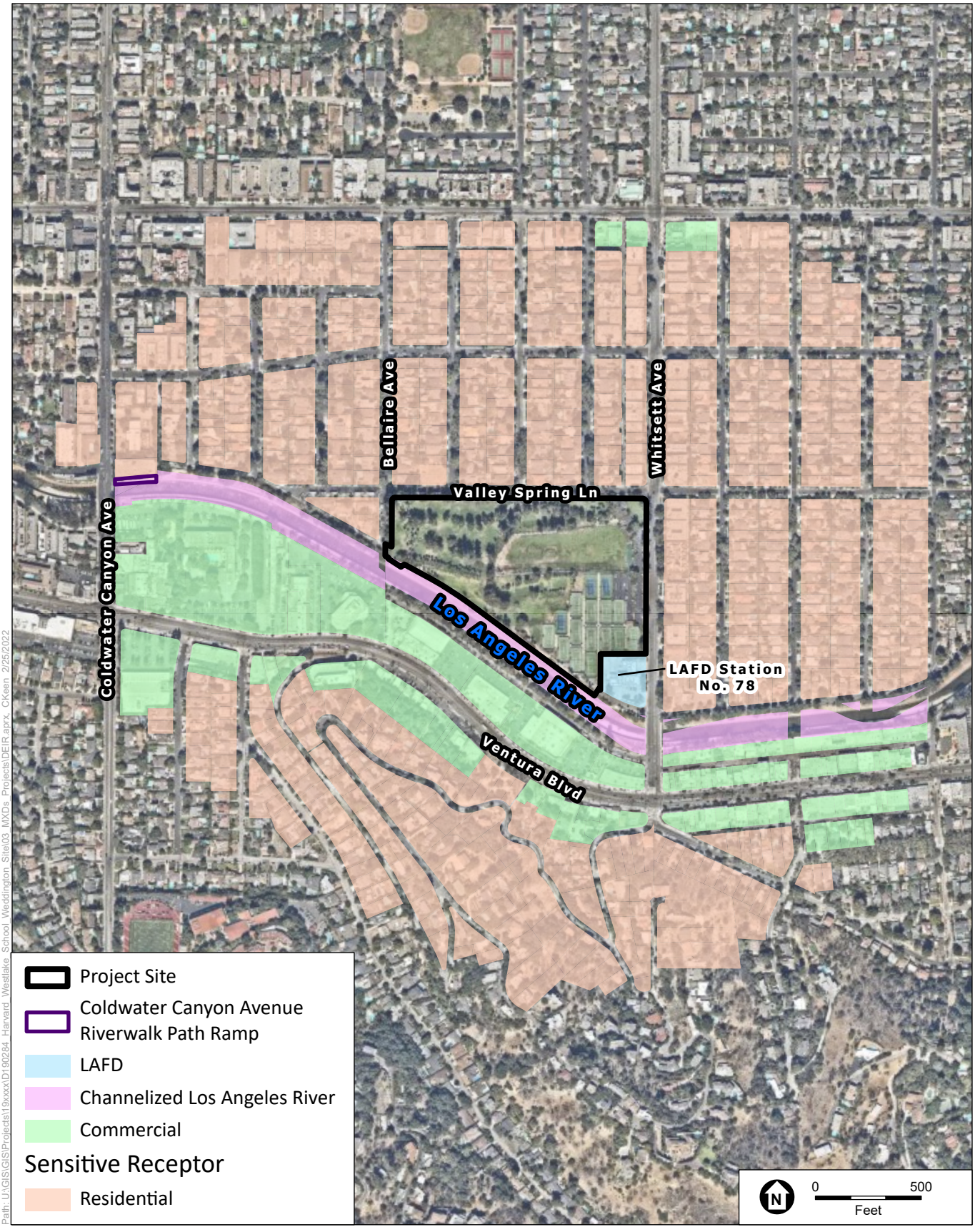
SOURCE: ESA, 2020.

(e) Sensitive Receptors and Locations

Certain population groups, such as children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to the potential effects of air pollution than others. As a result, certain land uses that are occupied by these population groups, such as residences, hospitals and schools, are considered to be air quality-sensitive land uses. The Project Site is primarily surrounded by residential neighborhoods to the north, east, and west of the Project Site, as shown in **Figure IV.B-1**, *Sensitive Receptor Locations Nearest to the Project Site*. These include multi-family neighborhoods along the east side of Whitsett Avenue directly east of the Project Site and along both the east and west sides of Whitsett Avenue to the north of Valley Spring Lane. Single-family residential neighborhoods are located to the north of Valley Spring Lane. Two single-family homes are located to the west of the Project Site on Bellaire Avenue, in which the residences face Bellaire Avenue and the Project Site. The surrounding area consists of developed residential neighborhoods, with residential neighborhoods continuing north to the nearest commercial uses along Moorpark Avenue, 0.25 miles north of the Project Site. Adjoining the southeast corner of the Project Site, LAFD Fire Station 78 is located at the west side of Whitsett Avenue, where Whitsett Avenue and Valleyheart Drive intersect.

To the south, the Project Site adjoins the Zev Greenway, the longest river greenway in the San Fernando Valley, which follows the north side of the Los Angeles River for 0.5 miles between Whitsett Avenue on the east and Coldwater Canyon Avenue on the west (see Chapter II, *Project Description*, in this Draft EIR for additional details).[43] The channelized Los Angeles River is located just south of the Zev Greenway. The area along the southern edge of the river is improved with a bicycle path. Commercial uses are located to the south of the river and oriented to (facing) Ventura Boulevard, 0.1 miles south of the Project Site.

[43] The Planning Report, Zen Yaroslavsky LA River Greenway Trail: The Valley's 'Missing Link', October 30, 2014, https://www.planningreport.com/2014/10/30/zev-yaroslavsky-la-river-greenway-trail-valleys-missing-link, accessed July 2, 2020.



SOURCE: ESA, 2021.

Harvard-Westlake River Park Project

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

The Project vicinity is highly urbanized and generally built out. The north side of Ventura Boulevard directly to the south of the Project Site is developed with retail uses. These uses are served by large surface parking lots, including parking areas between the commercial buildings and the Los Angeles River. Retail and office uses are also located along the south side of Ventura Boulevard and, because Ventura Boulevard is located at the edge of the rising Santa Monica Mountains, residential neighborhoods in the hillside areas begin immediately to the south of this commercial strip. Other than the largely residential receptors shown in Figure IV.B-1, other air quality-sensitive uses are located at greater distances from the Project Site and would experience lower air pollutant impacts from potential sources of pollutants from the Project Site due to atmospheric dispersion effects and are not listed.

3. Project Impacts

a) Thresholds of Significance

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

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

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

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

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

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

- Combustion Emissions from Construction Equipment
  - Type, number of pieces and usage for each type of construction equipment;
  - Estimated fuel usage and type of fuel (diesel, natural gas) for each type of equipment; and
  - Emission factors for each type of equipment.
- Fugitive Dust: Grading, Excavation and Hauling
  - Amount of soil to be disturbed on-site or moved off-site;
  - Emission factors for disturbed soil;

  - Duration of grading, excavation and hauling activities;
  - Type and number of pieces of equipment to be used; and
  - Projected haul route.
- Fugitive Dust: Heavy-Duty Equipment Travel on Unpaved Roads
  - Length and type of road;
  - Type, number of pieces, weight and usage of equipment; and
  - Type of soil.
- Other Mobile Source Emissions
  - Number and average length of construction worker trips to project site, per day; and
  - Duration of construction activities.

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

Consistency with Applicable Air Quality Plans. CEQA Guidelines Section 15125 requires an analysis of project consistency with applicable governmental plans and policies. In accordance with the SCAQMD's CEQA Air Quality Handbook, the following criteria were used to evaluate the Project's consistency with the SCAQMD's 2016 AQMP and the City's General Plan Air Quality Element:

- Criterion 1: Will the Project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations; or
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Criterion 2: Will the Project exceed the assumptions utilized in preparing the AQMP

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

Construction and Operational Emission Air Quality Standards. A significant impact may occur if a project would add a cumulatively considerable contribution of a federal or State non-attainment pollutant. The Air Basin is currently in non-attainment for O_3, PM10, and PM2.5. SCAQMD methodology recommends that significance thresholds be used to determine the potential cumulative impacts to regional air quality along with a project's consistency with the current AQMP.

The SCAQMD has established numerical significance thresholds for construction and operational activities. The numerical thresholds are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.[44] Given that construction impacts are temporary and limited to the construction phase, the SCAQMD has established numerical significance thresholds specific to construction activity. Based on the thresholds in the SCAQMD CEQA Air Quality Handbook,[45] the Project would potentially result in a significant impact of a federal or State non-attainment pollutant if emissions of O_3 precursors (VOC and NO_X), PM10, or PM2.5 would exceed the values shown in **Table IV.B-5**, *SCAQMD Regional Emissions Thresholds*.

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

Activity	VOC	NO_X	CO	SO_2	PM10	PM2.5
Construction	75	100	550	150	150	55
Operations	55	55	550	150	150	55

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

Localized Emission Impacts on Sensitive Receptors. In addition, the SCAQMD has developed a methodology to assess the potential for localized emissions to cause an exceedance of applicable ambient air quality standards or ambient concentration limits. Impacts would be considered significant if the following would occur:

- Maximum daily localized emissions of NO_X and/or CO during construction or operation are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for NO_2 and/or CO.[46]

[44] SCAQMD, CEQA Air Quality Handbook, April 1993.

[45] SCAQMD, Air Quality Significance Thresholds, April 2019.

