# IV. Environmental Impact Analysis

# B. Air Quality

## 1. Introduction

This section addresses air emissions generated by construction and operation of the Project and whether the Project would cause an exceedance of an ambient air quality standard or a South Coast Air Quality Management District's (SCAQMD) numeric indicator. The analysis also addresses consistency of the Project with air quality policies and control measures set forth within the SCAQMD Air Quality Management Plan (AQMP), and the City of Los Angeles General Plan. Details regarding the air quality analysis are provided in the Air Quality Technical Report provided in Appendix C of this Draft EIR.

## 2. Environmental Setting

### a) Regulatory Framework

#### (1) Federal

The federal Clean Air Act of 1963 was the first federal legislation regarding air pollution control and has been amended numerous times in subsequent years, with the most recent amendments occurring in 1990. At the federal level, the USEPA is responsible for implementation of certain portions of the Clean Air Act including mobile source requirements. Other portions of the Clean Air Act, such as stationary source requirements, are implemented by state and local agencies.

The Clean Air Act establishes federal air quality standards, known as NAAQS and specifies future dates for achieving compliance. The Clean Air Act also mandates that the state submit and implement a State Implementation Plan for areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met. The 1990 amendments to the Clean Air Act identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the Clean Air Act which are most applicable to the Project include Title I (Non-attainment Provisions) and Title II (Mobile Source Provisions).

Title I requirements are implemented for the purpose of attaining NAAQS for the following criteria pollutants: (1) $O_3$; (2) $NO_2$; (3) CO; (4) $SO_2$; (5) PM10; (6) PM2.5, and (7) lead. The NAAQS were amended in July 1997 to include an 8-hour standard for $O_3$ and to adopt a NAAQS for PM2.5. The NAAQS were also amended in September 2006 to include an established methodology for calculating PM2.5 as well as revoking the annual PM10 threshold. Table IV.B-1 shows the NAAQS currently in effect for each criteria pollutant.

**Table IV.B-1**, *South Coast Air Basin Attainment Status (Los Angeles County)*, shows the attainment status of the Air Basin for each criteria pollutant. As shown in Table IV.B-1, the Air Basin is currently in non-attainment for $O_3$, PM2.5, and one area of the Air Basin for Pb under the NAAQS.

**TABLE IV.B-1**
**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: United States Environmental Protection Agency, Nonattainment Areas for Criteria Pollutants (Greenbook), Last Updated September 30, 2018, https://www.epa.gov/green-book. Accessed December 2018; California Air Resources Board, Area Designations Maps/State and National, Last Reviewed October 18, 2017, http://www.arb.ca.gov/desig/adm/adm.htm. Accessed December 2018.

In addition to criteria pollutants, Title I also includes air toxics provisions which require the USEPA to develop and enforce regulations to protect the public from exposure to airborne contaminants that are known to be hazardous to human health. In accordance with Section 112, the USEPA establishes National Emission Standards for Hazardous Air Pollutants (NESHAPs). The list of hazardous air pollutants (HAPs), or air toxics, includes specific compounds that are known or suspected to cause cancer or other serious health effects.

Title II requirements pertain to mobile sources, such as cars, trucks, buses, and planes. Reformulated gasoline, automobile pollution control devices, and vapor recovery nozzles on gas pumps are a few 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 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.

### (2) State of California

#### *(a) California Air Resources Board*

CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state 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 (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts. The SIP is required for the State to take over implementation of the federal Clean Air Act from the USEPA.

#### *(b) California Clean Air Act*

The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the CAAQS by the earliest practical date. The CAAQS apply to the same criteria pollutants as the federal Clean Air Act but also include state-identified criteria pollutants, which include sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride. CARB has primary responsibility for ensuring the implementation of the California Clean Air Act,[1] responding to the federal Clean Air Act planning requirements applicable to the state, and regulating emissions from motor vehicles and consumer products within the state. Table IV.B-2 shows the CAAQS currently in effect for each of the criteria pollutants as well as

[1] Chapter 1568 of the Statutes of 1988.

the other pollutants recognized by the state. As shown in Table IV.B-2, the CAAQS include more stringent standards than the NAAQS for most of the criteria air pollutants.

Health and Safety Code Section 39607(e) requires CARB to establish and periodically review area designation criteria. Table IV.B-1 provides a summary of the attainment status of the Los Angeles County portion of the Air Basin with respect to the state standards. The Air Basin is designated as attainment for the California standards for sulfates and unclassified for hydrogen sulfide and visibility-reducing particles.[2] As shown in Table IV.B-1, the Air Basin is currently in non-attainment for $O_3$, PM10, and PM2.5 under the CAAQS. Since vinyl chloride is a carcinogenic toxic air contaminant, CARB does not classify attainment status for this pollutant.

### *(c) Air Quality and Land Use Handbook*

CARB published the *Air Quality and Land Use Handbook* in April 2005 to serve as a general guide for considering impacts to sensitive receptors from facilities that emit TAC emissions. The recommendations provided therein are voluntary and do not constitute a requirement or mandate for either land use agencies or local air districts. The goal of the guidance document is to protect sensitive receptors, such as children, the elderly, acutely ill, and chronically ill persons, from exposure to TAC emissions. Some examples of CARB's siting recommendations include the following: (1) avoid siting sensitive receptors within 500 feet of a freeway, urban road with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day; (2) avoid siting sensitive receptors within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units per day, or where transport refrigeration unit operations exceed 300 hours per week); (3) avoid siting sensitive receptors within 300 feet of any dry cleaning operation using perchloroethylene and within 500 feet of operations with two or more machines; and (4) avoid siting sensitive receptors within 300 feet of a large gasoline dispensing facility (3.6 million gallons per year or more) or 50 feet of a typical gasoline dispensing facility (less than 3.6 million gallons per year).[3]

### *(d) On-Road and Off-Road Vehicle Rules*

In 2004, CARB adopted an Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs (Title 13 California Code of Regulations [CCR], Section 2485). The measure applies to diesel-fueled commercial vehicles with gross vehicle weight

2 California Air Resources Board, State Area Designations Definitions, 2016, https://www.arb.ca.gov/desig/adm/define.htm. The term unclassified is defined by CARB as a category given to an area with insufficient data and are treated as attainment areas for regulatory purposes.

3 California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, 2005, https://www.arb.ca.gov/ch/handbook.pdf. Accessed December 2018.

ratings greater than 10,000 pounds that are licensed to operate on highways, regardless of where they are registered. This measure does not allow diesel-fueled commercial vehicles to idle for more than 5 minutes at any given time.

In 2008, CARB approved the Truck and Bus regulation to reduce $NO_X$, PM10, and PM2.5 emissions from existing diesel vehicles operating in California (13 CCR, Section 2025).[4] The requirements were amended to apply to nearly all diesel-fueled trucks and buses with a gross vehicle weight rating (GVWR) greater than 14,000 pounds. For the largest trucks in the fleet, those with a GVWR greater than 26,000 pounds, there are two methods to comply with the requirements. The first way is for the fleet owner to retrofit or replace engines, starting with the oldest engine model year, to meet 2010 engine standards, or better. This is phased over 8 years, starting in 2015 and would be fully implemented by 2023, meaning that all trucks operating in the State subject to this option would meet or exceed the 2010 engine emission standards for $NO_X$ and DPM by 2023. The second option, if chosen, requires fleet owners, starting in 2012, to retrofit a portion of their fleet with diesel particulate filters (DPFs) achieving at least 85 percent removal efficiency, so that by January 1, 2016 their entire fleet is equipped with DPFs. However, DPFs do not lower $NO_X$ emissions. Thus, fleet owners choosing the second option must still comply with the 2010 engine emission standards for their trucks and busses by 2020.

In addition to limiting exhaust from idling trucks, CARB also promulgated emission standard for off-road diesel construction equipment of greater than 25 horsepower (hp) such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation adopted by CARB on July 26, 2007 aims to reduce emissions by 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).[5] Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with large fleets beginning compliance in 2014, medium fleets in 2017, and small fleets in 2019. Each fleet must demonstrate compliance through one of two methods. The first option is to calculate and maintain fleet average emissions targets, which encourages the retirement or repowering of older equipment and rewards the introduction of newer cleaner units into the fleet. The second option is to meet the Best Available Control Technology (BACT) requirements by turning over or installing Verified Diesel Emission Control Strategies (VDECS) on a certain percentage of its total fleet horsepower. The compliance schedule requires that BACT turn overs or retrofits (VDECS

4 California Air Resources Board, Final Regulation Order, Amendments to the Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use On-Road Diesel-Fueled Vehicles, http://www.arb.ca.gov/msprog/onrdiesel/documents/TBFinalReg.pdf. Accessed December 2018.

5 California Air Resources Board, Final Regulation Order, Regulation for In-Use Off-Road Diesel-Fueled Fleets, http://www.arb.ca.gov/regact/2010/offroadlsi10/finaloffroadreg.pdf. Accessed December 2018.

installation) be fully implemented by 2023 in all equipment for large and medium fleets and across 100 percent of small fleets by 2028.

### (3) Regional

#### *(a) South Coast Air Quality Management District*

The SCAQMD has jurisdiction over air quality planning for all of Orange County, Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County. The Air Basin is a subregion within SCAQMD jurisdiction. While air quality in the Air Basin has improved, the Air Basin requires continued diligence to meet the air quality standards.

##### *(i) Air Quality Management Plan*

The SCAQMD has adopted a series of AQMPs to meet the CAAQS and NAAQS. The 2012 AQMP incorporates scientific and technological information and planning assumptions, including regional growth projections[6] to achieve federal standards for air quality in the Air Basin. It incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, and on-road and off-road mobile sources. The 2012 AQMP includes new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. Additionally, it highlights the significant amount of emission reductions needed and the urgent need to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under the federal Clean Air Act.

The SCAQMD released the Draft 2016 AQMP on June 30, 2016 for public review and comment. A revised Draft 2016 AQMP was released in October 2016 and the SCAQMD Governing Board adopted the 2016 AQMP on March 3, 2017.[7] CARB approved the 2016 AQMP on March 23, 2017. Key elements of the 2016 AQMP include implementing fair-share emissions reductions strategies at the federal, state, and local levels; establishing partnerships, funding, and incentives to accelerate deployment of zero and near-zero-emissions technologies; and taking credit from co-benefits from greenhouse gas, energy, transportation and other

6 South Coast Air Quality Management District, 2012 Air Quality Management Plan, 2013, http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2012-air-quality-management-plan. Accessed December 2018.

7 South Coast Air Quality Management District, 2016 Air Quality Management Plan, https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15. Accessed December 2018.

planning efforts.[8] The strategies included in the 2016 AQMP are intended to demonstrate attainment of the NAAQS for the federal non-attainment pollutants ozone and PM2.5.[9] Similar to the 2012 AQMP, the 2016 AQMP relies on "…aggressive mobile source control strategy supplemented with focused and strategic stationary source control measures." The 2016 AQMP also recognizes the reduction in traditional air pollutants which occur as a "co-benefit" with the reduction in climate change-related pollutants achieved through greenhouse gas (GHG) emission reduction programs and policies, and commercial building energy efficiency measures.[10] This analysis considers the 2016 AQMP as the most recent SCAQMD adopted plan.

*(ii) Air Quality Guidance Documents*

The SCAQMD published the California Environmental Quality Act (CEQA) Air Quality Handbook to provide local governments with guidance for analyzing and mitigating project-specific air quality impacts.[11] 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) of the CEQA Air Quality Handbook, because the tables were derived using an obsolete version of CARB's mobile source emission factor inventory, and the trip generation characteristics of the land uses identified in these screening tables were based on the fifth edition of the Institute of Transportation Engineer's Trip Generation Manual, instead of the most current edition. Additionally, the lead agency should avoid using the on-road mobile source emission factors in Table A9-5-J1 through A9-5-L (EMFAC7EP Emission Factors for Passenger Vehicles and Trucks, Emission Factors for Estimating Material Hauling, and Emission Factors for Oxides of Sulfur and Lead). The SCAQMD instead recommends using other approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod) software.[12] The SCAQMD has published a guidance document called the *Final Localized Significance Threshold Methodology* that is intended to provide guidance in evaluating localized effects

8 South Coast Air Quality Management District, 2016 Air Quality Management Plan.

9 South Coast Air Quality Management District, NAAQS/CAAQS and Attainment Status for South Coast Air Basin, 2016, http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=2. Accessed December 2018.

10 South Coast Air Quality Management District, NAAQS/CAAQS and Attainment Status for South Coast Air Basin.

11 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 December 2018.

12 South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993.

from mass emissions during construction.[13] The SCAQMD adopted additional guidance regarding PM2.5 in a document called *Final Methodology to Calculate Particulate Matter ($PM_{2.5}$) and PM2.5 Significance Thresholds*.[14] This latter document has been incorporated by the SCAQMD into its CEQA significance thresholds and Localized Significance Threshold Methodology.

*(iii) SCAQMD Rules and Regulations*

Several SCAQMD rules adopted to implement portions of the AQMP may apply to the proposed Project. The Project may be subject to the following SCAQMD rules and regulations:

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

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

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

- **Rule 403 – Fugitive Dust:** This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 403 restricts visible fugitive dust to the project property line, restricts the net PM10 emissions to less than 50 micrograms per cubic meter (µg/m3) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures (identified in the tables within the rule). Mitigation measures may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or

13 South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, 2008.

14 South Coast Air Quality Management District, Final Methodology to Calculate Particulate Matter $(PM)_{2.5}$ and $PM_{2.5}$ Significance Thresholds, 2006, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/pm-2-5-significance-thresholds-and-calculation-methodology. Accessed December 2018.

ceasing all activities. Finally, a contingency plan may be required if so determined by the USEPA.

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

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

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

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

- **Rule 1186 – PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations:** This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

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

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

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

- **Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines:** This rule applies to stationary compression ignition (CI) engine greater than 50 brake horsepower and sets limits on emissions and operating hours. In general, new stationary emergency standby diesel-fueled engines greater than 50 brake horsepower are not permitted to operate more than 50 hours per year for maintenance and testing.