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

- Maximum daily localized emissions of PM10 and/or PM2.5 during construction are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed 10.4 µg/m^3 over 24 hours (SCAQMD Rule 403 control requirement).
- Maximum daily localized emissions of PM10 and/or PM2.5 during operation are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site to exceed 2.5 µg/m^3 over 24 hours (SCAQMD Rule 1303 allowable change in concentration).
- The following conditions would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:
  - The Project would cause or contribute to an exceedance of the CAAQS 1-hour or 8-hour CO standards of 20 or 9.0 parts per million (ppm), respectively.
  - Where the CO standard is exceeded at the intersection, a project would result in a significant impact if the incremental increase due to the project is equal to or greater than 1.0 ppm for the California 1-hour CO standard, or 0.45 ppm for the 8-hour CO standard.

The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and, therefore, not cause or contribute to an exceedance of the applicable ambient air quality standards or ambient concentration limits without project-specific dispersion modeling.[47] This analysis uses the screening criteria to evaluate impacts from localized emissions where applicable.

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

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

Objectionable Odors and Other Emissions. With respect to other emissions, such as odors, the Project would be considered significant if it created objectionable odors affecting a substantial number of people. In addition, based on the thresholds in the SCAQMD CEQA Air Quality Handbook,[49] the Project would potentially result in a significant impact of an attainment, maintenance, or unclassified pollutant if emissions of CO or SO_2 would exceed the values shown in Table IV.B-5.

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

48 SCAQMD, CEQA Air Quality Handbook, April 1993.

49 SCAQMD, Air Quality Significance Thresholds, April 2019.

b) Methodology

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

(1) SCAQMD Air Quality Guidance Documents

The SCAQMD published the CEQA Air Quality Handbook to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.[50] The CEQA Air Quality Handbook provides standards, methodologies, and procedures for conducting air quality analyses in EIRs and was used extensively in the preparation of this analysis. However, the SCAQMD is currently in the process of replacing the CEQA Air Quality Handbook with the Air Quality Analysis Guidance Handbook. While this process is underway, the SCAQMD recommends that lead agencies avoid using the screening tables in Chapter 6 (Determining the Air Quality Significance of a Project) and the on-road mobile source emission factors in Tables A9-5-J1 through A9-5 of the CEQA Air Quality Handbook as they are outdated.

The SCAQMD instead recommends using other approved models to calculate emissions from land use projects, such as the CalEEMod software, which is a model developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts. CalEEMod is a Statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions from a variety of land use projects. At the time that the emissions modeling was conducted, CalEEMod Version 2016.3.2 was the version that was available. While the Version 2020.4.0 is now available, the use of Version 2020.4.0 would produce similar, if not fewer, resulting emissions. CalEEMod Version 2020.4.0 includes updated utility factors and energy demand factors based on newer and more stringent building energy efficiency standards, which would result in fewer operational emissions in both the air quality and GHG emissions assessments. CalEEMod 2020.4.0 did not update emission factors relative to construction equipment and uses the same construction equipment emission factors as Version 2016.3.2. Therefore, the use of CalEEMod Version 2016.3.2 in this analysis does not underestimate emissions, would not lead to different impact determinations than disclosed herein, and provides for a slightly conservative (i.e., environmentally protective) analysis with respect to operational emissions.

The SCAQMD has published a guidance document called the Final Localized Significance Threshold Methodology for CEQA Evaluations that is intended to provide guidance when evaluating the localized effects from mass emissions during construction.[51] The SCAQMD adopted additional guidance regarding PM2.5 emissions

[50] SCAQMD, CEQA Air Quality Handbook, April 1993.

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

in a document called Final Methodology to Calculate Particulate Matter (PM)2.5 and PM2.5 Significance Thresholds.[52] This latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and Final Localized Significance Threshold Methodology.

(2) Consistency with Air Quality Management Plan

The SCAQMD is required, pursuant to the CAA, to reduce emissions of criteria pollutants for which the Air Basin is in non-attainment of the NAAQS (e.g., O_3 and PM2.5).[53] The SCAQMD's 2016 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the five NAAQS related to these pollutants, including transportation control strategies from SCAG's 2016-2040 RTP/SCS designed to reduce VMT.[54] The 2016 AQMP control strategies were developed, in part, based on regional growth projections prepared by SCAG through 2040.[55] For this reason, projects whose growth is consistent with the assumptions used in the 2016-2040 RTP/SCS will be deemed to be consistent with the 2016 AQMP because their growth has already been included in the growth projections utilized in the formulation of the control strategies in the 2016 AQMP. Thus, emissions from projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the 2016 AQMP would not jeopardize attainment of the air pollutant reduction goals identified in the AQMP even if their emissions exceed the SCAQMD thresholds of significance.[56] As noted above, the 2016 AQMP has been adopted by the SCAQMD and CARB. Therefore, this analysis considers consistency of the Project (see Chapter II, *Project Description*, of this Draft EIR for additional details) with the 2016 AQMP based on the AQMP's consistency with applicable growth projections and emission control strategies.

(3) Consistency with General Plan – Air Quality Element

As discussed previously, the City's General Plan Air Quality Element includes Citywide goals, objectives, and policies that guide the City in the implementation of its air quality improvement programs and strategies. Goals, objectives, and polices of the Air Quality Element relevant to the Project include minimizing traffic congestion and increasing energy efficiency, as well as reducing air pollutant emissions consistent with the AQMP. The analysis below provides a side-by-side comparison of each of the relevant provisions

[52] SCAQMD, Final Methodology to Calculate Particulate Matter (PM)2.5 and PM2.5 Significance Thresholds, 2006.

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

[54] SCAQMD, 2016 AQMP, March 2017, pages ES-6 and 4-42.

[55] SCAQMD, 2016 AQMP, March 2017, pages 4-42 to 4-44.

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

in the Air Quality Element with the Project to determine the whether the Project would be consistent with those provisions.

(4) Existing Project Site Emissions

Existing operational site emissions were estimated using CalEEMod Version 2016.3.2, as described below. Since the clubhouse with café and putting green would continue to operate similar to existing conditions, the analysis assumes these uses would generate the same operational air quality emissions without or with the Project and were, therefore, not included in existing or operational emissions modeling. The other existing uses would be demolished and removed to allow for development of the Project. Existing site emissions are associated with vehicle trips to and from the Project Site, landscaping equipment, on-site combustion of natural gas for heating, and fugitive emissions of VOCs from the use of aerosol products and coatings. For mobile sources, the vehicle trips and VMT were obtained for the existing uses from the Project's Transportation Assessment (TA), which incorporates the City's VMT analysis procedures and Transportation Assessment Guidelines and emission factors from the CARB on-road vehicle emissions factor (EMFAC2017) model. [57]

As discussed in the CalEEMod User's Guide, emissions from on-site natural gas combustion were based on usage data from the CEC's *California Commercial End Use Survey* (CEUS), which lists energy demand by building type.[58] Since 1978, the CEC has established building energy efficiency standards, which are updated periodically. The CEUS provides data on a limited Statewide basis for different climate zones. Because CalEEMod applies correction factors to account for compliance with recent updates to the Title 24 Building Energy Efficiency Standards, energy demand is adjusted to account for assumed compliance with older Title 24 Building Energy Efficiency Standards, based on available conversion data.[59]

Other sources of emissions from existing uses include equipment used to maintain landscaping, such as lawnmowers and trimmers. The CalEEMod software uses landscaping equipment emission factors from the CARB off-road (OFFROAD) emissions factor model and the CARB *Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment*.[60] The CalEEMod software assumes that landscaping equipment operates for 250 days per year in the Air Basin. Fugitive VOC emissions are based on consumer product usage factors provided by the SCAQMD within CalEEMod and architectural coating emission factors based on SCAQMD Rule 1113.

---

57 Fehr & Peers, Transportation Assessment – Harvard-Westlake River Park Project for Assessor Parcel Numbers 2375-018-020 and portion of APN 2375-018-903 Los Angeles River Parcel 276,4141 Whitsett Avenue, Studio City, CA 91604, April 2021. Provided in Appendix M of this Draft EIR.

58 CAPCOA, CalEEMod User's Guide, Appendix E, Section 5, October 2017.

59 CAPCOA, CalEEMod User's Guide, Appendix E, Section 5, October 2017.

60 CARB, OFFROAD Modeling Change Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment, June 13, 2003.

(5) Construction Emissions Methodology

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

Project construction activities that would have the potential to create regional air quality impacts include vehicle trips generated by construction workers, vendor trucks, and haul trucks traveling to and from the Project Site and building activities, such as the application of paint and other surface coatings. The Project's daily regional criteria pollutant emissions during construction have been estimated by assuming a conservative scenario for construction activities (i.e., assuming all construction occurs at the earliest feasible date, given that regulatory requirements will improve future emissions associated with fleet, vehicle, and equipment mixes) and applying the mobile source and fugitive dust emissions factors. The emissions have been estimated using the CalEEMod software (Version 2016.3.2), an emissions inventory software program recommended by the SCAQMD, and the CARB on-road vehicle EMFAC2017 model. The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule based on information provided by Harvard-Westlake School. When information was unknown, CalEEMod defaults were used. Emissions from off-road equipment and off-road vehicles were estimated through CalEEMod since CalEEMod is based on outputs from the CARB off-road emissions factor (OFFROAD), which is the emissions estimation model developed by CARB and used to calculate emissions from construction activities, including off-road vehicles. Worker trip, concrete truck, vendor truck and haul truck trip estimates were provided by the Project's construction representative. Emissions from worker trips, haul truck trips, concrete truck trips and vendor truck trips were estimated using EMFAC2017 . Haul truck trip estimates were based on excavation volumes obtained from the Project's engineering representative and 7 cubic yard capacity haul trucks for demolition and site preparation phase and 14 cubic yard soil capacity haul trucks for the grading/excavation phase; cement truck trip estimates were based on the Project's engineering representative and 10 cubic yard concrete capacity concrete trucks. Emissions from haul trucks, vendor trucks, and concrete trucks were also estimated outside of CalEEMod using EMFAC2017 emission factors for haul, vendor and concrete trucks because CalEEMod assumes that the number of heavy-duty trucks input into the model occurs across the entire length of the applicable construction phases. However, since the applicable construction phases would not have the same number of haul trucks, vendor trucks, and concrete trucks on-site every day within each particular phase, the emissions calculations performed outside of CalEEMod are able to account for the varying maximum numbers of daily haul truck and concrete truck trips within each of the demolition, site preparation, grading/excavation, and foundations/concrete pour, landscape and pool/canopy/building phases. These values were applied to the construction phasing assumptions used in the criteria pollutant analysis to generate criteria pollutant emissions values for each construction activity. The Project would export approximately 250,000 cubic yards of soil, approximately 10,590

cubic yards of demolition debris (asphalt, earthwork, and general construction debris) and approximately 6,532 cubic yards of site preparation debris (vegetation and minor earthwork). Emissions from these activities were estimated by construction phase. The maximum daily emissions were estimated based on maximum construction activity conditions for heavy-duty off-road construction equipment and on-road mobile sources and do not represent the emissions that would occur every day during Project construction. The maximum daily emissions were compared to the SCAQMD daily regional thresholds of significance. A detailed discussion of the Project's construction phasing and equipment list is available in the *Technical Appendix for Air Quality and Greenhouse Gas Emissions* for the Project, which is provided in Appendix C of this Draft EIR.[61]