*(b) Southern California Association of Governments*

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino and Imperial Counties and addresses regional issues relating to transportation, the economy, community development and the environment. SCAG is the federally designated Metropolitan Planning Organization (MPO) for the majority of the Southern California region and is the largest MPO in the nation, where by law, SCAG is required to ensure that transportation activities are supportive of and comply with the goals of regional and state air quality plans in order to attain the NAAQS. In addition, SCAG co-produces the transportation strategy and transportation control measure sections of the AQMP with the SCAQMD for the Air Basin. With regard to air quality planning, SCAG adopted the 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) in April 2016, which addresses regional development and growth forecasts and forms the basis for the land use and transportation control portions of the AQMP. The growth forecasts are utilized in the preparation of the air quality forecasts and consistency analysis included in the AQMP. The RTP/SCS and AQMP are based on projections originating within local jurisdictions.

SCAG's Sustainable Communities Strategy provides specific implementation strategies. These strategies include supporting projects that encourage a diverse job opportunities for a variety of skills and education, recreation and culture and a full-range of shopping, entertainment and services all within a relatively short distance; encouraging employment development around current and planned transit stations and neighborhood commercial centers; encouraging the implementation of a "Complete Streets" policy that meets the needs of all users of the streets, roads and highways including bicyclists, children, persons with disabilities, motorists, electric vehicles, movers of commercial goods, pedestrians,

users of public transportation, and seniors; and supporting alternative fueled vehicles.[15]

#### (4) Local

Local jurisdictions, such as the City of Los Angeles, 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. The City's General Plan Air Quality Element includes City-wide goals, objectives, and policies related to air quality resources. A number of these goals, objectives, and policies are relevant to the Project and are related 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 City of Los Angeles is also responsible for the implementation of transportation control measures as outlined in the AQMP. Through capital improvement programs, local governments 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.

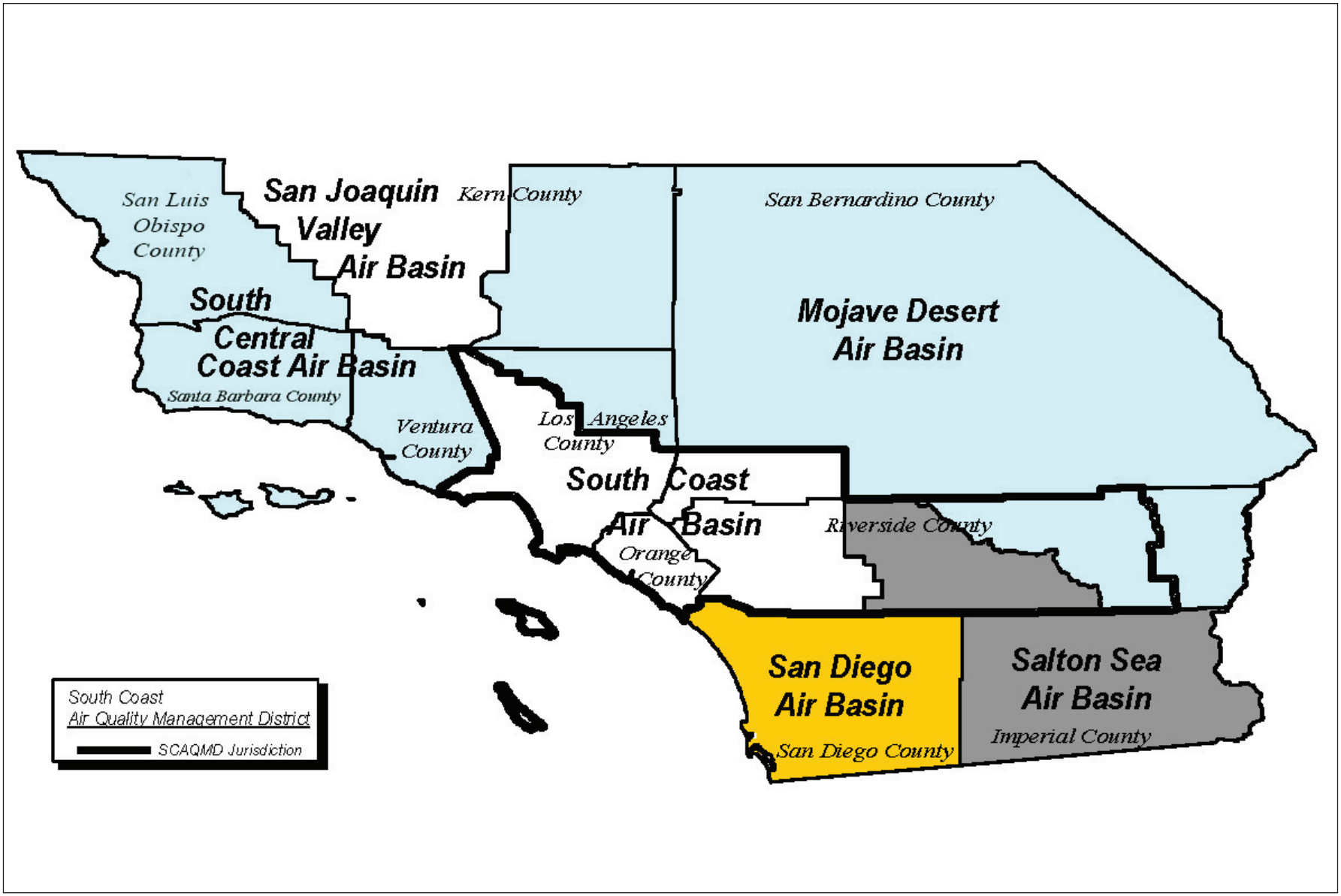
## b) Existing Conditions

### (1) Regional Air Quality

#### *(a) Air Basin*

The Project Site is located within the South Coast Air Basin (Air Basin), which is shown in **Figure IV.B-1**, *Boundaries of the South Coast Air Quality Management District*. The Air Basin is an approximately 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Air Basin consists of Orange County, Los Angeles County (excluding the Antelope Valley portion), and the western, non-desert portions of San Bernardino and Riverside counties, in addition to the San Gorgonio Pass area in Riverside County. The terrain and geographical location determine the distinctive climate of the Air Basin, as it is a coastal plain with connecting broad valleys and low hills.

[15] Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, pages 74-101, http://scagrtpscs.net/Documents/2016/final / f2016RTPSCS.pdf. Accessed December 2018.




SOURCE: South Coast Air Quality Management District, 2014

Times Mirror Square Project

**Figure IV.B-1**

Boundaries of the South Coast Air Quality Management District

ESA

The Air Basin lies in the semi-permanent high-pressure zone of the eastern Pacific Ocean. The usually mild climatological pattern is interrupted by periods of hot weather, winter storms, or Santa Ana winds. The extent and severity of pollutant concentrations in the Air Basin is 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.

The greatest air pollution impacts throughout the Air Basin typically occur from June through September. This condition is generally attributed to the emissions occurring in the Air Basin, light winds, and shallow vertical atmospheric mixing. These factors reduce the potential for pollutant dispersion, 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.

### *(b) Sources of Air Pollution*

As detailed in the AQMP, the major sources of air pollution in the Air Basin are divided into four major source classifications: point, area, on-road, and off-road sources. Point and area sources are the two major subcategories of stationary sources.[16] Point sources are permitted facilities that contain one or more emission sources at an identified location (e.g., power plants, refineries). Area sources consist of many small emission sources (e.g., residential water heaters, architectural coatings, consumer products and permitted sources) which are distributed across the region. On-road sources and off-road sources are the two main subcategories of mobile sources, such as cars and trucks (on-road sources) and heavy construction equipment (off-road sources).

### *(c) Criteria Pollutants*

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 the overall endeavor to prevent further deterioration and facilitate improvement in air quality. The following pollutants are regulated by the United States Environmental Protection Agency (USEPA) and are subject to emissions control requirements adopted by federal, state and local regulatory agencies. These pollutants are referred to as

16 South Coast Air Quality Management District, 2012 Air Quality Management Plan.

"criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted for them. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for each of the monitored pollutants and their effects on health are summarized in **Table IV.B-2,** *Ambient Air Quality Standards*. The NAAQS and 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. A brief description of the health effects of these criteria air pollutants are provided below.

*(i) Ozone ($O_3$)*

Ozone is a secondary pollutant formed by the chemical reaction of volatile organic compounds (VOCs) and nitrogen oxides ($NO_X$) in the presence of sunlight under favorable meteorological conditions, such as high temperature and stagnation episodes. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable. According to the USEPA, ozone can cause the muscles in the airways to constrict potentially leading to wheezing and shortness of breath.[17] Ozone can make it more difficult to breathe deeply and vigorously; cause shortness of breath and pain when taking a deep breath; cause coughing and sore or scratchy throat; inflame and damage the airways; aggravate lung diseases such as asthma, emphysema and chronic bronchitis; increase the frequency of asthma attacks; make the lungs more susceptible to infection; continue to damage the lungs even when the symptoms have disappeared; and cause chronic obstructive pulmonary disease.[18] Long-term exposure to ozone is linked to aggravation of asthma, and is likely to be one of many causes of asthma development and long-term exposures to higher concentrations of ozone may also be linked to permanent lung damage, such as abnormal lung development in children.[19] According to CARB, inhalation of ozone causes inflammation and irritation of the tissues lining human airways, causing and worsening a variety of symptoms and exposure to ozone can reduce the volume of air that the lungs breathe in and cause shortness of breath.[20] The USEPA states that people most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers.[21] Children are at greatest risk from exposure to ozone because

17 United States Environmental Protection Agency, Health Effects of Ozone Pollution, https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution, last updated October 10, 2018. Accessed January 2019.

18 United States Environmental Protection Agency, Health Effects of Ozone Pollution.

19 United States Environmental Protection Agency, Health Effects of Ozone Pollution.

20 California Air Resources Board, Ozone & Health, Health Effects of Ozone, https://ww2.arb.ca.gov/resources/ozone-and-health. Accessed January 2019.

21 United States Environmental Protection Agency, Health Effects of Ozone Pollution.

their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure.[22] According to CARB, studies show that children are no more or less likely to suffer harmful effects than adults; however, children and teens may be more susceptible to ozone and other pollutants because they spend nearly twice as much time outdoors and engaged in vigorous activities compared to adults.[23] Children breathe more rapidly than adults and inhale more pollution per pound of their body weight than adults and are less likely than adults to notice their own symptoms and avoid harmful exposures.[24] Further research may be able to better distinguish between health effects in children and adults.[25]

*(ii) Volatile Organic Compounds (VOCs)*

VOCs are organic chemical compounds of carbon and are not "criteria" pollutants themselves; however, they contribute with $NO_X$ to form ozone, and are regulated to prevent the formation of ozone.[26] According to CARB, some VOCs are highly reactive and play a critical role in the formation of ozone, other VOCs have adverse health effects, and in some cases, VOCs can be both highly reactive and have adverse health effects.[27] 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.).[28]

*(iii) Nitrogen Dioxide ($NO_2$) and Nitrogen Oxides*

$NO_X$ is a term that refers to a group of compounds containing nitrogen and oxygen. The primary compounds of air quality concern include $NO_2$ and nitric oxide (NO). Ambient air quality standards have been promulgated for $NO_2$, which is a reddish-brown, reactive gas.[29] The principle form of $NO_X$ produced by combustion is NO, but NO reacts quickly in the atmosphere to form $NO_2$, creating the mixture of NO and $NO_2$ referred to as $NO_X$.[30] Major sources of $NO_X$ include emissions from cars,

22 United States Environmental Protection Agency, Health Effects of Ozone Pollution.
23 California Air Resources Board, Ozone & Health, Health Effects of Ozone.
24 California Air Resources Board, Ozone & Health, Health Effects of Ozone.
25 California Air Resources Board, Ozone & Health, Health Effects of Ozone.
26 United States Environmental Protection Agency, Technical Overview of Volatile Organic Compounds, https://www.epa.gov/indoor-air-quality-iaq/technical-overview-volatile-organic-compounds, last updated April 12, 2017. Accessed January 2019.
27 California Air Resources Board, Toxic Air Contaminants Monitoring, Volatile Organic Compounds, https://www.arb.ca.gov/aaqm/toxics.htm, last reviewed June 9, 2016. Accessed January 2019.
28 California Air Resources Board, Toxic Air Contaminants Monitoring, Volatile Organic Compounds.
29 California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health. Accessed January 2019.
30 California Air Resources Board, Nitrogen Dioxide & Health.

trucks and buses, power plants, and off-road equipment.[31] The terms $NO_X$ and $NO_2$ are sometimes used interchangeably. However, the term $NO_X$ is typically used when discussing emissions, usually from combustion-related activities, and the term $NO_2$ is typically used when discussing ambient air quality standards. Where $NO_X$ emissions are discussed in the context of the thresholds of significance or impact analyses, the discussions are based on the conservative assumption that all $NO_X$ emissions would oxidize in the atmosphere to form $NO_2$. According to the USEPA, short-term exposures to $NO_2$ can potentially aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms while longer exposures to elevated concentrations of $NO_2$ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections.[32] According to CARB, controlled human exposure studies that show that $NO_2$ exposure can intensify responses to allergens in allergic asthmatics.[33] In addition, a number of epidemiological studies have demonstrated associations between $NO_2$ exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses.[34] Infants and children are particularly at risk from exposure to $NO_2$ because they have disproportionately higher exposure to $NO_2$ than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration while in adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.[35] CARB states that much of the information on distribution in air, human exposure and dose, and health effects is specifically for $NO_2$ and there is only limited information for NO and $NO_X$, as well as large uncertainty in relating health effects to NO or $NO_X$ exposure.[36]

As shown previously in Table IV.B-1, the Air Basin is designated as attainment for $NO_2$ and non-attainment for ozone (NAAQS and CAAQS). The primary pollutant of concern during construction and operational activities is $NO_X$ since the Air Basin is non-attainment for ozone and $NO_X$ is an ozone precursor emission.

31 United States Environmental Protection Agency, Nitrogen Dioxide ($NO_2$) Pollution, https://www.epa.gov/no2-pollution/basic-information-about-no2, last updated September 8, 2016. Accessed January 2019.
32 United States Environmental Protection Agency, Nitrogen Dioxide ($NO_2$) Pollution.
33 California Air Resources Board, Nitrogen Dioxide & Health.
34 California Air Resources Board, Nitrogen Dioxide & Health.
35 California Air Resources Board, Nitrogen Dioxide & Health.
36 California Air Resources Board, Nitrogen Dioxide & Health.

## TABLE IV.B-2
## AMBIENT AIR QUALITY STANDARDS

| Pollutant | Average Time | California Standards[a] | | National Standards[b] | | |
|---|---|---|---|---|---|---|
| | | Concentration[c] | Method[d] | Primary[c,e] | Secondary[c,f] | Method[g] |
| $O_3$ [h] | 1 Hour | 0.09 ppm (180 µg/m$^3$) | Ultraviolet Photometry | — | Same as Primary Standard | Ultraviolet Photometry |
| | 8 Hour | 0.070 ppm (137 µg/m$^3$) | | 0.070 ppm (137 µg/m$^3$) | | |
| $NO_2$ [i] | 1 Hour | 0.18 ppm (339 µg/m$^3$) | Gas Phase Chemiluminescence | 100 ppb (188 µg/m$^3$) | None | Gas Phase Chemiluminescence |
| | Annual Arithmetic Mean | 0.030 ppm (57 µg/m$^3$) | | 53 ppb (100 µg/m$^3$) | Same as Primary Standard | |
| CO | 1 Hour | 20 ppm (23 mg/m$^3$) | Non-Dispersive Infrared Photometry (NDIR) | 35 ppm (40 mg/m$^3$) | None | Non-Dispersive Infrared Photometry (NDIR) |
| | 8 Hour | 9.0 ppm (10mg/m$^3$) | | 9 ppm (10 mg/m$^3$) | | |
| | 8 Hour (Lake Tahoe) | 6 ppm (7 mg/m$^3$) | | — | — | |
| $SO_2$ [j] | 1 Hour | 0.25 ppm (655 µg/m$^3$) | Ultraviolet Fluorescence | 75 ppb (196 µg/m$^3$) | — | Ultraviolet Fluorescence; Spectrophotometry (Pararosanilin e Method)[9] |
| | 3 Hour | — | | — | 0.5 ppm (1300 µg/m$^3$) | |
| | 24 Hour | 0.04 ppm (105 µg/m$^3$) | | 0.14 ppm (for certain areas)[j] | — | |
| | Annual Arithmetic Mean | — | | 0.030 ppm (for certain areas) [j] | — | |
| PM10 [k] | 24 Hour | 50 µg/m3 | Gravimetric or Beta Attenuation | 150 µg/m3 | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 20 µg/m$^3$ | | — | | |
| PM2.5 [k] | 24 Hour | No Separate State Standard | | 35 µg/m$^3$ | Same as Primary Standard | Inertial Separation and Gravimetric Analysis |
| | Annual Arithmetic Mean | 12 µg/m$^3$ | Gravimetric or Beta Attenuation | 12.0 µg/m$^3$ [k] | 15 µg/m$^3$ | |
| Lead [l,m] | 30 Day Average | 1.5 µg/m$^3$ | Atomic Absorption | — | — | High Volume Sampler and |

| Pollutant | Average Time | California Standards[a] | | National Standards[b] | | |
|---|---|---|---|---|---|---|
| | | Concentration[c] | Method[d] | Primary[c,e] | Secondary[c,f] | Method[g] |
| | Calendar Quarter | — | | 1.5 µg/m$^3$ (for certain areas)[m] | Same as Primary Standard | Atomic Absorption |
| | Rolling 3-Month Average [m] | -- | | 0.15 µg/m$^3$ | | |
| Visibility Reducing Particles [n] | 8 Hour | Extinction coefficient of 0.23 per kilometer — visibility of ten miles or more (0.07 — 30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70 percent. Method: Beta Attenuation and Transmittance through Filter Tape. | | **No Federal Standards** | | |
| Sulfates ($SO_4$) | 24 Hour | 25 µg/m$^3$ | Ion Chromatography | | | |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm (42 µg/m$^3$) | Ultraviolet Fluorescence | | | |
| Vinyl Chloride [l] | 24 Hour | 0.01 ppm (26 µg/m$^3$) | Gas Chromatography | | | |

a California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m$^3$ is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

c Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

d Any equivalent procedure which can be shown to the satisfaction of CARB to give equivalent results at or near the level of the air quality standard may be used.

e National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

f National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

g Reference method as described by the USEPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the USEPA.

h On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

i To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb.

j On June 2, 2010, a new 1-hour $SO_2$ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour

| Pollutant | Average Time | California Standards[a] | | National Standards[b] | | |
|---|---|---|---|---|---|---|
| | | Concentration[c] | Method[d] | Primary[c,e] | Secondary[c,f] | Method[g] |

daily maximum concentrations at each site must not exceed 75 ppb. The 1971 $SO_2$ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

k On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 µg/m$^3$ to 12.0 µg/m$^3$. The other PM2.5 and PM10 standards were retained.

l CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

m The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m$^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

n In 1989, the California Air Resources Board converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

SOURCE: California Air Resources Board, Ambient Air Quality Standards, May 4, 2016, https://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed December 2018.

### *(iv) Carbon Monoxide (CO)*

Carbon monoxide (CO) is primarily emitted from combustion processes and motor vehicles due to the incomplete combustion of fuel, such as natural gas, gasoline, or wood, with the majority of outdoor CO emissions from mobile sources.[37] According to the USEPA, breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain and at very high levels, which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness and death.[38] Very high levels of CO are not likely to occur outdoors; however, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease since these people already have a reduced ability for getting oxygenated blood to their hearts and are especially vulnerable to the effects of CO when exercising or under increased stress.[39] In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina.[40]

37 California Air Resources Board, Carbon Monoxide & Health, https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health. Accessed January 2019.

38 United States Environmental Protection Agency, Carbon Monoxide (CO) Pollution in Outdoor Air, https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution, last updated September 8, 2016. Accessed January 2019.

39 United States Environmental Protection Agency, Carbon Monoxide (CO) Pollution in Outdoor Air

40 United States Environmental Protection Agency, Carbon Monoxide (CO) Pollution in Outdoor Air

According to CARB, the most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain.[41] For people with cardiovascular disease, short-term CO exposure can further reduce their body's already compromised ability to respond to the increased oxygen demands of exercise, exertion, or stress; inadequate oxygen delivery to the heart muscle leads to chest pain and decreased exercise tolerance.[42] Unborn babies, infants, elderly people, and people with anemia or with a history of heart or respiratory disease are most likely to experience health effects with exposure to elevated levels of CO.[43]

*(v) Sulfur Dioxide ($SO_2$)*

According to the USEPA, the largest source of sulfur dioxide ($SO_2$) emissions in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities while smaller sources of $SO_2$ emissions include industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulfur content.[44] In 2006, California phased-in the ultra-low-sulfur diesel regulation limiting vehicle diesel fuel to a sulfur content not exceeding 15 parts per million, down from the previous requirement of 500 parts per million, substantially reducing emissions of sulfur from diesel combustion.[45] According to the USEPA, short-term exposures to $SO_2$ can harm the human respiratory system and make breathing difficult.[46] According to CARB, health effects at levels near the State one-hour standard are those of asthma exacerbation, including bronchoconstriction accompanied by symptoms of respiratory irritation such as wheezing, shortness of breath and chest tightness, especially during exercise or physical activity and exposure at elevated levels of $SO_2$ (above 1 ppm) results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.[47] Children, the elderly, and those with asthma,

41 California Air Resources Board, Carbon Monoxide & Health.
42 California Air Resources Board, Carbon Monoxide & Health.
43 California Air Resources Board, Carbon Monoxide & Health.
44 United States Environmental Protection Agency, Sulfur Dioxide ($SO_2$) Pollution, https://www.epa.gov/so2-pollution/sulfur-dioxide-basics, last updated June 28, 2018. Accessed January 2019.
45 California Air Resources Board, Final Regulation Order, Amendments to the California Diesel Fuel Regulations, Amend Section 2281, Title 13, California Code of Regulations, https://www.arb.ca.gov/regact/ulsd2003/fro2.pdf, approved July 15, 2004. Accessed January 2019.
46 United States Environmental Protection Agency, Sulfur Dioxide ($SO_2$) Pollution.
47 California Air Resources Board, Sulfur Dioxide & Health, https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health. Accessed January 2019.

cardiovascular disease, or chronic lung disease (such as bronchitis or emphysema) are most likely to experience the adverse effects of $SO_2$.[48,49]

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

Particulate matter air pollution is a mixture of solid particles and liquid droplets found in the air.[50] Some particles, such as dust, dirt, soot, or smoke, are large or dark enough to be seen with the naked eye while other particles are so small they can only be detected using an electron microscope.[51] Particles are defined by their diameter for air quality regulatory purposes: inhalable particles with diameters that are generally 10 micrometers and smaller (PM10); and fine inhalable particles with diameters that are generally 2.5 micrometers and smaller (PM2.5).[52] Thus, PM2.5 comprises a portion or a subset of PM10. Sources of PM10 emissions include dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, and wind-blown dust from open lands.[53] Sources of PM2.5 emissions include combustion of gasoline, oil, diesel fuel, or wood.[54] PM10 and PM2.5 may be either directly emitted from sources (primary particles) or formed in the atmosphere through chemical reactions of gases (secondary particles) such as $SO_2$, $NO_X$, and certain organic compounds.[55] According to CARB, both PM10 and PM2.5 can be inhaled, with some depositing throughout the airways; PM10 is more likely to deposit on the surfaces of the larger airways of the upper region of the lung while PM2.5 is more likely to travel into and deposit on the surface of the deeper parts of the lung, which can induce tissue damage, and lung inflammation.[56] Short-term (up to 24 hours duration) exposure to PM10 has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits.[57] The effects of long-term (months or years) exposure to PM10 are less clear, although studies suggest a link between long-term PM10 exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air

48 California Air Resources Board, Sulfur Dioxide & Health.
49 United States Environmental Protection Agency, Sulfur Dioxide ($SO_2$) Pollution.
50 United States Environmental Protection Agency, Particulate Matter (PM) Pollution, https://www.epa.gov/pm-pollution/particulate-matter-pm-basics, last updated November 14, 2018. Accessed January 2019.
51 United States Environmental Protection Agency, Particulate Matter (PM) Pollution.
52 United States Environmental Protection Agency, Particulate Matter (PM) Pollution.
53 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10), https://www.arb.ca.gov/research/aaqs/common-pollutants/pm/pm.htm, last reviewed August 10, 2017. Accessed January 2019.
54 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
55 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
56 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
57 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).

pollution causes lung cancer.[58] Short-term exposure to PM2.5 has been associated with premature mortality, increased hospital admissions for heart or lung causes, acute and chronic bronchitis, asthma attacks, emergency room visits, respiratory symptoms, and restricted activity days and long-term exposure to PM2.5 has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children.[59] According to CARB, populations most likely to experience adverse health effects with exposure to PM10 and PM2.5 include older adults with chronic heart or lung disease, children, and asthmatics and children and infants are more susceptible to harm from inhaling pollutants such as PM10 and PM2.5 compared to healthy adults because they inhale more air per pound of body weight than do adults, spend more time outdoors, and have developing immune systems.[60]

#### *(vii) Lead (Pb)*

Major sources of lead emissions include ore and metals processing, piston-engine aircraft operating on leaded aviation fuel, waste incinerators, utilities, and lead-acid battery manufacturers.[61] In the past, leaded gasoline was a major source of lead emissions; however, the removal of lead from gasoline has resulted in a decrease of lead in the air by 98 percent between 1980 and 2014.[62] Lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system, and affects the oxygen carrying capacity of blood.[63] The lead effects most commonly encountered in current populations are neurological effects in children, such as behavioral problems and reduced intelligence, anemia, and liver or kidney damage.[64] Excessive lead exposure in adults can cause reproductive problems in men and women, high blood pressure, kidney disease, digestive problems, nerve disorders, memory and concentration problems, and muscle and joint pain.[65]

### *(d) Toxic Air Contaminants*

In addition to criteria pollutants, the SCAQMD periodically assesses levels of toxic air contaminants (TACs) in the Air Basin. A TAC is defined by California Health and Safety Code Section 39655:

58 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
59 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
60 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
61 United States Environmental Protection Agency, Lead Air Pollution, https://www.epa.gov/lead-air-pollution/basic-information-about-lead-air-pollution, last updated November 29, 2017. Accessed January 2019.
62 United States Environmental Protection Agency, Lead Air Pollution.
63 United States Environmental Protection Agency, Lead Air Pollution.
64 California Air Resources Board, Lead & Health, https://ww2.arb.ca.gov/resources/lead-and-health. Accessed January 2019.
65 California Air Resources Board, Lead & Health.

> *"Toxic air contaminant" means an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412(b)) is a toxic air contaminant.*

Between July 2012 and June 2013, the SCAQMD conducted the Multiple Air Toxics Exposure Study (MATES IV), which is a follow-up to previous air toxics studies conducted in the Air Basin. The MATES IV Final Report was issued in May 2015. The study, based on actual monitored data throughout the Air Basin, consisted of several elements. These included a monitoring program, an updated emissions inventory of TACs, and a modeling effort to characterize carcinogenic risk across the Air Basin from exposure to TACs. The study concluded that the average of the modeled air toxics concentrations measured at each of the monitoring stations in the Air Basin equates to a background cancer risk from long-term inhalation exposure to TAC emissions of approximately 418 in one million based on the average of 10 fixed monitoring sites and 367 in one million based on a population-weighted average risk. The overall cancer risk was about 65 percent lower for the average of 10 fixed monitoring sites and 57 percent lower for the population-weighted risk than the previous MATES III cancer risks.[66]

Approximately 68 percent of the risk is attributed to diesel particulate matter (DPM) emissions, approximately 22 percent to other toxics associated with mobile sources (including benzene, butadiene, and formaldehyde), and approximately 10 percent of all airborne carcinogenic risk is attributed to stationary sources (which include industries and certain other businesses, such as dry cleaners and chrome plating operations).[67] The study also found lower ambient concentrations of most of the measured air toxics compared to the levels measured in the previous study conducted during 2004 and 2006. Specifically, benzene and 1,3-butadiene, pollutants generated mainly from vehicles, were down 35 percent and 11 percent, respectively.[68] The reductions were attributed to air quality control regulations and improved emission control technologies. In addition to air toxics, MATES IV included continuous measurements of black carbon and ultrafine particles (particles smaller than 0.1 microns in size), which are emitted by the combustion of diesel fuels. Sampling sites located near heavily-trafficked freeways or near

66 South Coast Air Quality Management District, Final Report – Multiple Air Toxics Exposure Study in the South Coast Air Basin, page ES-2-3, 2015, http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7. Accessed December 2018.