Project construction activities that would have the potential to create local air quality impacts include fugitive dust from demolition, grading, and building activities, such as the application of paint and other surface coatings. The localized effects from the on-site portion of the Project's construction emissions were evaluated at the nearby sensitive receptor locations that would be potentially impacted by Project construction in accordance with the SCAQMD's *Final Localized Significance Threshold Methodology*.[62] The localized significance thresholds only address NO_X, CO, PM10, and PM2.5 emissions. The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and therefore not cause or contribute to an exceedance of the applicable ambient air quality standards without the need for Project-specific dispersion modeling. The localized analysis for the Project is based on this SCAQMD screening criteria. The Project Site is located within the boundaries of the Sherman Oaks–Studio City–Toluca Lake–Cahuenga Pass Community Plan Area of the City within the Studio City community and is 17.2 acres in size, with the nearest off-site receptors located north, east, and west of the Project Site along Valley Spring Lane, Whitsett Avenue, and Bellaire Avenue. Therefore, conservatively, the screening criteria used in the analysis were those applicable for a 5-acre site in the East San Fernando Valley area with sensitive receptors located 25 meters away, which accounts for all adjacent off-site sensitive receptors.[63,64] The Project would also include the installation of an Americans with Disabilities Act (ADA)-compliant accessible pedestrian ramp leading to the Zev Greenway at Coldwater Canyon Avenue (Coldwater Canyon Avenue Riverwalk Path Ramp). The

61 Impacts from asbestos and lead-based paint from Project demolition are expected to be less than significant with compliance with regulations. For additional details please refer to Section IV.H, *Hazards and Hazardous Materials*, of this Draft EIR.

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

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

64 Using the screening criteria applicable for a 5-acre site is conservative because the localized significance thresholds are project site dependent and the allowable thresholds increase with increasing project size. Therefore, using a 5-acre site threshold instead of the Project Site's full 17.2 acres yields a more stringent analysis.

localized screening criteria applicable to a 0.14-acre site in the East San Fernando Valley area with sensitive receptors located within 25 meters, which accounts for all adjacent off-site sensitive receptors, was used for the localized emissions analysis of the Coldwater Canyon Avenue Riverwalk Path Ramp.[65] The maximum net daily emissions from construction of the Project were compared to these screening criteria.

Project construction is estimated to start in 2022 but may commence at a later date. If this occurs, construction impacts would be lower than those analyzed below due to the use of a more energy-efficient and cleaner burning construction vehicle fleet mix, pursuant to State regulations that require vehicle fleet operators to phase-in less polluting heavy-duty equipment (see Subsection IV.B.2.b)(2)(b), *On-Road and Off-Road Vehicle Rules*, for additional details). As a result, should Project construction commence at a later date than analyzed in this Draft EIR, air quality impacts would be lower than the impacts disclosed herein.

(6) Operational Emissions Methodology

Project operational emissions were estimated using CalEEMod Version 2016.3.2 to forecast the daily regional criteria pollutant emissions from on-site area and stationary sources that would occur during long-term Project operations.

Operation of the Project has the potential to generate criteria pollutant emissions through vehicle and truck trips traveling to and from the Project Site. For mobile sources, the estimated vehicle trips and maximum daily VMT were provided for the Project uses in the Project's Transportation Assessment (TA) where the VMT analysis used the City's VMT analysis procedures and Transportation Assessment Guidelines.[66] In addition, while the community use component of the Project, which would be classified as a community-serving recreational facility, would be exempt from VMT analysis per Los Angeles Department of Transportation (LADOT) requirements in accordance with LADOT's *Transportation Assessment Guidelines* (TAG),[67] the emissions associated with VMT from the community use component of the Project were accounted for in the Project's operational emissions for the purposes of this air quality analysis. Additionally, in order to estimate maximum daily emissions, VMT from a large Harvard-Westlake School Special Event (those that are not related to regular academic activities or athletic programs, practices, or competitions and that are expected to draw more than 100 attendees), which could occur on a weekday, was accounted for in the Project's operational emissions for

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

[66] Fehr & Peers, Transportation Assessment – Harvard-Westlake River Park Project for Assessor Parcel Numbers 2375-018-020 and portion of APN 2375-018-903 Los Angeles River Parcel 276,4141 Whitsett Avenue, Studio City, CA 91604, April 2021. Provided in Appendix M of this Draft EIR.

[67] LADOT, *Transportation Assessment Guidelines*, July 2020.

the purposes of this air quality analysis. Therefore, the Project's mobile source operational emissions represent a maximum day with the highest estimated VMT.

The EMFAC2017 model was run in the emissions mode (also referred to as the "Burden" mode) and used to generate Air District-specific vehicle fleet emission factors in units of grams or metric tons per mile. These emission factors were then applied to the daily VMT to obtain daily mobile source emissions. Daily VMT for the educational facility component of the Project are provided in the TA prepared for the Project. The daily VMT for the community use component of the Project were based on trip generation estimates by Fehr and Peers and the average trip length (5.9 miles) estimated based on a weighted average trip length by zip code distribution to the Project Site, documented in the TA.[68]

The Project's operational emissions were estimated using the CalEEMod software. CalEEMod was used to forecast the daily regional criteria pollutant emissions from on-site area and stationary sources that would occur during long-term Project operations. Emissions would result from area sources located on-site, such as natural gas combustion from water heaters, boilers, and cooking stoves, landscaping equipment, and use of consumer products. The Project is not expected to contain any large stationary combustion equipment, such as large boilers or combustion turbines. Natural gas usage factors in CalEEMod are based on the CEC 2002 CEUS data adjusted to reflect more recent Title 24 Building Energy Efficiency Standards. Non-Title 24 natural gas usage for pool heating were also included using CalEEMod factors, as discussed in the CalEEMod User's Guide.[69]

Operational air quality impacts were assessed based on the incremental increase in emissions compared to baseline conditions. Under CEQA, the baseline environmental setting for an EIR is generally established at or around the time that the Notice of Preparation (NOP) for the EIR is published. As discussed previously, existing on-site facilities include the 2,700-square-foot clubhouse with a 10-seat café, a 799-square-foot tennis shack, and 16 tennis courts with approximately 128 court lights that reach a height of 22 feet. A nine-hole, 27-par golf course comprising approximately 426,000 square feet, a 25-stall driving range with a 2,300-square-foot golf canopy, and a putting green are also located on the Project Site. As previously stated, the existing clubhouse and café, and putting green northeast of the clubhouse would remain as part of the Project and were, therefore, not included in operational emissions modeling. Existing site emissions are associated with vehicle trips to and from the Project Site, on-site combustion of natural gas for heating, and fugitive emissions of VOCs from the use of aerosol products and coatings. Therefore, the net change in operational emissions is based on the difference between the existing Project Site emissions and the emissions of the Project Site at full

[68] Fehr & Peers, Transportation Assessment – Harvard-Westlake River Park Project for Assessor Parcel Numbers 2375-018-020 and portion of APN 2375-018-903 Los Angeles River Parcel 276,4141 Whitsett Avenue, Studio City, CA 91604, April 2021. Provided in Appendix M of this Draft EIR.

[69] CAPCOA, CalEEMod User's Guide, page 43, November 2017.

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

The localized effects from the on-site portion of the maximum daily net emissions from Project operation were evaluated at the nearby sensitive receptor locations that would be potentially impacted by operation of the Project according to the SCAQMD's *Final Localized Significance Threshold Methodology*.[70] The localized impacts from operation of the Project were assessed similar to the construction emissions, as discussed previously. For further explanation, please see the *Air Quality and Greenhouse Gas Emissions Technical Documentation* in Appendix C of this Draft EIR. The Coldwater Canyon Avenue Riverwalk Path Ramp would not generate an increase in localized operational emissions. Therefore, a localized operational emissions analysis for the Coldwater Canyon Avenue Riverwalk Path Ramp is not required.

Project operation is conservatively estimated at the earliest feasible year after construction (i.e., 2025) but may commence at a later date. If the onset of Project operations is delayed to a later date than assumed in the modeling analysis, operational impacts would be less at a later date than those analyzed here in 2025 due to the improving vehicle technology that would be more fuel-efficient and lead to a cleaner vehicle fleet mix traveling to and from the Project Site as reflected in EMFAC mobile source emission factors. As a result, Project buildout at a later date than analyzed in emissions modeling would result in air quality emission impacts that would be lower than the impacts disclosed herein.

(7) Localized Emissions

The localized effects from the on-site portion of the maximum daily emissions from Project operation were evaluated at the nearby sensitive receptor locations that would be potentially impacted by operation of the Project according to the SCAQMD's Final Localized Significance Threshold Methodology.[71] The localized impacts from operation of the Project were assessed similar to the construction emissions, as discussed previously. For further explanation, please see Appendix C of this Draft EIR.