67 South Coast Air Quality Management District, Final Report – Multiple Air Toxics Exposure Study in the South Coast Air Basin, page ES-2.

68 South Coast Air Quality Management District, Final Report – Multiple Air Toxics Exposure Study in the South Coast Air Basin, page 6-1.

industrial areas were characterized by higher levels of black carbon and ultrafine particles compared to more rural sites.

### (2) Local Air Quality

#### *(a) Existing Criteria Pollutants Levels at Nearby Monitoring Stations*

The SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin to measure ambient pollutant concentrations. The nearest monitoring station most representative of the Project Site is the Central Los Angeles County Monitoring Station, located 1.35 miles north east of the Project Site at 1603 North Main Street, Los Angeles, CA 90012. Criteria pollutants monitored at this station include $O_3$, $NO_2$, CO, $SO_2$, Pb, PM10 and PM2.5. The most recent data available from the SCAQMD for this monitoring station are from years 2012 to 2016. The pollutant concentration data for these years are summarized in **Table IV.B-3,** *Ambient Air Quality Data*. As shown in Table IV.B-3, the CAAQS and NAAQS were not exceeded in the Project vicinity for most pollutants between 2012 and 2016, except for ozone and particulate matter (PM10 and PM2.5).

**TABLE IV.B-3**
**AMBIENT AIR QUALITY DATA**

| Pollutant/Standard [a] | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| **$O_3$ (1-hour)** | | | | | |
| Maximum Concentration (ppm) | 0.093 | 0.081 | 0.113 | 0.104 | 0.103 |
| Days > CAAQS (0.09 ppm) | 0 | 0 | 3 | 2 | 2 |
| **$O_3$ (8-hour)** | | | | | |
| Maximum Concentration (ppm) | 0.077 | 0.069 | 0.094 | 0.074 | 0.078 |
| 4th High 8-hour Concentration (ppm) | 0.068 | 0.060 | 0.072 | 0.072 | 0.071 |
| Days > CAAQS (0.070 ppm) | 2 | 0 | 7 | 6 | 4 |
| Days > NAAQS (0.070 ppm) | 2 | 0 | 7 | 6 | 4 |
| **$NO_2$ (1-hour)** | | | | | |
| Maximum Concentration (ppm) | 0.077 | 0.090 | 0.082 | 0.079 | 0.065 |
| 98th Percentile Concentration (ppm) | 0.069 | 0.063 | 0.067 | 0.062 | 0.061 |
| **$NO_2$ (Annual)** | | | | | |
| Annual Arithmetic Mean (0.030 ppm) | 0.025 | 0.022 | 0.022 | 0.022 | 0.021 |
| **CO (1-hour)** | | | | | |
| Maximum Concentration (ppm) | N/A | N/A | 3 | 3.2 | 1.9 |
| Days > CAAQS (20 ppm) | 0 | 0 | 0 | 0 | 0 |
| **CO (8-hour)** | | | | | |
| Maximum Concentration (ppm) | 1.9 | 2.0 | 2.0 | 1.8 | 1.4 |
| Days > CAAQS (9.0 ppm) | 0 | 0 | 0 | 0 | 0 |

| Pollutant/Standard [a] | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| **$SO_2$ (1-hour)** | | | | | |
| Maximum Concentration (ppm) | 0.005 | 0.006 | 0.005 | 0.013 | 0.013 |
| 99th Percentile Concentration (ppm) | 0.005 | 0.005 | 0.004 | 0.006 | 0.003 |
| Days > CAAQS (0.075 ppm) | 0 | 0 | 0 | 0 | 0 |
| **$SO_2$ (24-hour)** | | | | | |
| Maximum Concentration (ppm) | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 |
| Days > CAAQS (0.14 ppm) | 0 | 0 | 0 | 0 | 0 |
| **PM10 (24-hour)** | | | | | |
| Maximum Concentration (µg/m$^3$) | 80 | 57 | 87 | 88 | 67 [b] |
| Samples > CAAQS (50 µg/m$^3$) | 4 | 1 | 32 | 26 | 18 |
| Samples > NAAQS (150 µg/m$^3$) | 0 | 0 | 0 | 0 | 0 |
| **PM10 (Annual Average)** | | | | | |
| Annual Arithmetic Mean (20 µg/m$^3$) | 30.2 | 29.5 | 35.4 | 33.0 | 32.4 |
| **PM2.5 (24-hour)** | | | | | |
| Maximum Concentration (µg/m$^3$) | 58.7 | 43.1 | 59.9 [b] | 56.4 | 44.4 |
| 98th Percentile Concentration (µg/m$^3$) | 31.8 | 29.0 | 34.5 | 38.0 | 27.3 |
| Samples > NAAQS (35 µg/m$^3$) | 4 | 1 | 6 | 7 | 2 |
| **PM2.5 (Annual)** | | | | | |
| Annual Arithmetic Mean (12 µg/m$^3$) | 12.6 | 12.0 | 12.4 | 12.4 | 11.8 |
| **Lead** | | | | | |
| Maximum 30-day average (µg/m$^3$) | 0.014 | 0.013 | 0.013 | 0.013 | 0.016 |
| Samples > CAAQS (1.5 µg/m$^3$) | 0 | 0 | 0 | 0 | 0 |

a ppm = parts per million; µg/m$^3$ = micrograms per cubic meter
b Exceptional events occurred in 2013 for PM2.5. Exceptional events are not considered violations of an ambient air quality standard.

SOURCE: South Coast Air Quality Management District, Historical Data by Year, http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year; California Air Resources Board, Air Quality Data Statistics, http://www.arb.ca.gov/adam/; United States Environmental Protection Agency, AirData, http://www.epa.gov/airdata/ad_rep_mon.html. Accessed December 2018.

### *(b) Existing Toxic Air Contaminant Risk Levels*

The SCAQMD has prepared a series of maps that show regional trends in estimated outdoor long-term 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 grid in which the Project Site is located is shown in **Figure IV.B-2,** *Background Inhalation Cancer Risk for Project Site Area*. As shown, the background potential cancer risk

per million people is estimated at 1,830 per million (compared to an overall South Coast Air Basin-wide risk of 1,023 per million).[69] Generally, the risk from air toxics is lower near the coastline: it increases inland, with higher risks concentrated near diesel sources (e.g., freeways, airports, and ports).

### *(c) Existing Site Emissions*

The Project Site is currently developed with five structurally distinct but internally connected buildings currently occupied by the Los Angeles Times offices, a bank, and other office uses. The buildings range from four to 10 stories in height. The buildings include the eight-story Times Building, the 4-story Plant Building, the 10-story Mirror Building, the six-story parking structure, and the six-story Executive Building. Combined the Times, Plant, Mirror, and Executive Buildings have a total floor area of approximately 559,863 square feet. This includes approximately 541,113 square feet of commercial office uses across the four existing buildings, an approximately 7,500 square-foot bank in the Executive Building, and an approximately 11,250 square-foot cafeteria in the Plant Building. The current site usage generates air quality emissions from operations related to the commercial activities at the site. Approximately 223,945 square feet, or 40 percent of the existing uses, are vacant office spaces that have been vacant for 10 years. Therefore, the analysis assumes no existing emissions or vehicle trips are generated from the 40 percent vacant office spaces. **Table IV.B-4**, *Existing Site Operational Emissions*, identifies the existing site uses and emissions.

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

| Source | VOC | $NO_X$ | CO | $SO_2$ | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| Area | 8 | <1 | <1 | 0 | <1 | <1 |
| Energy (Natural Gas) | <1 | 2 | 1 | <1 | <1 | <1 |
| Motor Vehicles | 8 | 35 | 97 | <1 | 18 | 5 |
| **Total Existing Emissions** | **16** | **37** | **98** | **<1** | **18** | **5** |

a Totals may not add up exactly due to rounding in the modeling calculations Detailed emissions calculations are provided in Appendix C-1 of Appendix C of this Draft EIR. Approximately 223,945 square feet, or 40 percent of the existing uses, are vacant office spaces that have been vacant for 10 years. Therefore, the analysis assumes no existing emissions or vehicle trips are generated from the 40 percent vacant office spaces.

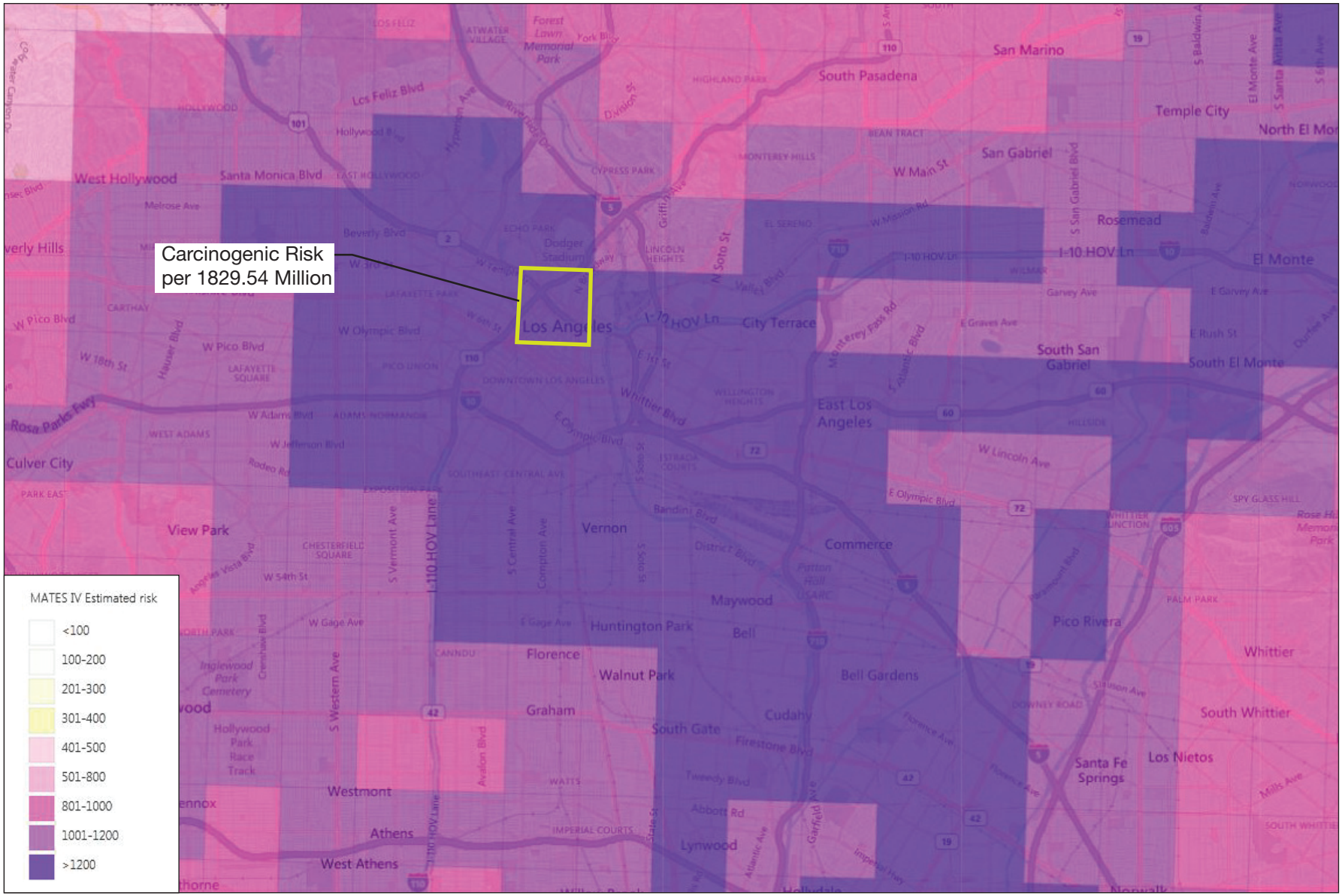
SOURCE: ESA, 2018.

69 South Coast Air Quality Management District, Multiple Air Toxics Exposure Study, MATES IV Carcinogenic Risk Interactive Map, https://scaqmd-online.maps.arcgis.com/apps/webappviewer/index.html?id=470c30bc6daf4ef6a43f0082973ff45f. Accessed December 2018.

### *(d) Sensitive Receptors and Locations*

Certain population groups, such as children, elderly, and acutely and chronically ill persons (especially those with cardio-respiratory diseases), are considered more sensitive to the potential effects of air pollution than others. As a result, certain land uses that are occupied by these population groups, such as residences, hospitals and schools, are considered to be air quality sensitive land uses. The Project Site is primarily surrounded by civic and commercial uses, although there are areas of air quality sensitive land uses within 1,000 feet of the Project Site, as shown in **Figure IV.B-3,** *Sensitive Receptor Locations Nearest to the Project Site*. Air quality sensitive land uses nearest to the Project Site are described below. Maximum air quality impacts are evaluated for these air quality sensitive land uses. Other air quality sensitive land uses are located farther from the Project Site and would experience lower impacts.

- The City Hall Park is located approximately 150 feet to the northeast of the Project Site.
- Grand Park is located approximately 434 feet to the north of the Project Site.
- The one-acre park just south of the LAPD Headquarters Building is located approximately 80 feet southeast of the Project Site.
- The Higgins Building Lofts apartment complex is located at the corner of S. Main Street and West 2nd Street approximately 250 feet southeast of the Project Site.
- The Douglas Lofts apartment complex is located at the corner of Spring Street and West 3rd Street approximately 530 feet southwest of the Project Site.
- The Victor Clothing apartment complex is located on Broadway approximately 480 feet to the southwest of the of the Project Site.
- The Pan American Lofts building is located at the corner of Broadway and W. 3rd Street approximately 550 feet southwest of the Project Site.
- The newly constructed STOA apartment complex is located on S. Main Street approximately 550 feet southeast of the Project Site.




SOURCE: South Coast Air Quality Management District, 2017

Times Mirror Square Project

**Figure IV.B-2**

Background Inhalation Cancer Risk for Project Site Area

ESA


SOURCE: Google Maps, 2016 (Aerial).

Times Mirror Square

**Figure IV.B-3**

Sensitive Receptor Locations Nearest to the Project Site

ESA

*(e) Future Sensitive Receptors and Locations (Sensitive Receptors Not Built Yet)*

Beyond the existing development that could potentially be impacted by Project construction, there are three future projects in the nearby vicinity of the Project Site that could be impacted should they become constructed and occupied prior to the construction of the Project. Future sensitive land uses in close proximity to the Project Site are also shown in Figure IV.B-3, and include the following:

- A mixed-use residential development is planned for construction over the future Metro station at the corner of 2nd Street and Broadway approximately 50 feet southwest of the Project Site.
- The First and Broadway Civic Center Park will be constructed at the corner of 1st and Broadway approximately 130 feet northwest of the Project Site.
- The Lotus 77 apartment complex will be constructed at 118 Astronaut E S Onizuka Street approximately 1,300 feet southeast of the Project Site.

# 3. Project Impacts

## a) 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 conducted as follows. Additional details are provided in the Air Quality Technical Report in Appendix C of this Draft EIR.

### (1) Consistency with Air Quality Management Plan

The SCAQMD is required, pursuant to the Clean Air Act, to reduce emissions of criteria pollutants for which the Air Basin is in non-attainment of the NAAQS (e.g., ozone and PM2.5). The SCAQMD's 2012 Air Quality Management Plan contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the NAAQS. These strategies are developed, in part, based on regional growth projections prepared by SCAG. Projects that are consistent with the assumptions used in the Air Quality Management Plan do not interfere with attainment because the growth is included in the projections utilized in the formulation of the Air Quality Management Plan. Thus, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the Air Quality Management Plan would be consistent with the Air Quality Management Plan, even if they exceed the SCAQMD's numeric indicators.[70] As noted above, the 2016 AQMP has been adopted by the SCAQMD and CARB. Therefore, this analysis considers the 2016

[70] South Coast Air Quality Management District, CEQA Air Quality Handbook, Chapter 12, 1993, page 12-1.

AQMP. The Project's consistency with the AQMP is evaluated based on consistency with the applicable growth projections and emission control strategies.

### (2) Construction Impacts

Construction of the Project has the potential to generate temporary criteria pollutant emissions through the use of heavy-duty construction equipment, such as excavators and forklifts, and through vehicle trips generated from 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 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.

Construction emissions were estimated assuming an early starting period. In order to provide a conservative emissions analysis, for modeling purposes, construction emissions were modeled with a starting time period in calendar year 2018. The Project would be expected to be fully built-out will full operation of all uses by calendar year 2023. Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. If the onset of construction is delayed to a later date than assumed in the modeling analysis, construction impacts would be less than those analyzed, because a more energy-efficient and cleaner burning construction equipment and vehicle fleet mix would be expected in the future, pursuant to State regulations that require construction equipment fleet operators to phase-in less polluting heavy-duty equipment. As a result, should the Project commence construction on a later date than modeled in this air quality impact analysis, air quality impacts would be less than the impacts disclosed herein. Emissions are estimated using the CalEEMod (Version 2016.3.2) software, which 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. CalEEMod was developed in collaboration with the air districts of California. Regional data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California air districts to account for local requirements and conditions. The model is considered to be an accurate and comprehensive tool for quantifying air quality and GHG impacts from land use projects throughout California and is recommended by the SCAQMD.[71]

[71] South Coast Air Quality Management District, California Emissions Estimator Model, http://www.aqmd.gov/caleemod/. Accessed December 2018.

Daily regional emissions during construction are forecasted by assuming a conservative estimate of construction activities (i.e., assuming all construction occurs at the earliest feasible date) and applying the mobile source and fugitive dust emissions factors. The input values used in this analysis were adjusted to be Project-specific based on equipment types and the construction schedule. Construction haul and vendor truck emissions during demolition, grading, concrete pour and building construction were evaluated using regional heavy-duty truck emission factors from EMFAC2014. Daily truck trips and default trip length data were used to assess roadway emissions from truck exhaust. The maximum daily emissions are estimated values for the worst-case day and do not represent the emissions that would occur for every day of Project construction. The maximum daily emissions are compared to the SCAQMD daily regional numeric indicators (calculation details are provided in the Air Quality Technical Report provided in Appendix C of this Draft EIR).

### (3) Operational Impacts

Operation of the Project has the potential to generate criteria pollutant emissions through vehicle trips traveling to and from the Project Site. In addition, emissions would result from area sources on-site such as natural gas combustion from water heaters, landscaping equipment, and use of consumer products. Stationary sources of emissions may also be generated by on-site charbroiling associated with food preparation activities at the proposed restaurant land uses if the restaurant were to install charbroiling equipment. Criteria pollutant emissions would also be generated by point sources including new cooling towers and new emergency generators. Operational impacts were assessed for the existing uses in the year of 2017 (see Table IV.B-4, above), which represents the NOP baseline year, and for the full Project buildout year of 2023 (calculation details are provided in the Air Quality Technical Report provided in Appendix C of this Draft EIR).

The California Supreme Court issued an opinion regarding the environmental baseline to be used in an EIR for a long-range transportation improvement in the case *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority,* 57 Cal. 4th 439 (2013) (NFSR) in August 2013. In its decision, the Court held in part that “nothing in CEQA precludes an agency...from considering both types of baseline—existing and future conditions—in its primary analysis of the project’s significant adverse effects,” but if an agency “chooses to evaluate only the impacts on future conditions, foregoing the existing conditions analysis called for under the State CEQA Guidelines,” the agency needs to justify that choice. An air-quality analysis of the conditions when the Project becomes fully operational in 2023 would provide the most accurate and environmentally meaningful assessment of the Project’s operational air quality impacts, as the Project could not be operational in 2017 because it is seeking entitlements at this time and would require approximately 48 months of construction once the entitlements have been obtained. Thus, any operational impacts produced by modeling a hypothetical

2017 build out year could not in fact occur, and thereby could not realistically create a significant impact on the environment.

The operational emissions were also estimated using the CalEEMod software. CalEEMod was used to forecast the daily regional emissions from area and stationary sources that would occur during long-term Project operations. In calculating mobile-source emissions, the trip length values were based on the distances provided in CalEEMod. The trip distances were applied to the maximum daily trip estimates, based on the trip rates in the Project Transportation Impact Analysis.[72] The trips take into account trip and vehicle miles traveled (VMT) reductions from Project characteristics, including internal capture from co-locating commercial and residential uses on the Project Site, access to nearby mass transit, and the Project Site's proximity to nearby office, library, retail, restaurant, theater, entertainment, park, and other commercial and recreational uses in Downtown Los Angeles.

Area source emissions are based on natural gas combustion rates for building heating, water heaters and cooking, landscaping equipment fuel combustion, and consumer product usage (including paints) rates provided in CalEEMod. Natural gas usage factors in CalEEMod are based on the California Energy Commission (CEC) California Commercial End Use Survey data set, which provides energy demand by building type and climate zone.[73] The Project does not include fireplaces in the design of the residential towers, which consists primarily of studios, one, and two bedroom apartments. Therefore, residential fireplaces were not included in the emissions analysis.

Stationary-source emissions are estimated separately outside of the CalEEMod software. Stationary sources may include charbroiling of meat that may occur on-site during food preparation activities in the restaurant kitchen. Charbroiling emissions are calculated based on emissions factors available from the SCAQMD. In order to provide a conservative analysis, it was assumed that the restaurant uses would charbroil meat with relatively high emission factors (i.e., hamburger meat and chicken). The quantity of meat charbroiled in the restaurant uses are based on survey data from the SCAQMD and San Joaquin Valley Air Pollution Control District. The estimated emissions account for reductions from compliance with emissions control requirements consistent with SCAQMD Rule 1138.

Stationary sources would also include four on-site cooling towers to assist in dissipating heat from commercial processes of the Project, and would utilize a flow rate of approximately 17,820 gallons per day (refer to Section IV.R, *Water Supply*, of this Draft EIR). Emissions from the cooling towers occur as a result of air containing chemical impurities passing through the cooling water in the tower

72 Fehr & Peers, Times Mirror Square Project Transportation Impact Analysis, 2018.

73 California Energy Commission, California Commercial End-Use Survey, http://capabilities.itron.com/CeusWeb/Chart.aspx. Accessed December 2018.

where some of the liquid water is entrained into the air stream and carried out of the tower as "drift" droplets where the particulate matter constituent of the drift droplets may be classified as an emission. Large drift droplets often settle out of the tower exhaust air stream and deposit near the tower, while other drift droplets may evaporate before being deposited in the area surrounding the tower, and they also can produce PM emissions. To estimate daily emissions, particulate matter emission factors for wet cooling towers calculated by the USEPA were used, conservatively assuming it would operate 24 hours a day, every day of the year using the above mentioned daily flow rate.[74]

Stationary source emissions are estimated for new emergency generators expected in each tower (two generators for the Project), rated at approximately 414 kilowatts (555 horsepower) for the North Tower emergency generator and 623 kilowatts (835 horsepower) for the South Tower emergency generator based on preliminary engineering assumptions. The emergency generators would result in emissions during maintenance and testing operations. The emergency generator emissions are calculated based on compliance with the Tier 4 interim emissions standards and compliance with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines) mandated emission limits and operating hour constraints. Emergency generators are permitted by the SCAQMD and regulated under SCAQMD Rule 1470. Maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year per Rule 1470. For the purposes of estimating daily emissions, it is estimated that the emergency generators would operate for up to two hours on days with maintenance and testing activities.

Operational air quality impacts are 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 for the EIR is published. As discussed previously, the Project Site is currently developed with five structurally distinct but internally connected buildings currently occupied by the Los Angeles Times offices, a bank, and other office uses. The buildings were constructed between the 1930s and 1970s and range from four to ten stories in height. The buildings include the eight-story Times Building, the four-story Plant Building, the ten-story Mirror Building, the six-story parking structure, and the six-story Executive Building. This includes approximately 541,113 square feet of commercial office uses across the four existing buildings, an approximately 7,500 square-foot bank in the Executive Building, an approximately 11,250 square-foot cafeteria in the Plant Building. Approximately 223,945 square feet, or 40 percent of the existing uses, are vacant office spaces that have been vacant for 10 years. Therefore, the analysis assumes no existing emissions or vehicle trips are generated from the 40 percent vacant

74 United States Environmental Protection Agency, Air Pollutant Factors (AP-42), Fifth Edition, Volume I - Chapter 13.4: Wet Cooling Towers, https://www3.epa.gov/ttn/chief/ap42/ch13/final/c13s04.pdf. Accessed December 2018.

office spaces. The net operational emissions generated by the proposed Project are equal to the Project's emissions minus the existing Project Site emissions. The maximum daily net emissions from operation of the Project are compared to the SCAQMD daily regional numeric indicators.

### (4) Localized Emissions

The localized effects from the on-site portion of the emissions are evaluated at nearby sensitive receptor locations potentially impacted by the Project according to the SCAQMD *Final Localized Significance Threshold Methodology* (June 2003, revised July 2008).[75] The localized significance thresholds are only applicable to $NO_X$, CO, PM10 and PM2.5. The SCAQMD has established conservative 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 project-specific dispersion modeling. The localized analysis is based on this SCAQMD screening criteria. The screening criteria depend on: (1) the area in which the Project is located, (2) the size of the Project Site, and (3) the distance between the Project Site and the nearest sensitive receptor. The Project Site is located in the SCAQMD's Central Los Angeles Source Receptor Area 1 and is approximately 3.6 acres in size, with renovations of existing buildings taking place on approximately 1.85 acres of the site and construction of new residential towers on approximately 1.84 acres of the site. In order to provide a conservative assessment of localized construction and operational, the screening criteria used in the analysis were those applicable to a 1.84-acre site for residential tower construction, and a 3.6-acre site for total Project construction activities (residential tower construction and renovation activities) and Project operations, in the Central Los Angeles area with sensitive receptors located 25 meters away.

The nearest off-site air quality sensitive receptors are the one-acre park just south of the LAPD Headquarters Building located approximately 25 meters southeast of the Project Site and the Higgins Building Lofts apartment complex located at the corner of S. Main Street and West 2nd Street approximately 75 meters southeast of the Project Site.

Based on available information, the future mixed-use residential development planned for future construction over the future Metro station at the corner of 2nd Street and Broadway approximately 50 feet southwest of the Project Site is not reasonably expected to be in operation and occupied during construction of the Project. The Initial Study[76] for that project states that its construction will not begin until construction of the Metro Regional Connector portal and station within the site

[75] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology.

[76] City of Los Angeles Department of City Planning, Initial Study, 222 West 2nd Project, Case No. ENV 2016-3809-EIR, dated January 2017, https://planning.lacity.org/eir/nops/222 West2nd/Is.pdf. Accessed December 2018.

is complete. Therefore, construction of this related project would not be anticipated to begin until 2022 and would not be anticipated to be complete until 2025, which would be two years after completion the Project. Therefore, there is no evidence to assume that this future mixed-use residential development would be occupied by residents during construction of the Project, and as such, there would no exposure to these future residents from construction-related localized emissions from the Project.

Operational CO, $NO_X$, PM10 and PM2.5 localized emissions, which generally consists of both fugitive dust and non-fugitive dust exhaust emissions, such as diesel fuel and natural gas combustion, were analyzed in accordance with the SCAQMD *Final Localized Significance Threshold Methodology* (June 2003, revised July 2008). Therefore, with respect to localized operational CO, $NO_X$, PM10 and PM2.5, the SCAQMD recommends evaluating impacts at the closest sensitive receptor as sensitive receptors further away in distance would experience lesser impacts. As a conservative assessment, the operational LSTs for CO, $NO_X$, PM10 and PM2.5 are based on the distance of 25-meters for the most conservative analysis that corresponds to existing sensitive receptors, such as the one-acre park just south of the LAPD Headquarters Building located southeast of the Project Site, as well as the nearest future sensitive receptor that would be located at the corner of 2nd Street and Broadway southwest of the Project Site.

According to the SCAQMD *Final Localized Significance Threshold Methodology*, "projects whose calculated emission budgets for the proposed construction or operational activities are above the LST emission levels found in the LST mass rate look-up tables should not assume that the project would necessarily generate adverse impacts. Detailed air dispersion modeling may demonstrate that pollutant concentrations are below localized significant levels."[77] Thus, if the screening criteria would be exceeded, a project could implement mitigation measures to reduce localized emissions to below the screening criteria or conduct dispersion modeling using the USEPA AMS/EPA Regulatory Model (AERMOD) dispersion model with meteorological data from the closest SCAQMD monitoring station to refine the localized impact analysis.