(8) CO Hotspots

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

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

[71] SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

greatest peak-hour traffic volumes that would be impacted by the Project to the intersections modeled by the SCAQMD. Project-impacted intersections with peak-hour traffic volumes that would be lower than the intersections modeled by the SCAQMD, in conjunction with lower background CO levels, would result in lower overall CO concentrations as compared to the SCAQMD-modeled values to maintain attainment status in its AQMP.

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

The greatest potential for TAC emissions during construction would be related to DPM emissions associated with heavy-duty equipment during excavation and grading activities. Construction activities associated with the Project would be sporadic, transitory, and short-term in nature (approximately 30 months). As further described below, the City is not required to conduct a quantified health risk assessment (HRA) for recreational and athletic facility projects, such as the Project, as the applicable standards and guidance that are available are intended for evaluation of health risks associated with stationary long-term sources of TAC emissions. Rather than being a stationary source of TAC emissions, the Project's emissions are largely from mobile sources, and, while the Project would generate localized TAC emissions during construction, the associated activities and exposures would be short- rather than long-term.

The OEHHA developed the Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (Guidance Manual),[72] in conjunction with CARB, for use in implementing the Air Toxics "Hot Spots" Program (Health and Safety Code Section 44360 et. seq.). The Air Toxics "Hot Spots" Program requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels. The intent in developing the Guidance Manual was to provide HRA procedures for use in the Air Toxics Hot Spots Program or for the permitting of new or modified stationary sources.

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

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

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

> *considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime."*[73]

The Project is not a "Hot Spots" Program project but rather involves the construction and operation of a school athletic and recreational facility and publicly-accessible recreational uses. The OEHHA Guidance Manual applies to stationary source operations which have no applicability to athletic and recreational projects, such as the Project. While OEHHA provides limited guidance on how to conduct HRAs for short-term projects, it makes it clear there is "considerable uncertainty" in evaluating cancer risk over short-term durations. In addition, the Guidance Manual does not identify short-term projects or non-stationary source projects that warrant the preparation of a HRA or recommend the preparation of HRAs for short-term construction projects or non-stationary source projects, such as the Project.

In addition to OEHHA highlighting the considerable uncertainty in meaningfully evaluating short term exposures to TACs, with respect to construction emissions, the SCAQMD states that it "currently does not have guidance on construction Health Risk Assessments."[74] Furthermore, in comments presented to the SCAQMD Governing Board[75] relating to TAC exposures associated with Rules 1401, 1401.1, 1402 and 212 revisions, with regard to the use of the OEHHA Guidance Manual for projects subject to CEQA, SCAQMD staff reported that:

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

To date, the SCAQMD has not conducted public workshops nor developed policy relating to the applicability of applying the Guidance Manual for projects prepared by other public/lead agencies subject to CEQA, for short-term construction emissions, or for recreational and

---

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

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

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

athletic facility projects, such as the Project. Therefore, in light of the considerable uncertainty and lack of accepted guidance for assessing short-term construction emissions from OEHHA and SCAQMD, the City does not require that a quantified HRA be prepared for the Project for purposes of CEQA compliance. Based on the above, a qualitative analysis is appropriate for assessing the Project's construction emissions.

During long-term operations, TACs could be emitted as part of periodic maintenance operations, from routine cleaning, from periodic painting, etc., and from periodic visits from delivery trucks and service vehicles. However, these events are expected to be occasional and result in minimal emissions exposure to off-site sensitive receptors. As the Project consists of recreational school- and community-based activities, the Project would not include sources of substantial TAC emissions identified by the SCAQMD or CARB siting recommendations.[76,77] Thus, a qualitative analysis is appropriate for assessing the Project's operational emissions. The siting of the Project itself in relation to off-site sources of TACs is addressed under land use compatibility for the surrounding area in Section IV.J, *Land Use and Planning*, of this Draft EIR.

c) Project Design Features

No specific Project Design Features are proposed with regard to air quality.

d) Analysis of Project Impacts

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

(1) Impact Analysis

(a) SCAQMD CEQA Air Quality Handbook Policy Analysis

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

- Criterion 1: Will the Project result in any of the following:
  - An increase in the frequency or severity of existing air quality violations; or
  - Cause or contribute to new air quality violations; or
  - Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
- Criterion 2: Will the Project exceed the assumptions utilized in preparing the AQMP

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

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

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

(i) Criterion 1

With respect to the first criterion, as discussed under the analysis for Threshold (c) below, localized concentrations of NO_2 as NO_X, CO, PM10, and PM2.5 have been analyzed for the Project. SO_2 emissions would be negligible during construction and long-term operations and, therefore, would not have the potential to cause or effect a violation of the SO_2 ambient air quality standard. Since VOCs are not a criteria pollutant, there is no ambient standard or localized threshold for VOCs. However, 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.

The Project's NO_X, CO, PM10, and PM2.5 emissions during construction and operations were analyzed: (1) to ascertain potential effects on localized concentrations; and (2) to determine if there is a potential for such emissions to cause or effect a violation of the ambient air quality standards for NO_2, CO, PM10, and PM2.5. As shown in Table IV.B-9, the increases in localized emissions of NO_X, CO, PM10, and PM2.5 during construction would not exceed the SCAQMD-recommended localized significance thresholds at sensitive receptors in proximity to the Project Site. As shown in Table IV.B-10, the increases in localized emissions of NO_X, CO, PM10, and PM2.5 emissions during operation of the Project would not exceed the SCAQMD-recommended localized significance thresholds at sensitive receptors in proximity to the Project Site.

The Project would not introduce any substantial stationary sources of emissions; therefore, CO is the appropriate benchmark pollutant for assessing local area air quality impacts from post-construction motor vehicle operations.[78] As indicated below in Threshold (c), no intersections would result in a CO hotspot in excess of the ambient air quality standards, and impacts would be less than significant. Accordingly, the Project would not increase the frequency or severity of an existing CO violation or cause or contribute to new CO violations.

Therefore, in response to Criterion 1, the Project could potentially increase the frequency or severity of an existing violation or cause or contribute to new violations for ozone based on the temporary construction localized exceedance of NO_X, which is an O_3 precursor. **Accordingly, impacts regarding the timely attainment of air quality standards or interim emission reductions specified in the AQMP would be significant.**

(ii) Criterion 2

With respect to the second criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on

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

assumptions in SCAG's 2016-2040 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 consistency with applicable population, housing, and employment growth projections and appropriate incorporation of AQMP control measures. The following discussion provides an analysis with respect to these measures.

(a) Air Quality Management Plan Consistency

Construction and operation of the Project would comply with applicable required fleet rules and control strategies to reduce on-road truck emissions (i.e., 13 CCR, Section 2025 [CARB Truck and Bus regulation]), and other applicable SCAQMD rules specified and incorporated in the 2016 AQMP. As discussed under Subsection 3.b, *Methodology*, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP even if their emissions exceed the SCAQMD's thresholds of significance. As discussed below, compliance with the applicable required fleet rules and control strategies and requirements would render it consistent with, and meet or exceed, the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Thus, the Project's construction-related and operations-related criteria pollutant emissions would not cause the Air Basin's criteria pollutant emissions to worsen so as to impede the SCAQMD's efforts to achieve attainment with respect to any criteria pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM10, and PM2.5) [79] or to cause the Air Basin to deteriorate from its current attainment status with respect to any other criteria pollutant emissions.

As further discussed below, the Project is also consistent with the 2016 AQMP as the Project would incorporate into its design appropriate control strategies set forth in the 2016 AQMP for achieving its emission reduction goals and would be consistent with the demographic and economic assumptions upon which the 2016 AQMP is based (see Chapter II.4.g), *Sustainability Features*, of this Draft EIR for additional details).

(i) Construction Growth Projections

The Project would generate approximately 275 short-term construction jobs[80], but these jobs would not necessarily bring new construction workers or their families into the region, since construction workers are typically drawn from an existing regional pool of construction workers who travel among construction sites within the region as individual projects are completed, and are not typically brought from other regions to work on

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

[80] Construction job estimate based on the maximum number of workers needed during overlap of the utilities, foundations and architectural coatings phases.

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

(ii) Operations Growth Projections

As discussed in Section II., *Project Description*, of this Draft EIR, the Project's growth would fall within the growth projections contained in the 2016-2040 RTP/SCS, which forms the basis of the growth projections in the 2016 AQMP. The Project's on-site employees would include security, custodial, landscaping, kitchen, team store, staff, athletic coaches, and athletic administration personnel. "Staff" refers to clubhouse cashiers, general maintenance, clerical, receptionist, and/or IT personnel. On a typical day in which no high attendance events (i.e., fewer than 300 spectators and participants) would take place, there would be a maximum of 80 employees. Approximately 30 employees would be present between 6:00 a.m. and 12:00 p.m., increasing gradually between noon and 2:00 p.m. The highest presence of employees would occur between 2:00 p.m. and 6:00 p.m. On days in which high attendance events (i.e., greater than 300 spectators and participants) do take place, there would be a maximum of approximately 100 employees. Security personnel would be present on-site 24 hours per day, every day of the year, and range in numbers from two to as many as ten security personnel depending on the time of day and number of scheduled activities. Conservatively assuming 100 new employees based on days in which high attendance events do take place, this increase in employees would represent less than 0.0003 percent of the growth in employees projected for the City in the 2016-2040 RTP/SCS, between 2020 and 2040.[81] The Project would, therefore, also fall within the growth projections as contained in the RTP/SCS, and ultimately the growth projections in the AQMP, since the growth would occur in a transit rich area, which would minimize potential growth in transportation-related emissions.

As discussed above under Subsection 3.b, *Methodology*, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality reductions identified in the AQMP, even if their emissions exceed the SCAQMD's thresholds of significance.[82] The Project would not obstruct implementation of the 2016 AQMP, as discussed below under Thresholds (b), (c), and (d), since its regional construction and operational emissions would be less than significant with implementation of feasible mitigation measures (discussed further below under the *Mitigation Measures* subsection), and its localized construction and operational emissions would be less than significant. **As a result, the Project would not conflict with the growth projections and control strategies used in the development in the 2016 AQMP. Impacts would be less than significant.**

[81] Based on SCAG 2016-2040 RTP/SCS Final Growth Forecast by Jurisdiction.

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

(b) Control Strategies

(i) Construction

During its construction phase, the Project would comply with CARB's requirements to minimize short-term emissions from on-road and off-road diesel equipment and with SCAQMD's regulations, such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling VOC emissions from architectural coatings. Furthermore, the Project would utilize construction contractors in compliance with State on-road and off-road vehicle rules, including the ATCM that limits heavy-duty diesel motor vehicle idling to five minutes at any location (Title 13 CCR, Section 2485), the Truck and Bus regulation that reduces NO_X, PM10, and PM2.5 emissions from existing diesel vehicles operating in California (13 CCR, Section 2025) and the In-Use Off-Road Diesel Fueled Fleets regulation that reduces emissions by the installation of diesel soot filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission controlled models (13 CCR, Section 2449). The Project's construction contractor would be required to comply with these regulatory control measures. **Compliance with these regulatory control measures would ensure the Project would not conflict with AQMP control strategies intended to reduce emissions from construction equipment and activities. Impacts would be less than significant.**

(ii) Operations

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

The Project's location, design, and land uses would support transportation control strategies related to reducing vehicle trips for users and visitors of the Project's athletic and recreational uses, including a shuttle system between the School's Upper Campus and the Project Site whenever there are School activities underway at the Project Site in order to encourage efficient transportation and reduce VMT associated with the Project (refer to Section IV.M, *Transportation*, for additional details. The Project is considered an "urban infill" project as it would replace existing recreational golf and tennis uses with two athletic fields with bleacher seating, an 80,249-square-foot, two-story multi-purpose gymnasium, a 52-meter swimming pool with seating, eight tennis courts with seating, one level of below-grade parking, and a surface parking lot for use as an athletic and recreational facility to supplement the Harvard-Westlake School's existing, space-constrained athletic facilities and to provide open space and recreational facilities to community members. The Project proposes a project consistent with compact growth, on a parcel of infill urban land accessible to and well-served by public transit, including LADOT's DASH Van Nuys/Studio City bus, with stops at Whitsett Avenue/Valley Spring Lane adjacent to the Project Site, and Whitsett/Ventura Boulevard, 0.13 miles to the

south. Transit service also includes the Los Angeles County Metropolitan Transportation Authority's (Metro) Local Line 167, with stops at Whitsett Avenue/Valley Spring Lane adjacent to the Project Site and at Whitsett Avenue/Ventura Boulevard, approximately 0.1 miles to the south. Transit service also includes Metro Bus Rapid Transit Line 750 and Local Lines 150/240 on Ventura Boulevard, which provide connection to the Metro B Line Universal City/Studio City Station, approximately 2.5 miles to the east. The Project Site is also 2.3 miles southwest of the Metro B Line North Hollywood Station, which also serves the Metro G Line. New job growth, as a result of the completed project, is focused in a High Quality Transit Area (HQTA). This analysis provides evidence of the Project's consistency with the 2016 AQMP's goal of reducing mobile source emissions as a source of NO_X and PM2.5. As described above, by locating its school athletic and recreational uses, as well as public open space and recreational uses within an area that has existing high quality public transit (with access to existing regional bus service) and employment opportunities within walking distance the Project would reduce vehicle trips and VMT and result in the corresponding reduction in air pollutant emissions. In addition, by including features that support and encourage pedestrian activity and other non-vehicular transportation and increased transit use in the Studio City community of Los Angeles, the Project would further reduce vehicle trips and VMT and result in the corresponding reduction in air pollutant emissions.

Thus, the Project would not conflict with the 2016 AQMP with respect to transportation control strategies from the 2016-2040 RTP/SCS that are intended to reduce VMT and resulting regional mobile source emissions. Impacts would be less than significant.

(b) General Plan Air Quality Element

The Project would promote the General Plan Air Quality Element goals, objectives, and policies as listed in Subsection 2.b)(4)(a), *City of Los Angeles Air Quality Element*. In particular, the Project location and characteristics, as discussed above, would achieve several goals, policies, and objectives of the Air Quality Element by locating its development in an urban infill area and supporting a land use pattern that promotes sustainability and minimization of VMT. The Project would continue to support pedestrian activity in the Studio City community of Los Angeles by continuing to locate park and recreational uses and added new school and community athletic uses in an already established neighborhood in proximity to the Harvard-Westlake Upper School campus. As discussed in Chapter II, *Project Description*, pedestrian access to the Project Site interior would be accessed via a primary pedestrian entry on Whitsett Avenue and would be located between Field A and the clubhouse. Four additional pedestrian entry points to the landscaped walking paths that weave throughout the Project Site would also be located on Valley Spring Lane between Teesdale Avenue and Whitsett Avenue, two others (in addition to the primary entry) would be located at various points along Whitsett Avenue, and one gate leading to the Project Site from the Zev Greenway (described further below). These pedestrian entry gates would allow members of the public to access the seven acres of walking paths, wooded areas, and

tennis courts but would not provide direct access to the interior athletic facilities. Seven acres of the Project Site would be available as open space for public use and tennis recreation, including areas in which collected and treated stormwater and urban run-off would be used for bio-habitat water feature areas. An extensively planted, three-quarter-mile long pedestrian path would be created to circumnavigate the perimeter of the Project Site, providing opportunities for exercise, shaded areas and bench seating, and dog walking. The network of publicly-accessible pathways and landscaped areas would connect with the Zev Greenway via a new ADA-compliant ramp alongside the multipurpose gymnasium and would allow visitors pedestrian access between the putting green, tennis courts, and a new overlook area to observe the Los Angeles River waterway. In addition, off-site from the Project, the Project would also install an ADA-compliant accessible pedestrian ramp leading to the Zev Greenway at Coldwater Canyon Avenue.

The Project would provide 100 on-site bicycle parking spaces to promote bicycle connectivity between the Project Site, the Los Angeles River, and the surrounding neighborhoods. Bicycle parking spaces would be located both at-grade, in areas near the clubhouse, Field A, and the multi-purpose gymnasium and in the underground parking structure. A large portion of the bicycle parking spaces would be located at grade and available for public use. The Project's pedestrian features would be integrated into the adjacent pedestrian network to maintain connections with multimodal facilities. Residents, visitors, patrons, and employees arriving to the Project Site by bicycle would have the same access opportunities as pedestrians and would be able to utilize on-site bicycle parking. Providing pedestrian and bicycle access that minimizes barriers and links the Project Site with existing or planned external streets encourages people to walk instead of drive and reduces VMT.[83] Based on the above, the Project would support a land use pattern that encourages reduced vehicle trips and transportation air pollutant emissions.

Furthermore, the Project Site is served by multiple public transit options (with access to existing local and regional bus lines that connect to regional rail service). While the Project Site is not located within a Transit Priority Area (TPA) or Transit Oriented Communities (TOC) area, the Project Site is located 2.3 miles southwest of the Metro B Line North Hollywood Station, which also serves the Metro G Line. The Project Site is also served by Metro Local Line 167, with stops at Whitsett Avenue/Valley Spring Lane adjacent to the Project Site and at Whitsett Avenue/Ventura Boulevard, approximately 0.1 miles to the south. Transit service also includes Metro Bus Rapid Transit Line 750 and Local Lines 150/240 on Ventura Boulevard, which provide connection to the Metro B Line Universal City/Studio City Station, approximately 2.5 miles to the east In addition, The Project would utilize a shuttle system between the School's Upper Campus and the Project Site whenever there are School activities underway at the Project Site, in order to encourage efficient transportation and reduce VMT associated with the Project. Refer to Section IV.M, *Transportation*, for additional details regarding public transit services. As such, the

[83] CAPCOA, Quantifying Greenhouse Gas Mitigation Measures, 2010, pages 186-189.

Project would provide opportunities for the use of alternative modes of transportation, including convenient access to public transit and opportunities for walking and biking, thereby facilitating a reduction in VMT.

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

(2) Mitigation Measures

The Project has the potential to conflict with or obstruct the implementation of the applicable air quality plan. As such, Mitigation Measure AQ-MM-1 would be applied to reduce impacts. Mitigation Measure AQ-MM-1 is provided in Threshold (b) below.

(3) Level of Significance After Mitigation

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

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

(1) Impact Analysis

(a) Construction

Construction of the Project has the potential to generate temporary regional criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators and forklifts, through vehicle trips generated by workers and haul trucks traveling to and from the Project Site, and through building activities, such as the application of paint and other surface coatings. In addition, fugitive dust emissions would result from demolition and various soil-handling activities. Mobile source emissions, primarily NO_X, would result from the use of construction equipment, such as dozers and loaders. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of construction activity, and prevailing weather conditions.[84]

The maximum daily construction emissions for the Project were estimated for each construction phase and conservatively analyzed using screening criteria applicable to a 5-acre site in the East San Fernando Valley area with sensitive receptors located 25

[84] Impacts from asbestos and lead-based paint from Project demolition are expected to be less than significant with compliance with regulations. For additional details please refer to Section IV.H, *Hazards and Hazardous Materials*, of this Draft EIR.

meters away, which accounts for all adjacent off-site sensitive receptors.[85,86] In addition, the SCAQMD localized screening criteria applicable to a 0.14-acre site in the East San Fernando Valley area with sensitive receptors located within 25 meters, which accounts for all adjacent off-site sensitive receptors, was used for the localized emissions analysis for the installation of the Coldwater Canyon Avenue Riverwalk Path Ramp.[87] Some individual construction phases could potentially overlap; therefore, the estimated maximum daily emissions include these potential overlaps by combining the relevant construction phase emissions. The maximum daily emissions were estimated based on maximum construction activity conditions for heavy-duty off-road construction equipment and on-road mobile sources and do not represent the emissions that would occur every day during Project construction, which would be lower on construction days under typical or below average construction activity conditions. Detailed emissions calculations are provided in Appendix C of this Draft EIR.