### (5) CO Hotspots

Localized areas where ambient CO 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 are evaluated based on prior dispersion modeling of the four busiest intersections in the Air Basin that has been conducted by the SCAQMD for its CO Attainment Demonstration Plan in the AQMP.[78] The analysis compares the intersections with the greatest peak-hour

[77] South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, page 1-2.

[78] South Coast Air Quality Management District, 2012 Air Quality Management Plan.

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 are lower than the intersections modeled by the SCAQMD, in conjunction with lower background CO levels, would result in lower overall CO concentrations compared to the SCAQMD modeled values in its AQMP.

#### (6) Toxic Air Contaminants Impacts (Construction and Operation)

The greatest potential for construction TAC emissions would be associated with DPM emissions associated from heavy-duty equipment during excavation and grading activities. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk-assessment methodology. Additionally, the SCAQMD CEQA guidance does not require a HRA for short-term construction emissions. Construction activities associated with the Project would be sporadic, transitory, and short-term in nature (approximately 48 months). Thus, construction of the Project would not result in a substantial, long-term (i.e., 70-year) source of TAC emissions. Nonetheless, a qualitative assessment of TAC emissions associated with short-term construction TAC emissions is provided in the analysis section below.

During long-term operations, TACs could be emitted as part of periodic maintenance operations, period testing and maintenance of the emergency generator, restaurant charbroiling, cleaning, painting, etc., and from periodic visits from delivery trucks and service vehicles. However, these uses are expected to be occasional and result in minimal exposure to off-site sensitive receptors. As the Project consists of residential, and commercial/restaurant uses, the Project would not include sources of substantial TAC emissions identified by the SCAQMD or CARB siting recommendations.[79,80] Thus, a qualitative analysis is appropriate for operational emissions.

## b) Project Design Features

The following Project Design Features (PDFs) are applicable to the Project.

**PDF-AQ-1: Green Building Features:** The Project will be designed to achieve the equivalent of the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) Silver Certification level for new buildings. The Project will demonstrate

79 South Coast Air Quality Management District, Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning, 2005, Table 2-3, http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4. Accessed December 2018.

80 California Air Resources Board, Air Quality and Land Use Handbook: A Community Health Perspective, Table 1-1.

compliance with the LEED Silver Certification or equivalent by providing architectural and engineering documentation, building energy modeling simulations, and other supporting evidence consistent with USGBC accepted documentation standards. Pre-construction documentation that indicates the Project is designed to achieve the number of points required for LEED Silver Certification will be provided to the City prior to building permit issuance. Post-construction documentation that indicates the Project operates within the expected parameters to achieve the number of points required for LEED Silver Certification will be provided to the City after completion of LEED Silver Certification commissioning activities.

**PDF-AQ-2: Electric Vehicle Parking Features:** The Project will designate a minimum of ten (10) percent of the Code-required on-site nonresidential parking for carpool and/or alternative-fueled vehicles. The Project will ensure that at least twenty (20) percent of the total code-required parking spaces provided for all types of parking facilities are capable of supporting future electric vehicle supply equipment (EVSE), with 5 percent of the Code-required spaces further improved with electric vehicle charging stations. Plans will indicate the proposed type and location(s) of EVSE and also include raceway method(s), wiring schematics and electrical calculations to verify that the electrical system has sufficient capacity to simultaneously charge all electric vehicles at all designated EV charging locations at their full rated amperage. Plan design will be based upon Level 2 or greater EVSE at its maximum operating capacity. Only raceways and related components are required to be installed at the time of construction. When the application of the 20 percent results in a fractional space, the Applicant will round up to the next whole number. A label stating “EV CAPABLE” will be posted in a conspicuous place at the service panel or subpanel and next to the raceway termination point.

## c) Thresholds of Significance

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

***a) Conflict with or obstruct implementation of the applicable air quality plan;***

***b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;***

***c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors);***

***d) Expose sensitive receptors to substantial pollutant concentrations; or***

***e) Create objectionable odors affecting a substantial number of people.***

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

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

**Construction**

*a) 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.

*b) 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.

*c) 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.

*d) 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 also evaluated in accordance with the most recent criteria adopted by the SCAQMD in connection with its *CEQA Air Quality Handbook, Air*

*Quality Analysis Guidance Handbook,* and subsequent SCAQMD guidance as discussed below.[81]

*(a) Regional Emissions*

The SCAQMD has established regional numerical emission indicators of significance for construction and operational activities. The numerical emission indicators are based on the recognition that the Air Basin is a distinct geographic area with a critical air pollution problem for which ambient air quality standards have been promulgated to protect public health.[82] Given that construction impacts are temporary and limited to the construction phase, the SCAQMD has established numerical indicators of significance specific to construction activity. Based on the indicators in the SCAQMD CEQA Air Quality Handbook,[83] the Project would potentially cause or contribute to an exceedance of an ambient air quality standard if Project construction or operation would generate regional emissions that would exceed the following:

- Construction:
  - 75 pounds a day for VOC
  - 100 pounds per day for NOX
  - 550 pounds per day for CO
  - 150 pounds per day for SO2
  - 150 pounds per day for PM10
  - 55 pounds per day for PM2.5
- Operation:
  - 55 pounds a day for VOC
  - 55 pounds per day for NOX
  - 550 pounds per day for CO

81 While the SCAQMD CEQA Air Quality Handbook contains numerical indicators of significance for lead, project construction and operation would not include sources of lead emissions and would not exceed the numerical indicators 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.

82 South Coast Air Quality Management District, CEQA Air Quality Handbook.

83 South Coast Air Quality Management District, Air Quality Significance Thresholds, 2015, http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2. Accessed December 2018.

- 150 pounds per day for SO2
- 150 pounds per day for PM10
- 55 pounds per day for PM2.5

*(b) Localized Emissions*

In addition to the regional numerical emission indicators of significance listed above, 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 NOX and/or CO during construction or operation are greater than the applicable localized significance thresholds, resulting in predicted ambient concentrations in the vicinity of the Project Site greater than the most stringent ambient air quality standards for NO2 and/or CO.[84]

- 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/m3 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/m3 over 24 hours (SCAQMD Rule 1303 allowable change in concentration).

The SCAQMD has established localized 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. The use of the localized screening criteria are conservative mass daily emission limits that would satisfy the concentration-based limits listed above. This analysis uses the localized screening criteria to evaluate impacts from localized emissions where applicable.

To evaluate potential impacts associated with mobile sources, this assessment evaluates the potential for the Project to cause the following condition to would occur at an intersection or roadway within one-quarter mile of a sensitive receptor:

84 South Coast Air Quality Management District, Final Localized Significance Threshold Methodology.

- 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.

Based on the criteria set forth by the SCAQMD, the Project would expose sensitive receptors to substantial concentrations of toxic air contaminants if any of the following would occur:[85]

- 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.

Per the 2006 L.A. CEQA Thresholds Guide, the determination of significance shall be made on a case-by-case basis, considering the following factors:

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

## d) Analysis of Project Impacts

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

The AQMP was adopted by the SCAQMD as a program to lead the Air Basin into compliance with several criteria pollutant standards and other federal requirements and relies on emissions forecasts based on demographic and economic growth projections provided by SCAG's Regional Transportation Plan/Sustainable Communities Strategy.[86] SCAG is charged by California law to prepare and approve "the portions of each AQMP relating to demographic projections and integrated regional land use, housing, employment, and transportation programs, measures and strategies."[87] Projects whose growth is included in the projections used in the formulation of the AQMP are considered to be consistent with the plan and not to interfere with its attainment.

85 South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993.
86 South Coast Air Quality Management District, 2016 Air Quality Management Plan, page 3-1.
87 South Coast Air Quality Management District, 2016 Air Quality Management Plan, page 4-42.

The SCAQMD recommends that, when determining whether a project is consistent with the current AQMP, a lead agency must assess whether the project would directly obstruct implementation of the plan and whether it is consistent with the demographic and economic assumptions (typically land use related, such as resultant employment or residential units) upon which the plan is based.[88] Projects would also be considered to be consistent with the AQMP, in that the Project would be consistent with appropriate control strategies set forth in the AQMP for achieving its emission reduction goals and the Project is consistent with the demographic and economic assumptions upon which the plan is based. The analysis below is organized by discussing the Project's construction and operational consistency with control strategies and growth projections.

### (1) Construction

#### *(a) Control Strategies*

During its construction phase, the Project would ensure compliance with CARB 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 other construction emissions. As described further below, the Project would result in a short-term and temporary significant impact with respect to regional $NO_X$ emissions during construction, even after implementation of feasible mitigation measures. However, the Project would comply with fleet rules to reduce on-road truck emissions (i.e., 13 CCR, Section 2025 [CARB Truck and Bus regulation]) and the impact would be limited to up to two days each during the two continuous concrete pouring foundation phases. As discussed under Methodology, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the Air Quality Management Plan would not jeopardize attainment of the air quality levels identified in the Air Quality Management Plan, even if they exceed the SCAQMD's numeric indicators. The short-term and temporary impact would not conflict with the SCAQMD's long-term plans to achieve the ambient air quality standards. Compliance with these measures and requirements described earlier in the paragraph would be consistent with and meets or exceeds the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

#### *(b) Growth Projections*

The Project would generate short-term construction jobs, resulting in an increase in short-term employment compared to existing conditions. Construction workers typically travel amongst construction sites as individual projects are completed within a particular area and are not typically brought from other areas to work on developments such as the Project. Moreover, being relatively small in number and

88 South Coast Air Quality Management District, Air Quality Analysis Handbook.

temporary in nature, construction jobs under the Project would not conflict with the long-term employment projections upon which the AQMP is based.

## (2) Operations

### *(a) Control Strategies and Policy Consistency*

The Project's location, design, and proposed land uses would be consistent with the AQMP. The AQMP includes transportation control measures that are intended to reduce regional mobile source emissions.[89] While the majority of the measures are implemented by cities, counties, and other regional agencies such as SCAG and SCAQMD, the Project's location, design, and land uses would support measures related to reducing vehicle trips for residents, patrons, and employees by increasing residential and commercial density near public transit, as further discussed below.

The California Air Pollution Control Officers Association (CAPCOA) has provided guidance for mitigating or reducing emissions from land use development projects within its guidance document titled *Quantifying Greenhouse Gas Mitigation Measures*.[90] The land use characteristics listed below are consistent with the CAPCOA guidance document, and would reduce vehicle trips to and from the Project Site and vehicle trip distances and would achieve a reduction in transportation-related air pollutant and GHG emissions.

- **Increased Density:** Increased density, measured in terms of persons, jobs, and/or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies such as enhanced transit services. This characteristic corresponds to CAPCOA guidance strategy LUT-1.[91] According to CAPCOA, the reduction in VMT from this characteristic applies to urban and suburban settings for residential, retail, office, industrial, and mixed-use projects. The Project is located in an urban infill[92] location and is mixed-use; therefore, this characteristic applies to the

89 Through capital improvement programs, local governments 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.

90 California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, 2010, http://capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf. Accessed December 2018.

91 California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, pages 155-158.

92 California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, pages 59-60. The project area meets the characteristics for an urban setting with respect to typical building heights of 6 stories or much higher, grid street pattern, minimal setbacks, constrained parking, high parking prices, high quality rail service (i.e., Metro Red and Purple Lines at the Grand Park/Civic Center Station), location relative to regional cores (5 miles

Project. The Project would increase the Project Site density to approximately 305 dwelling units per acre and would provide approximately 425 jobs per acre (refer to Section IV.J, *Population and Housing*, of this Draft EIR, which provides employment data used to estimate the number of jobs per acre).[93]

- **Location Efficiency:** Location efficiency describes the location of a project relative to the type of urban landscape such as an urban area, compact infill, or suburban center. This measure is not intended as a separate strategy but rather serves as a "cap" for all land use/location strategies. This characteristic corresponds to CAPCOA guidance strategy LUT-2.[94] According to CAPCOA, the reduction in VMT from this characteristic applies to urban and suburban settings for residential, retail, office, industrial, and mixed-use projects. The Project is located in an urban infill location and is mixed-use; therefore, this characteristic applies to the Project. According to the CAPCOA guidance, factors that contribute to VMT reductions under this characteristic include the geographic location of the Project within the region. The Project Site represents an urban infill location within Downtown Los Angeles. The Project Site is served by existing public transportation located within a quarter-mile. The Project Site is within an active urban center with many existing off-site commercial, entertainment, hotel, and residential buildings. The location efficiency of the Project Site would reduce vehicle trips and VMT compared to the statewide and South Coast Air Basin average and would result in corresponding reductions in transportation-related emissions.[95]

- **Increased Land Use Diversity and Mixed-Uses:** Locating different types of land uses near one another can decrease VMT since trips between land use types are shorter and could be accommodated by alternative modes of transportation, such as public transit, bicycles, and walking. This characteristic

or less) and jobs/housing balance (the Central City Community Plan Area has an existing jobs/housing ratio of approximately 7.3 for year 2017).

93 Based on employment density factors in the Los Angeles Unified School District, 2016 Developer Fee Justification Study, March 2017.

94 California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, pages 159-161.

95 CalEEMod, by default, assumes that trip distances in the South Coast Air Basin are slightly longer than the statewide average. This is due to the fact that commute patterns in the South Coast Air Basin involve a substantial portion of the population commuting relatively far distances, which is documented in the Southern California Association of Governments 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS). The 2016 RTP/SCS shows that, even under future Plan conditions, upwards of 50 percent of all work trips would be 10 miles or longer (SCAG, Performance Measures Appendix, page 13, 2016). The 2016 RTP/SCS does not specify the current percentage of work trips greater than 10 miles in the region, but it can be assumed that the percentage is currently greater than 50 percent since the goal of the RTP/SCS is to reduce overall VMT in the region. It is thus reasonable to assume that the trip distances in South Coast Air Basin are analogous to the statewide average given that the default model trip distances in the South Coast Air Basin are slightly longer but still generally similar to the statewide average. Therefore, projects could achieve similar levels of VMT reduction (65 percent in an urban area, 30 percent in a compact infill area, or 10 percent for a suburban center) compared to the South Coast Air Basin average.

corresponds to CAPCOA guidance strategy LUT-3.[96] According to CAPCOA, the reduction in VMT from this characteristic applies to urban and suburban settings (also potentially for rural master-planned communities) for mixed-use projects. The Project is located in an urban infill location and is mixed-use; therefore, this characteristic applies to the Project. According to the CAPCOA guidance, factors that contribute to VMT reductions under this characteristic include the percentage of each land use type in the Project. The Project would co-locate multi-family residences, offices, retail, and restaurant land uses in close proximity to existing off-site commercial and residential uses, as well as major transit facilities. The increases in land use diversity and mix of uses on the Project Site, as well as proximity to transit, would reduce vehicle trips and VMT by encouraging walking and non-automotive forms of transportation.