The results of the criteria pollutant calculations, including emissions for construction activities associated with the off-site improvements to the segment of Valleyheart Drive south of Los Angeles Fire Department Fire Station 78 and to portions of the Zev Greenway adjacent to the Project Site and the installation of the Coldwater Canyon Avenue Riverwalk Path Ramp, are presented in **Table IV.B-6**, *Estimated Maximum Regional Construction Emissions*. As shown in Table IV.B-6, construction-related daily emissions of NO_X would exceed the SCAQMD thresholds of significance. Emissions of other criteria pollutants would be below SCAQMD thresholds. The NO_X emissions result primarily from heavy-duty trucks required for on-road soil hauling and from concrete trucks delivering concrete to the Project Site from concrete suppliers. **Therefore, the Project's temporary impact related to regional NO_X construction emissions would be potentially significant.**

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

86 Using the screening criteria applicable for a 5-acre site is conservative because the localized significance thresholds are project site dependent and the allowable thresholds increase with increasing project size. Therefore, using a 5-acre site threshold instead of the Project Site's full 17.2 acres yields a more stringent analysis.

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

TABLE IV.B-6
ESTIMATED MAXIMUM REGIONAL CONSTRUCTION EMISSIONS
(POUNDS PER DAY) [a]

Source	VOC	NO_X	CO	SO_2	PM10 [b]	PM2.5 [b]
Construction Phases						
Site Preparation 1	2.5	45.1	31.8	0.1	4.8	1.8
Demolition	5.1	79.6	65.5	0.2	8.9	3.5
Demolition (reduced trucks)	4.8	68.9	61.3	0.2	7.9	3.1
Grading	6.6	**122.7**	72.1	0.4	11.3	4.4
Grading (reduced trucks)	4.9	75.1	53.6	0.2	6.8	2.9
Foundations	6.4	70.2	82.5	0.2	5.6	2.9
Foundations (no trucks)	5.1	47.1	62.7	0.1	4.3	2.5
Foundations (reduced trucks)	5.8	58.6	72.6	0.2	4.9	2.7
Utilities	3.0	27.5	35.5	0.1	1.9	1.3
Building Construction	2.5	23.4	32.1	0.1	3.4	1.6
Building Construction (no workers)	2.4	23.0	26.6	0.1	1.2	1.0
Site Preparation 2	4.5	63.4	50.8	0.2	5.8	2.7
Landscape	5.3	59.5	56.8	0.1	2.7	2.2
Landscape (reduced trucks)	5.0	52.2	58.2	0.1	4.5	2.6
Landscape (no workers)	5.1	56.0	56.6	0.1	2.5	2.0
Pool Area	2.0	21.5	21.9	0.1	1.1	0.7
Pool Area (reduced trucks)	1.7	17.0	18.8	<0.1	0.8	0.6
Architectural Coating	9.3	13.9	25.8	0.1	3.9	1.4
Architectural Coating (reduced trucks)	9.3	12.5	24.7	0.1	3.7	1.3
Paving	2.0	18.7	23.9	<0.1	1.5	1.0
Overlapping Phases						
Demolition + Site Preparation 1 - 2022	7.6	**124.7**	97.4	0.4	13.8	5.3
Demolition (reduced trucks) + Grading (reduced trucks) - 2022	9.7	**144.0**	114.9	0.4	14.8	6.1
Grading + Utilities + Foundations (reduced trucks) - 2023	13.5	**161.4**	167.4	0.5	14.9	7.1
Site Preparation 2 + Utilities + Foundations + Building Construction (no workers) -2023	16.3	**184.1**	195.4	0.5	14.4	7.8
Utilities + Foundations + Building Construction (no workers) + Landscape - 2023	17.2	**180.2**	201.4	0.5	11.4	7.4
Utilities + Foundations (reduced trucks) + Building Construction (no workers) + Landscape + Pool Area - 2023	18.5	**190.1**	213.4	0.5	11.8	7.9
Utilities + Building Construction + Landscape (no workers) + Pool Area + Architectural Coating - 2024	21.6	**138.2**	171.2	0.4	12.5	6.7
Landscape (reduced trucks) + Pool Area (reduced trucks) + Architectural Coating (reduced trucks) + Paving - 2024	18.2	**103.9**	128.7	0.3	10.8	5.5
Maximum Daily Emissions	21.6	**190.1**	213.4	0.4	14.9	7.9
SCAQMD Thresholds of Significance	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	**Yes**	No	No	No	No

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

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

SOURCE: ESA, 2021.

(b) Operations

Mobile, stationary, and area source operational regional criteria pollutant emissions were calculated for the Project's full buildout year. Operational emission estimates include compliance with SCAQMD Rule 1113 (Architectural Coatings), which limits the VOC content of architectural coatings. Detailed emissions calculations are provided in Appendix C of this Draft EIR.

Natural gas usage factors are based on commercial and residential data from the California Energy Commission, and landscape equipment emissions are based on off-road emission factors from CARB. Emissions from the use of consumer products and the reapplication of architectural coatings are based on data provided in CalEEMod.

The results of the regional criteria pollutant emission calculations for VOC, NO_X, CO, SO_X, PM10, and PM2.5 are presented in **Table IV.B-7,** *Estimated Maximum Unmitigated Regional Operational Emissions – Project.* The Project's net operational-related daily emissions would not exceed the SCAQMD thresholds of significance. **As the Project's maximum regional emissions from operations would not exceed the regional thresholds of significance, regional operational emissions impacts would be less than significant.**

TABLE IV.B-7
ESTIMATED MAXIMUM REGIONAL OPERATIONAL EMISSIONS – PROJECT (POUNDS PER DAY) [a]

Source	VOC	NO_X	CO	SO_2	PM10	PM2.5
Existing						
Area (Coating, Consumer Products, Landscaping)	<1	<1	<1	0	<1	<1
Energy (Natural Gas)	<1	<1	<1	<1	<1	<1
Mobile	2	5	20	<1	5	1
Total Existing	**2**	**5**	**20**	**<1**	**5**	**1**
Project						
Area (Coating, Consumer Products, Landscaping)	3	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	13	23	116	<1	38	10
Total Project	16	23	116	<1	38	10
Net Increase						
Area (Coating, Consumer Products, Landscaping)	3	<1	<1	<1	<1	<1
Energy	<1	<1	<1	<1	<1	<1
Mobile	11	18	96	<1	33	9
Net Total Regional Emissions	**14**	**19**	**97**	<1	**33**	**9**
SCAQMD Thresholds of Significance	**55**	**55**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

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

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

SOURCE: ESA, 2021.

(2) Mitigation Measures

(a) Construction

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

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

- The Project shall utilize off-road diesel-powered construction equipment that meets or exceeds the California Air Resources Board (CARB) and United States Environmental Protection Agency (USEPA) Tier 4 Final off-road emissions standards or equivalent for equipment rated at 50 horsepower (hp) or greater during Project construction where available within the Los Angeles region. Such equipment shall be outfitted with Best Available Control Technology (BACT) which means a CARB certified Level 3 Diesel Particulate Filter or equivalent.
- During plan check, the Project's representative shall make available to the lead agency and South Coast Air Quality Management District (SCAQMD) a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that shall be used during any of the construction phases. The inventory shall include the horsepower rating, engine production year, and certification of the specified Tier standard. A copy of each such unit's certified tier specification, best available control technology (BACT) documentation, and CARB or SCAQMD operating permit shall be maintained on-site at the time of mobilization of each applicable unit of equipment.
- During demolition, site preparation, and grading and excavation activities, the contractor shall provide notification and documentation that haul truck drivers have received training regarding idling limitations specified in Title 13 California Code of Regulations, Section 2485, and that haul trucks limit idling for loading and unloading activities to 10 minutes or less per one-way truck trip.
- Contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. All construction equipment must be properly tuned and maintained in accordance with the manufacturer's specifications. The contractor shall keep documentation on-site demonstrating that the equipment has been maintained in accordance with the manufacturer's specifications. Tampering with construction equipment to increase horsepower or to defeat emission control devices shall be prohibited.
- Construction activities shall be discontinued during second-stage smog alerts. A record of any second-stage smog alerts and of discontinued

construction activities as applicable shall be maintained by the Contractor on-site.

(b) Operations

Project impacts regarding a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or State ambient air quality standard during operation would be less than significant. Therefore, no mitigation measures are required.

(3) Level of Significance After Mitigation

(a) Construction

Construction of the Project would result in emissions that exceed the NO_X regional threshold, and, as such, impacts would be potentially significant prior to mitigation. Implementation of Mitigation Measure AQ-MM-1 would reduce short-term and temporary NO_X emissions, including from haul trucks during the grading activities, as shown in **Table IV.B-8,** *Estimated Maximum Mitigated Regional Construction Emissions*. With implementation of Mitigation Measure AQ-MM-1, short-term construction NO_X emissions would be reduced to below the regional emission significance threshold for NOx. Therefore, short-term and temporary impacts related to regional NO_X construction emissions would be less than significant with mitigation.

TABLE IV.B-8
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) [a]

Source	VOC	NO_X	CO	SO_2	PM10 [b]	PM2.5 [b]
Construction Phases						
Site Preparation	1.4	33.3	31.8	0.1	4.3	1.3
Demolition	2.4	52.7	66.9	0.2	7.5	2.1
Demolition (reduced trucks)	2.1	42.9	63.7	0.2	6.5	1.8
Grading	3.7	91.8	73.0	0.4	10.1	3.3
Grading (reduced trucks)	2.1	50.2	62.8	0.3	7.0	2.2
Foundations	3.0	34.2	96.0	0.2	3.7	1.2
Foundations (no trucks)	1.7	11.1	76.2	0.1	2.4	0.8
Foundations (reduced trucks)	2.3	22.6	86.1	0.2	3.1	1.0
Utilities	1.3	11.4	44.0	0.1	1.0	0.4
Building Construction	0.9	6.2	35.1	0.1	2.6	0.8
Building Construction (no workers)	0.8	5.8	29.6	0.1	0.4	0.2
Site Preparation 2	1.6	31.2	53.6	0.2	4.3	1.3
Landscape	2.0	21.6	73.2	0.1	2.9	0.9
Landscape (reduced trucks)	1.8	17.4	69.7	0.1	2.7	0.9
Landscape (no workers)	1.9	21.3	68.0	0.1	0.7	0.3

TABLE IV.B-8
ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) [a]

Source	VOC	NO_X	CO	SO_2	PM10 [b]	PM2.5 [b]
Pool Area	0.8	10.1	25.1	0.1	0.5	0.2
Pool Area (reduced trucks)	0.6	6.5	22.1	<0.1	0.3	0.1
Architectural Coating	8.5	4.5	27.2	0.1	3.4	1.0
Architectural Coating (reduced trucks)	8.4	3.1	26.1	0.1	3.3	0.9
Paving	0.7	4.2	27.1	<0.1	0.8	0.3
Overlapping Phases						
Demolition + Site Preparation 1 - 2022	3.8	85.9	98.7	0.4	11.8	3.4
Demolition (reduced trucks) + Grading (reduced trucks) - 2022	4.4	91.3	122.5	0.4	12.1	3.6
Grading + Utilities + Foundations (reduced trucks) - 2023	5.7	84.2	192.9	0.5	11.1	3.6
Site Preparation 2 + Utilities + Foundations + Building Construction (no workers) -2023	6.7	82.6	223.2	0.5	9.4	3.1
Utilities + Foundations + Building Construction (no workers) + Landscape - 2023	6.9	72.6	237.6	0.5	5.8	2.1
Utilities + Foundations (reduced trucks) + Building Construction (no workers) + Landscape + Pool Area - 2023	7.1	71.1	252.9	0.5	5.7	2.1
Utilities + Building Construction + Landscape (no workers) + Pool Area + Architectural Coating - 2024	13.4	53.3	199.0	0.4	8.3	2.7
Landscape (reduced trucks) + Pool Area (reduced trucks) + Architectural Coating (reduced trucks) + Paving - 2024	11.7	34.8	148.1	0.3	7.3	2.2
Maximum Daily Emissions	3.8	85.9	98.7	0.4	11.8	3.4
SCAQMD Thresholds of Significance	**75**	**100**	**550**	**150**	**150**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

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

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

SOURCE: ESA, 2021.

(b) Operations

Project impacts regarding a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment under an applicable federal or State ambient air quality standard during operation would be less than significant without mitigation. Therefore, no mitigation measures were required or included, and the impact level remains less than significant.

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

(1) Impact Analysis

(a) Localized Construction

As explained above, the localized construction air quality analysis was conducted using the methodology prescribed in the SCAQMD *Final Localized Significance Threshold Methodology*.[88] The screening criteria provided in the *Final Localized Significance Threshold Methodology* were used to determine localized construction emissions thresholds for the Project. The maximum daily localized emissions for each of the construction phases and the localized significance thresholds are presented in **Table IV.B-9,** *Estimated Maximum Localized Construction Emissions.* **The Project's maximum localized operational emissions would be below the localized significance thresholds, and localized construction emissions impacts to existing sensitive receptors would be less than significant.**

TABLE IV.B-9
ESTIMATED MAXIMUM UNMITIGATED LOCALIZED CONSTRUCTION EMISSIONS
(POUNDS PER DAY) [a]

Source	NO_X	CO	PM10 [b]	PM2.5 [b]
Construction Phases				
Site Preparation	38	36	2	1
Demolition	32	45	4	2
Grading	27	33	2	1
Foundations	51	57	2	2
Utilities	27	33	1	1
Building Construction	20	24	1	1
Landscape	51	50	2	2
Pool Area	14	16	1	1
Architectural Coating	11	16	<1	<1
Paving	18	22	1	1
Overlapping Phases				
Demolition + Site Preparation - 2022	44	61	4	2
Demolition + Grading - 2022	59	78	5	3
Grading + Utilities + Foundations - 2023	99	123	5	4
Site Preparation + Utilities + Foundations + Building Construction -2023	132	151	6	5

[88] SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

TABLE IV.B-9
ESTIMATED MAXIMUM UNMITIGATED LOCALIZED CONSTRUCTION EMISSIONS
(POUNDS PER DAY) [a]

Source	NO_X	CO	PM10 [b]	PM2.5 [b]
Utilities + Foundations + Building Construction + Landscape - 2023	145	165	6	6
Utilities + Foundations + Building Construction + Landscape + Pool Area - 2023	159	180	7	6
Utilities + Building Construction + Landscape + Pool Area + Architectural Coating - 2024	119	140	5	5
Landscape + Pool Area + Architectural Coating + Paving - 2024	93	104	4	4
Maximum Daily Emissions	159	180	7	6
SCAQMD Thresholds of Significance [c]	**172**	**1,434**	**14**	**8**
Exceeds Thresholds?	No	No	No	No
Coldwater Canyon Avenue Riverwalk Path Ramp Construction	5	7	<1	<1
SCAQMD Thresholds of Significance [d]	**51**	**250**	**1**	**1**
Exceeds Thresholds?	No	No	No	No

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

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

[c] The SCAQMD LSTs are based on Source Receptor Area 7 (East San Fernando Valley) for a 5-acre site with sensitive receptors with the nearest sensitive receptor within 25 meters from the Project Site.

[d] The SCAQMD LSTs are based on Source Receptor Area 7 (East San Fernando Valley) for a 0.14-acre site with sensitive receptors with the nearest sensitive receptor within 25 meters from the Project Site.

SOURCE: ESA, 2021.

(b) Localized Operations

The localized operational air quality analysis was conducted using the methodology prescribed in the SCAQMD Localized Significance Threshold Methodology.[89] The screening criteria provided in the Localized Significance Threshold Methodology were used to determine the localized operational emissions numerical indicators of significance for the Project. The same assumptions, including compliance with the Title 24 (2019) building energy efficiency standards, CALGreen Code, and City of Los Angeles Green Building Code. The maximum daily localized emissions and the localized significance thresholds are presented in **Table IV.B-10,** *Estimated Maximum Localized Operational Emissions for Existing Sensitive Receptors – Project.* **The Project's maximum localized operational emissions would be below the localized significance thresholds, and**

[89] SCAQMD, Final Localized Significance Threshold Methodology, June 2003 and revised July 2008.

localized operational emissions impacts to existing sensitive receptors would be less than significant.

TABLE IV.B-10
ESTIMATED MAXIMUM LOCALIZED OPERATIONAL EMISSIONS – PROJECT
(POUNDS PER DAY) [a]

Source	NO_X	CO	PM10	PM2.5
Area (Coating, Consumer Products, Landscaping)	<0.1	0.1	<0.1	<0.1
Energy	0.5	0.4	<0.1	<0.1
Total Localized (On-Site) Emissions	**0.5**	**0.5**	**<0.1**	**<0.1**
SCAQMD Screening Significance Thresholds [b]	**172**	**1,434**	**4.0**	**2.0**
Exceeds Screening Significance Thresholds?	No	No	No	No

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

[b] The SCAQMD LSTs are based on Source Receptor Area 7 (East San Fernando Valley) for a 5-acre site with sensitive receptors with the nearest sensitive receptor within 25 meters from the Project Site.

SOURCE: ESA, 2021.

(c) Carbon Monoxide Hotspots

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

As shown previously in Table IV.B-3, CO levels in the Project area are substantially below the federal and the State standards. Maximum CO levels in recent years (2018-2020) were 3.4 ppm (one-hour average) and 2.2 ppm (eight-hour average) as compared to the criteria of 20 ppm (CAAQS one-hour average) or 35 ppm (NAAQS one-hour average) and 9.0 ppm (eight-hour average). No exceedances of the CO standards have been recorded at monitoring stations in the Air Basin since 2003,[90] and the Air Basin is currently designated as a CO attainment area for both the CAAQS and the NAAQS.

[90] SCAQMD, Final 2016 AQMP, March 2017, page 2-38.

The SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin. These included the intersections of Wilshire Boulevard and Veteran Avenue, Sunset Boulevard and Highland Avenue, La Cienega Boulevard and Century Boulevard, and Long Beach Boulevard and Imperial Highway. In the 2003 AQMP CO attainment demonstration, the SCAQMD noted that the intersection of Wilshire Boulevard and Veteran Avenue was the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day.[91] Relevant information from the 2003 AQMP CO attainment demonstration relied upon in this assessment is provided in Appendix C of this Draft EIR. This intersection is located near the on- and off-ramps to Interstate 405 in West Los Angeles. The evidence provided in Table 4-10 of Appendix V of the 2003 AQMP showed that the peak modeled CO concentration due to vehicle emissions (i.e., excluding background concentrations) at these four intersections was 4.6 ppm (one-hour average) and 3.2 ppm (eight-hour average) at Wilshire Boulevard and Veteran Avenue.[92]

Based on the Project's TA,[93] under Future plus Project (2025) conditions, the intersection of Coldwater Canyon Avenue and Ventura Boulevard would have a maximum traffic volume of approximately 53,480 average daily trips (ADT).[94] As a result, CO concentrations from the Project's maximum traffic volume at the intersection identified above plus the measured background level in the Project Site area are expected to be approximately 5.9 ppm (one-hour average) and 3.9 ppm (eight-hour average), which would not exceed the numerical thresholds of significance. Total traffic volumes at the maximally impacted intersection would likely have to increase by approximately five times higher to cause or contribute to a CO hotspot impact given that vehicles operating today have reduced CO emissions as compared to vehicles operating in year 2003 when the SCAQMD conducted the AQMP attainment demonstration modeling.[95] **This comparison demonstrates that the Project would not contribute to the formation of CO hotspots and that no further CO analysis is required. Therefore, the Project would result in less-than-significant impacts with respect to CO hotspots.**

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

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

93 Fehr & Peers, Transportation Assessment – Harvard-Westlake River Park Project for Assessor Parcel Numbers 2375-018-020 and portion of APN 2375-018-903 Los Angeles River Parcel 276,4141 Whitsett Avenue, Studio City, CA 91604, April 2021. Provided in Appendix M of this Draft EIR.