- **Increased Destination Accessibility:** This characteristic corresponds to CAPCOA guidance strategy LUT-4.[97] According to CAPCOA, the reduction in VMT from this characteristic applies to urban and suburban settings for residential, retail, office, industrial, and mixed-use projects. The Project is located in an urban infill location and is mixed-use, including residential, commercial, retail, and restaurant land uses; therefore, this characteristic applies to the Project. According to the CAPCOA guidance, factors that contribute to VMT reductions under this characteristic include the distance to Downtown Los Angeles and Hollywood, which are major job centers. The Project would be located in an area that offers access to multiple other nearby destinations including restaurant, bar, office, retail, entertainment, and residential uses. The Project Site is also located near other job centers in the region and within Downtown Los Angeles. The access to multiple destinations in close proximity to the Project Site would reduce vehicle trips and VMT compared to the statewide and South Coast Air Basin average, encourage walking and non-automotive forms of transportation, and would result in corresponding reductions in transportation-related emissions.

- **Increased Transit Accessibility:** Locating a project with high density near transit facilitates encourages the use of transit by people traveling to or from a project site. This characteristic corresponds to CAPCOA guidance strategy LUT-5.[98] According to CAPCOA, the reduction in VMT from this characteristic applies to urban and suburban settings (also potentially for rural settings adjacent to a commuter rail station with convenient access to a major employment center) for residential, retail, office, industrial, and mixed-use projects. The Project is located in an urban infill location and is mixed-use; therefore, this characteristic applies to the Project. According to the CAPCOA guidance, factors that contribute to VMT reductions under this characteristic

96 California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, pages 162-166.
97 California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, pages 167-170.
98 California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, pages 171-175.

include the distance to transit stations near the Project. The Project would be located within a quarter-mile of public transportation, including the Metro Civic Center/Grand Park Station that serves two subway lines, the Red Line and Purple Line and the future 2nd and Broadway Metro Station being constructed as part of the Regional Connector Project. The Red Line connects the Civic Center to Union Station, Hollywood, and North Hollywood. The Red and Purple Lines provide further connection to three light rail transit lines serving downtown Los Angeles: the Blue and Expo Lines at the 7th Street/Metro Center Station and the Gold Line at Union Station. In addition, as part of the Metro Regional Connector Project, the future Historic Broadway Station would allow passengers to transfer to Blue, Expo, Red and Purple Lines, bypassing Union Station. The Project is also within a quarter mile of many Metro bus routes (e.g., local 2, 4, 10, 28, 81, 83, 90, 91, 94, and 302, which run northbound along Hill and Lines 30, 33, 40, 45, 68, 83, 84, 92, and 330, which run southbound along Spring Street), LADOT's Dash Downtown "D" line, and Metro's Rapid Lines 728, 733, 745, and 770. The Project would provide access to on-site uses from existing pedestrian pathways. The Project would also provide parking for bicycles on-site to encourage utilization of alternative modes of transportation. The increased transit accessibility would reduce vehicle trips and VMT versus the statewide and South Coast Air Basin average, encourage walking and non-automotive forms of transportation, and would result in corresponding reductions in transportation-related emissions.

- **Improve Design of Development:** Improved street network characteristics within a neighborhood enhances walkability and connectivity. Characteristics include street accessibility usually measured in terms of number of intersections (e.g., 4-way intersections) per square mile. This characteristic corresponds to CAPCOA guidance strategy LUT-9.[99] According to CAPCOA, the reduction in VMT from this characteristic applies to urban and suburban settings for residential, retail, office, industrial, and mixed-use projects. The Project is located in an urban infill location and is mixed-use; therefore, this characteristic applies to the Project. The Project would provide an open-to-the sky pedestrian paseo (Paseo) leading from W. 1st Street to W. 2nd Street that would bisect the block between the new towers and the rehabilitated Times, Plant, and Mirror Buildings, and would provide a visual connection to First and Broadway Civic Center Park. The Project would also provide new street trees along W. 1st Street, S. Broadway, S. Spring Street, and W. 2nd Street. The Project would be located in a highly street-accessible area with over 100 four-way intersections within a 1-mile radius of the Project Site (see Appendix C-3 for additional details), which exceeds the standard intersection density assumed in baseline VMT modeling. The Project's addition of the Paseo and new street trees, along with the high intersection density would reduce vehicle

99 California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, pages 182-185. This measure is incorrectly labeled as LUT-8 in the document; however, it is the 9th measure in the land use transportation category and thus should be labeled as LUT-9.

trips and VMT versus the statewide and South Coast Air Basin average, encourage walking and non-automotive forms of transportation, and would result in corresponding reductions in transportation-related emissions.

- **Provide Pedestrian Network Improvements:** Providing pedestrian access that minimizes barriers and links a project site with existing or planned external streets encourages people to walk instead of drive. This characteristic corresponds to CAPCOA guidance strategy SDT-1.[100] According to CAPCOA, the reduction in VMT from this characteristic applies to urban, suburban, and rural settings for residential, retail, office, industrial, and mixed-use projects. The Project is located in an urban infill location and is mixed-use; therefore, this characteristic applies to the Project. According to the CAPCOA guidance, factors that contribute to VMT reductions under this characteristic include pedestrian access connectivity within the Project and to/from off-site destinations. The walkability of existing facilities is based in part on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile. These attributes are quantified by WalkScore.com and assigned a score out of 100 points. With the various commercial businesses and recreational and entertainment facilities adjacent to the Project Site and proximity to public transit, the walkability of rating of the Project Site area is approximately 91 points;[101] this compares to the Citywide score of 67 points. As discussed in Chapter 2, *Project Description*, the Project would provide a full retail and service base at street level along all four edges of the Podium, including 1st Street, Broadway, 2nd Street, and the Paseo providing an interconnected streetscape environment connecting 1st Street and 2nd Street with landscaping that buffers the scale and height of the new buildings and enhances the pedestrian experience. The Project would strengthen existing and new pedestrian connections and streetscapes through the use of landscaping and the addition of new trees along the street and Paseo, street furniture, lighting and signage. The Project would provide an internal pedestrian network for Project visitors and employees that links to the existing off-site pedestrian network including existing off-site sidewalks, and would therefore result in some reduction in VMT and associated transportation-related emissions.

The Project Transportation Impact Analysis already accounts for trip reductions from Increased Land Use Diversity and Mixed-Uses (LUT-3) and Increased Transit Accessibility (LUT-5). Therefore, VMT reductions for these characteristics were not included separate from the Transportation Impact Analysis to avoid double counting. Reductions in VMT were calculated for characteristics not included in the Transportation Impact Analysis, which include Increased Density (LUT-1),

[100] California Air Pollution Control Officers Association, Quantifying Greenhouse Gas Mitigation Measures, pages 186-189.

[101] WalkScore.com (www.walkscore.com) rates the Project Site area (202 W. 1st Street, Los Angeles, CA 90012) with a score of 91 of 100 possible points (scores accessed on November 8, 2017). Walk Score calculates the walkability of specific addresses by taking into account the ease of living in the neighborhood with a reduced reliance on automobile travel.

Location Efficiency (LUT-2), and Increased Destination Accessibility (LUT-4), Improved Design of Development (LUT-9), and Provide Pedestrian Network Improvements (SDT-1). The Project's VMT is reduced by approximately 29.1 percent in addition to the Transportation Impact Analysis trip reductions as a result of those characteristics that are not already reflected in the Transportation Impact Analysis, following the calculation protocol from the CAPCOA guidance.

The Project is proposed on an infill site. The Project would locate residential and retail uses in a Transit Oriented Development (TOD) that would be located within a quarter-mile of multiple public transportation options, including the Metro Civic Center/Grand Park Station that serves two subway lines, the Red Line and Purple Line, and the future 2nd and Broadway Metro Station being constructed as part of the Regional Connector. Therefore, the Project meets the criteria of the State as a Transportation Priority Area (TPA). The Red Line connects the Civic Center to Union Station, Hollywood, and North Hollywood. The Red and Purple Lines provide further connection to three light rail transit lines serving downtown Los Angeles: the Blue and Expo Lines at the 7th Street/Metro Center Station and the Gold Line at Union Station. As discussed above, the Project is also within a quarter mile of many Metro bus routes (e.g., local 2, 4, 10, 28, 81, 83, 90, 91, 94, and 302, which run northbound along Hill and Lines 30, 33, 40, 45, 68, 83, 84, 92, and 330, which run southbound along Spring Street), LADOT's Dash Downtown "D" line, and Metro's Rapid Lines 728, 733, 745, and 770. As discussed above, the Project has also been designed to incorporate features to attract pedestrians and to promote non-motorized transportation modes such as walking and biking. Further, its land use characteristics (including increased density, location efficiency, increased land use diversity and mixed-uses, etc.), discussed above, many of which overlap the strategies in the AQMP, have also been shown by CAPCOA to reduce vehicle trips and VMT, and corresponding vehicle emissions; the Project's incorporation of these features further demonstrates its consistency with the AQMP by reducing vehicle trips, VMT and other associated emissions.

*(b) Growth Projections*

The Project is anticipated to be operational in 2023. As discussed in Section IV.J, *Population and Housing*, of this Draft EIR, the Project would result in population growth that would be consistent with SCAG's growth projections, which are incorporated in the SCAQMD AQMP. The Project's growth is consistent with SCAG RTP/SCS goals and objectives under SB 375 to implement "smart growth" and state efforts to meet goals in the reduction of GHG. The SCAG RTP/SCS seeks improved "mobility and accessibility… to reach desired destinations with relative ease and within a reasonable time, using reasonably available transportation choices."[102] The SCAG 2016 RTP/SCS, of which the growth projections are incorporated into the 2016 AQMP, seeks to implement "strategies

[102] Southern California Association of Governments, 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy, page 160.

focused on compact infill development, superior placemaking (the process of creating public spaces that are appealing), and expanded housing and transportation choices."[103] The Project's design and proximity to public transit, including the Metro Civic Center/Grand Park Station, and the future 2nd and Broadway Station as part of the Metro Regional Connector Project would allow the Project's projected growth to be accommodated by the existing and under-construction transportation resources and decreases the time and cost of traveling as well as vehicular demand and associated pollutants. The Project would locate residential uses in close proximity to job centers in Los Angeles where people can live and work and have access to convenient modes of transportation in a manner that provides options for reducing reliance on automobiles. The Project's increase in population, housing, and employment are therefore consistent with SCAG's RTP/SCS goals and would be consistent with the growth projections for the period between 2023 and 2040 for the City as a whole (refer to Section IV.J, *Population and Housing*, of this Draft EIR). The Project would be consistent with the growth projections as contained in SCAG's RTP/SCS, which form the basis of the growth projections in the 2016 AQMP.

*(c) General Plan Air Quality Element*

The City's General Plan includes Citywide policies regarding a range of City resources and services, some of which are relevant to air quality. **Table IV.B-5,** *Comparison of the Project to Applicable Air Quality Policies of the General Plan*, evaluates the consistency of the Project with the applicable air quality goals, objectives, and policies in the Air Quality Element of the General Plan. As discussed below, the Project would not conflict with or be inconsistent with applicable air quality policies of the General Plan.

**TABLE IV.B-5**
**COMPARISON OF THE PROJECT TO APPLICABLE AIR QUALITY POLICIES OF THE GENERAL PLAN**

| Recommendation | Analysis of Project Consistency |
|---|---|
| **Air Quality Element** | |
| **Goal 1:** Good air quality and mobility in an environment of continued population growth and healthy economic structure. | **Consistent.** The Project would be consistent with SCAG RTP/SCS goals and objectives under SB 375 to implement "smart growth." The Project would provide residential uses and employment opportunities in close proximity to existing job centers in downtown Los Angeles where people can live and work and have access to modes of transportation that reduce reliance on automobiles and minimize associated air pollutant emissions. The Project would meet the applicable requirements of the State of California Green Building |

[103] Southern California Association of Governments, 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy, page 14.