94 The traffic volume of approximately 53,480 ADT was estimated based on the peak hour intersection volumes under future with Project conditions and the general assumption that peak hour trips represent approximately 10 percent of daily trip volumes (the Federal Highway Administration considers 10 percent to be a standard assumption; see Travel Model Improvement Program Time-of-Day Modeling Procedures: State-of-the-Practice, State-of-the-Art (2.0 Standard Approaches, http://www.fhwa.dot.gov/planning/tmip/publications/other_reports/tod_modeling_procedures/ch02.cfm).

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

(d) Toxic Air Contaminant Emissions

(i) Construction

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during the construction phase of the Project. According to OEHHA and the SCAQMD Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis,[96] health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary construction schedule (approximately 30 months), the Project would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of Project construction.

In addition, the Project would be consistent with the applicable 2016 AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. The Project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these CARB regulations would minimize emissions of TACs during construction. The Project would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the demolition and construction activities. In addition, as stated in Section IV.H, *Hazards and Hazardous Materials,* of this Draft EIR, demolition activities for the Project would include the removal of existing buildings, structures, and associated infrastructure. As such, hazardous materials may be present in the structures because of their age. The hazardous materials may include asbestos-containing materials and lead based paint. Numerous existing regulations require that demolition activities that may disturb or require the removal of materials that consist of, contain, or are coated with hazardous materials include inspection and testing for the presence of hazardous materials. If present, the hazardous materials are required to be managed and disposed of in accordance with applicable laws and regulations.[97] The nearest residential air quality sensitive receptors are located adjacent to the Project Site on the north, east and west. Based on the short-term duration of Project construction and compliance with regulations that would minimize emissions, construction of the Project would not expose sensitive receptors to substantial TAC concentrations.

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

[97] Impacts from asbestos and lead-based paint from demolition are expected to be less than significant. For additional details, refer to Section IV.H, *Hazards and Hazardous Materials,* of this Draft EIR.

Furthermore, as discussed in Threshold (b), the Project would be required to implement Mitigation Measure AQ-MM-1 to reduce regional NO_X emissions. The measure would have co-benefits of reducing emissions of PM10 and PM2.5 from heavy-duty diesel construction equipment (see Table IV.B-8), further reducing the TAC emissions during construction activities. **Therefore, impacts from TACs during construction would be less than significant.**

(ii) Operations

The SCAQMD recommends that operational health risk assessments be conducted for substantial sources of operational DPM (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions.[98] The Project would not include any truck stop or warehouse distribution uses, and, as such, operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance. Furthermore, Project trucks would be required to comply with the applicable provisions of 13 CCR, Section 2025 (Truck and Bus regulation) to minimize and reduce PM10, PM2.5, and NO_X emissions from existing diesel trucks. Therefore, Project operation would not be considered a substantial source of DPM.

With respect to the use of consumer products and architectural coatings, the school and public recreational uses associated with the Project would be expected to generate minimal emissions from these sources. The Project's land uses would not include installation of industrial-sized paint booths or require extensive use of commercial or household cleaning products.

The potential for significant increased health risk impacts associated with the inhalation of vapors and particulate matter in the air space above the artificial turf field, the accidental ingestion of artificial turf products, or dermal contact with artificial turf products are evaluated in Section IV.H, *Hazards and Hazardous Materials*, with additional detail provided in Appendix H-2 of this Draft EIR. As analyzed therein, Project impacts related to the inhalation of vapors and particulates associated with the use of artificial turf, ingestion of artificial turf products, and dermal contact with artificial turf products would be less than significant because evidence does not support a conclusion of a significant increase in health risks.

As a result, toxic or carcinogenic air pollutants are not expected to occur in any substantial amounts in conjunction with operation of the proposed land uses within the Project Site. **Based on the uses expected on the Project Site, operation of the Project would not expose sensitive receptors to substantial TAC concentrations, and operational impacts would be less than significant.**

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

(e) Conclusion

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

(2) Mitigation Measures

(a) Construction

Impacts regarding localized construction air quality emissions were determined to be less than significant. Therefore, no mitigation measures are required.

(b) Operations

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

(3) Level of Significance After Mitigation

(a) Construction

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

(b) Operation

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

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

As discussed in Chapter VI, *Other CEQA Considerations*, and in the Initial Study (Appendix A), of this Draft EIR, the Project would not create objectionable odors affecting a substantial number of people. In addition, as shown in Table IV.B-6 and Table IV.B-7, construction and operational emissions would not exceed the SCAQMD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO_2). **Therefore, construction and operation of the Project would result in less-than-significant impacts with respect to other emissions, including those leading to odors.**

e) Cumulative Impacts

(1) Impact Analysis

The City has identified five related projects located in the Project Site area that have not yet been built or that are currently under construction. The five related projects are shown in Table III-1 of Chapter III, *Environmental Setting*, of this Draft EIR. Related Project Nos. 1 and 5 are both located at 12833 Ventura Boulevard, approximately 630 feet west of the Project Site. Related Project Nos. 2, 3, and 4 are located at 12548, 12582 and 12544 Ventura Boulevard, respectively. These related projects are approximately 530 feet south of the Project Site.

Based on available information, Related Project No. 1 is anticipated to complete construction in 2021 prior to the commencement of construction activities for the Project.[99] However, since both the specific timing and the sequencing of the construction of Related Project Nos. 2, 3, 4, and 5 are unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. Furthermore, as discussed above, the related projects are not located directly adjacent to the Project Site, but are located 530 feet or more away from the Project Site. Therefore, even if construction of the related projects were to occur at the same time as the Project, localized emissions from the related projects would not substantially combine with localized emissions from the Project.[100]

Accordingly, the SCAQMD recommends using two methodologies to assess the cumulative impact of air quality emissions: (1) a project's consistency with the current AQMP be used to determine its potential cumulative impacts. or (2) that project-specific air quality impacts be used to determine the project's potential cumulative impacts to regional air quality.[101]

(a) Consistency with Air Quality Management Plan

The SCAQMD recommends assessing a project's cumulative impacts based on whether the project is consistent with the current AQMP. CEQA Guidelines Section 15064(h)(3)

99 The Shops at Sportsmen Lodge website, https://www.shopsatsportsmenslodge.com/, accessed April 15, 2021.

100 SCAQMD, Final Localized Significance Threshold Methodology, page 3-3, June 2003 and revised July 2008. Page 3-3 states that "…allowable emissions increase rapidly with increasing downwind distance." Stated another way, this means that emissions from a source disperse rapidly with increasing distance from the source resulting in corresponding pollutant concentrations that rapidly reduce with increasing distance.

101 SCAQMD, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, Appendix D, 1993, page D-3 ("As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR… Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.").

provides guidance in determining the significance of cumulative impacts. Specifically, CEQA Guidelines Section 15064(h)(3) states in part that:

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

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the Project's cumulative air quality impacts are determined not to be significant based on its consistency with the SCAQMD's adopted 2016 AQMP, as discussed above. As is also discussed above, the Project's increase in population, housing, and employment would be consistent with the 2016-2040 RTP/SCS growth projections, upon which the 2016 AQMP is based. Related projects would also be required to assess consistency with 2016 AQMP transportation control strategies, as well as with population, housing, and employment growth projections in the 2016-2040 RTP/SCS and provide mitigation measures if significant impacts are identified. As discussed in Threshold (a), the Project would not increase the frequency or severity of an existing violation or cause or contribute to new violations for ozone Therefore, the Project would be consistent with and would not conflict with or obstruct implementation of the 2016 AQMP. **Accordingly, Project impacts are not cumulatively considerable and cumulative impacts are less than significant.**

(b) Project-Specific Impacts

As stated in the 2006 L.A. CEQA Thresholds Guide, the "City of Los Angeles has not adopted specific Citywide significance thresholds for air quality impacts. However, because of the SCAQMD's regulatory role in the Air Basin, the 2006 L.A. CEQA Thresholds Guide references the screening criteria, significance thresholds and analysis methodologies in the CEQA Air Quality Handbook to assist in evaluating projects proposed within the City."[102] The SCAQMD CEQA Air Quality Handbook states that the "Handbook is intended to provide local governments, project proponents, and consultants who prepare environmental documents with guidance for analyzing and mitigating air quality impacts of projects."[103] The SCAQMD CEQA Air Quality Handbook also states that "[f]rom an air quality perspective, the impact of a project is determined by examining the types and levels of emissions generated by the project and its impact on factors that affect air quality. As such, projects should be evaluated in terms of air pollution thresholds

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

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

established by the District."[104] The SCAQMD has provided guidance on addressing the cumulative impacts for air quality. as discussed below:[105]

> *"As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR… Projects that exceed the Project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."*

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

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

For construction, as shown in Table IV.B-6, IV.B-8, and IV.B-9, the Project would not result in an exceedance of regional and localized significance thresholds with implementation of mitigation measures. **Therefore, cumulative impacts related to regional and localized construction emissions would be less than significant with mitigation.**

For operations, as shown in Table IV.B-7 and IV.B-10, the Project would not result in an exceedance of regional or localized significance thresholds. **Therefore, cumulative impacts related to regional operational emissions of VOC would be less than significant.**

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

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

(2) Mitigation Measures

(a) Construction

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

(b) Operations

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

(3) Level of Significance after Mitigation

(a) Construction

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

(b) Operations

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

This page intentionally left blank