| Recommendation | Analysis of Project Consistency |
|---|---|
| | Standards Code and the City of Los Angeles Green Building Code. In addition, the Project would incorporate PDFs that would go beyond California Green Building Standards Code and the City of Los Angeles Green Building Code (refer to subsection IV.B.3.b, *Project Design Features*, above) The Project would also reduce VMT as a result of its urban infill location, with access to public transportation within a quarter-mile of the Project Site, and its proximity to job centers, retail, recreational amenities and entertainment. As a result, the Project would support objectives to achieve good air quality, mobility and a healthy economic structure. |
| **Objective 1.1:** It is the objective of the City of Los Angeles to reduce air pollutants consistent with the Regional Air Quality Management Plan, increase traffic mobility, and sustain economic growth citywide. | **Consistent.** The Project's land use characteristics and Project Design Features would reduce emissions associated with energy and transportation. As discussed under Threshold a), the Project would be consistent with the SCAG growth projections that are used in preparing the AQMP. The Project would occupy a location that is highly accessible by regional and local bus lines and Metro rail. As such, the Project would be supportive of the Transportation Control Measures in the AQMP related to reducing vehicle trips for employees, visitors and residents. The Project would provide infill residential uses, which would allow people to live near work and recreational amenities. |
| **Objective 1.3:** It is the objective of the City of Los Angeles to reduce particulate air pollutants emanating from unpaved areas, parking lots, and construction sites. | **Consistent.** The Project would incorporate measures that would reduce particulate air pollutants from unpaved areas, parking lots, and construction sites. The Project would implement required control measures for construction-related fugitive dust pursuant to SCAQMD Rule 403. The Project would also comply with the applicable provisions of the CARB Air Toxics Control Measure regarding idling limitations for diesel trucks reducing exhaust DPM emissions. Project construction would comply with the applicable provisions of the CARB In-Use Off-Road Diesel Vehicle Regulation, which aims to reduce emissions through the installation of DPM filters and encouraging the retirement, replacement, or repower of older, dirtier engines with newer emission-controlled models. Project construction would also hat comply with the applicable provisions of the CARB Truck and Bus regulation to reduce PM and $NO_X$ emissions from existing diesel trucks. The Project would also implement a Mitigation Measure requiring the use of off-road construction equipment that meets the stringent Tier 4 emissions standards. The Project incorporates landscaped open spaces and trees. |
| **Policy 1.3.1:** Minimize particulate emissions from construction sites. | **Consistent.** The Project would incorporate measures that would reduce particulate air pollutants from construction activity as described above under Objective 1.3. |

| Recommendation | Analysis of Project Consistency |
|---|---|
| **Policy 1.3.2:** Minimize particulate emissions from unpaved roads and parking lots associated with vehicular traffic. | **Consistent.** The Project would implement required control measures for construction-related fugitive dust pursuant to SCAQMD Rule 403, which would minimize particulate emissions from unpaved roads and parking lots associated with construction-related vehicular traffic. |
| **Goal 2:** Less reliance on single-occupant vehicles with fewer commute and non-work trips. | **Consistent.** The Project's land use characteristics (refer to subsection IV.B.3.d)(2)(a), *Control Strategies and Policy Consistency*, above) would reduce trips and VMT due to its urban infill location, with nearby access to public transportation within a quarter-mile of the Project site and location in an area with access to multiple other destinations, including job centers, and retail uses. |
| **Objective 2.1:** It is the objective of the City of Los Angeles to reduce work trips as a step towards attaining trip reduction objectives necessary to achieve regional air quality goals. | **Consistent.** The Project would be located within a quarter-mile of existing and proposed public transportation, including existing regional and local Metro bus lines and Metro rail. The Project would locate infill residential, office, retail, and restaurant land uses in an area with access to multiple other destinations, including job centers, and retail uses. These features would reduce trips and encourage residents to utilize alternative modes of transportation. |
| **Policy 2.1.1:** Utilize compressed work weeks and flextime, telecommuting, carpooling, vanpooling, public transit, and improve walking/bicycling related facilities in order to reduce vehicle trips and/or VMT as an employer and encourage the private sector to do the same to reduce work trips and traffic congestion. | **Consistent.** The Project would be located within a quarter-mile of existing and future public transportation, provide access and pedestrian links to on-site uses from existing pedestrian pathways. The Project would include a pedestrian paseo leading from W. 1st Street to W. 2nd Street that would bisect the block between the new towers and the rehabilitated Times, Plant, and Mirror Buildings, and would provide a pedestrian connection towards First and Broadway Civic Center Park. The Project would provide 1,274 bicycle parking spaces. These features would reduce work trips and encourage employees to utilize alternative modes of transportation including public transportation, walking, and bicycling. The Project would exceed California Green Building Standards Code and the City of Los Angeles Green Building Code standards by designating a minimum of 10 percent of on-site non-residential parking for carpool and/or alternative-fueled vehicles. In addition, the Project design will provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations into 20 percent of the parking spaces, with 5 percent of the Code-required spaces further improved with electric vehicle charging stations |
| **Objective 2.2:** It is the objective of the City of Los Angeles to increase vehicle occupancy for non-work trips by creating disincentives for single | **Consistent.** The Project would exceed California Green Building Standards Code and the City of Los Angeles Green Building Code standards by designating a minimum of 10 percent of on-site non-residential |

| Recommendation | Analysis of Project Consistency |
|---|---|
| passenger vehicles, and incentives for high occupancy vehicles. | parking for carpool and/or alternative-fueled vehicles. In addition, the Project design will provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations into 20 percent of the total code-required parking spaces, with 5 percent of the Code-required spaces further improved with electric vehicle charging stations. In addition, the Project's location would encourage non-automotive transportation to and from the Project Site. As discussed previously, the Project would be located within a quarter-mile of existing and proposed public transportation, including existing regional and local Metro bus lines and Metro rail, and would provide bicycle parking and pedestrian pathways for building residents, employees, and visitors. |
| **Policy 2.2.1:** Discourage single-occupant vehicle use through a variety of measures such as market incentive strategies, mode-shift incentives, trip reduction plans and ridesharing subsidies. | **Consistent.** The Project's location would encourage non-automotive transportation to and from the Project Site. As discussed previously, the Project would be located within a quarter-mile of existing and proposed public transportation, including existing regional and local Metro bus lines and Metro rail, and would provide bicycle parking and pedestrian pathways for building residents, employees, and visitors. |
| **Policy 2.2.2:** Encourage multi-occupant vehicle travel and discourage single-occupant vehicle travel by instituting parking management practices. | **Consistent.** In accordance with mitigation measure MM-TRAF-1, the Applicant would implement a comprehensive Travel Demand Management (TDM) Program to promote non-automobile travel and reduce the use of single-occupant vehicle trips during commute hours (refer to Section IV.P, *Transportation and Traffic*, of this Draft EIR). The program could include such strategies as promoting Commute Trip Reduction (CTR) through information sharing and marketing for new employee orientations of trip reductions; providing unbundled parking for residential units; providing a program for discount transit passes for residents/employees; facilitating an on-site car- share program; providing priority locations for carpools and vanpools; accommodating flexible/alternative work schedules and telecommuting programs; including Project design elements to ensure a bicycle, transit and pedestrian friendly environment, providing bicycle parking in conformance with Section 12.21 A.16 of the LAMC and associated bicycle facilities; providing a Covenant and Agreement to ensure that the TDM program will be maintained; making a one-time financial contribution of $100,000 to the City of Los Angeles Department of Transportation to be used in in the implementation of the Mobility Hub in the general area of the Project; making a one-time financial contribution of $100,000 to the City's Bicycle Plan Trust Fund to implement bicycle improvements within the area of the proposed Project and contributing a one-time fixed fee |

| Recommendation | Analysis of Project Consistency |
|---|---|
| | to the City's Bicycle Plan Trust Fund to implement bicycle improvements within the area of the proposed Project. |
| **Goal 4:** Minimal impact of existing land use patterns and future land use development on air quality by addressing the relationship between land use, transportation, and air quality. | **Consistent.** The Project's characteristics would reduce trips and VMT due to its infill location, access to public transportation within a quarter-mile of the Project site, close proximity to multiple other destinations including job centers and retail uses, its mix of residential, retail, restaurant and office uses, and is pedestrian and bicycle-friendly. |
| **Objective 4.1:** It is the objective of the City of Los Angeles to include the regional attainment of ambient air quality standards as a primary consideration in land use planning. | **Consistent.** The Project analysis of potential air quality impacts relies upon the numeric indicators of significance adopted by the SCAQMD, which considers attainment of the ambient air quality standards. The Project also incorporates land use characteristics that would reduce air pollutant emissions (refer to subsection IV.B.3.d)(2)(a), *Control Strategies and Policy Consistency*, above). The Project impacts would be less than significant and would not cause or contribute to an exceedance of the ambient air quality standards, with the exception of $NO_X$ emissions during the two foundation concrete pouring activities lasting up to approximately two days each during construction, which would require mitigation and be significant and unavoidable on a temporary basis. |
| **Policy 4.1.2:** Ensure that project level review and approval of land use development remain at the local level. | **Consistent.** The Project environmental review would occur at the local level. |
| **Objective 4.2:** It is the objective of the City of Los Angeles to reduce vehicle trips and VMT associated with land use patterns. | **Consistent.** The Project's location and land use characteristics would reduce trips and VMT due to its urban infill location, access to public transportation within a quarter-mile of the Project site, and proximity to existing employment and commercial destinations, as would its mix of residential, office, retail, and restaurant uses on-site, and pedestrian- and bicycle-friendly features. |
| **Policy 4.2.2:** Improve accessibility for the City's residents to places of employment, shopping centers and other establishments. | **Consistent.** The Project would provide 1,127 new residential units in an infill location with access to public transportation within a quarter-mile of the Project site. The Project would also be located within a quarter-mile of off-site commercial, retail, restaurant, entertainment and other residential uses. |
| **Policy 4.2.3:** Ensure that new development is compatible with pedestrians, bicycles, transit, and alternative fuel vehicles. | **Consistent.** The Project is proposed on an infill location and would incorporate pedestrian pathways that would connect to the existing sidewalk network through the Project provided pedestrian paseo leading from W. 1st Street to W. 2nd Street that would bisect the block between the new towers and the rehabilitated Times, Plant, and Mirror Buildings, and would provide a pedestrian connection towards First and Broadway |

| Recommendation | Analysis of Project Consistency |
|---|---|
| | Civic Center Park and would be within a quarter-mile of existing and future public transportation. The Project would also designate a code-required minimum of 10 percent of on-site non-residential parking for carpool and/or alternative-fueled vehicles, and the Project design will go beyond the City code and provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for up to 20 percent of the code-required parking spaces, with 5 percent of the Code-required spaces further improved with electric vehicle charging stations. The Project would provide 1,274 bicycle parking spaces. In accordance with mitigation measure MM-TRAF-1, the Applicant would implement a comprehensive Travel Demand Management (TDM) Program to promote non-automobile travel and reduce the use of single-occupant vehicle trips through such strategies as promoting Commute Trip Reduction (CTR) through information sharing and marketing for new employee orientations of trip reductions; providing unbundled parking for residential units; providing a program for discount transit passes for residents/employees; facilitating an on-site car- share program; providing priority locations for carpools and vanpools; accommodating flexible/alternative work schedules and telecommuting programs; including Project design elements to ensure a bicycle, transit and pedestrian friendly environment, providing bicycle parking in conformance with Section 12.21 A.16 of the LAMC and associated bicycle facilities; providing a Covenant and Agreement to ensure that the TDM program will be maintained; making a one-time financial contribution of $100,000 to the City of Los Angeles Department of Transportation to be used in in the implementation of the Mobility Hub in the general area of the Project; making a one-time financial contribution of $100,000 to the City's Bicycle Plan Trust Fund to implement bicycle improvements within the area of the proposed Project and contributing a one-time fixed fee to the City's Bicycle Plan Trust Fund to implement bicycle improvements within the area of the proposed Project. |
| **Policy 4.2.4:** Require that air quality impacts be a consideration in the review and approval of all discretionary projects. | **Consistent.** The Project environmental review includes an analysis of air quality impacts. |
| **Policy 4.2.5:** Emphasize trip reduction, alternative transit and congestion management measures for discretionary projects. | **Consistent.** The Project is proposed on an infill site that would be located within a quarter-mile of existing and proposed public transportation, including existing regional and local Metro bus lines and Metro rail. The Project would provide 1,274 bicycle parking spaces. The Project would implement mitigation measure MM- |

| Recommendation | Analysis of Project Consistency |
|---|---|
| | TRAF-1, which requires the Applicant to implement a comprehensive Travel Demand Management (TDM) Program to promote non-auto travel and reduce the use of single-occupant vehicle trips (refer to Section IV.P, Transportation and Traffic, of this Draft EIR, for additional information). |
| **Goal 5:** Energy efficiency through land use and transportation planning, the use of renewable resources and less polluting fuels, and the implementation of conservation measures, including passive methods such as site orientation and tree planting. | **Consistent.** The Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code, the City of Los Angeles Green Building Code, and LEED Silver equivalence. The Project would incorporate sustainability measures and performance standards including implementing a construction waste management plan to divert all mixed construction and demolition debris to City certified construction and demolition waste processors, consistent with the Los Angeles City Council approved Council File 09-3029. The Project Site would include 3,550 square feet of ground-level paseo/plaza landscaped area including pedestrian scale trees. |
| **Objective 5.1:** It is the objective of the City of Los Angeles to increase energy efficiency of City facilities and private developments. | **Consistent.** As noted above, the Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code, the City of Los Angeles Green Building Code, and LEED Silver equivalence. |
| **Policy 5.1.2:** Effect a reduction in energy consumption and shift to non-polluting sources of energy in its buildings and operations. | **Consistent.** As noted above, the Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code, the City of Los Angeles Green Building Code, and LEED Silver equivalence. The Project would designate a minimum of 10 percent of on-site non-residential parking for carpool and/or alternative-fueled vehicles, and the Project design will provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations for up to 20 percent of the code-required parking spaces, with 5 percent of the Code-required spaces further improved with electric vehicle charging stations. |
| **Policy 5.1.4:** Reduce energy consumption and associated air emissions by encouraging waste reduction and recycling. | **Consistent.** The Project would implement a construction waste management plan to divert all mixed construction and demolition debris to City certified construction and demolition waste processors, consistent with the Los Angeles City Council approved Council File 09-3029. Municipal solid waste would be collected by haulers that comply with City and state waste diversion (specifically AB 1327 and AB 341) requirements, which may include mixed waste processing that yields diversion results comparable to source separation. |

| Recommendation | Analysis of Project Consistency |
|---|---|
| **Objective 5.3:** It is the objective of the City of Los Angeles to reduce the use of polluting fuels in stationary sources. | **Consistent.** As noted above, the Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code and the City of Los Angeles Green Building Code and LEED silver equivalence. |
| **Policy 5.3.1:** Support the development and use of equipment powered by electric or low-emitting fuels. | **Consistent.** As noted above, the Project would be designed and operated to meet the applicable requirements of the State of California Green Building Standards Code, the City of Los Angeles Green Building Code, and LEED Silver equivalence. The Project would also designate a minimum of 10 percent of on-site non-residential parking for carpool and/or alternative-fueled vehicles, and the Project design will provide for the installation of the conduit and panel capacity to accommodate future electric vehicle charging stations into 20 percent of the code-required parking spaces, with 5 percent of the Code-required spaces further improved with electric vehicle charging stations. |

SOURCE: ESA, 2018.

For all of these reasons, the Project would not conflict with or obstruct the implementation of the AQMP, and impacts would be less than significant.

***Threshold b) Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?***

### (1) Construction Emissions

Construction of the Project has the potential to create air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated from construction workers traveling to and from the Project Site. In addition, fugitive dust emissions would result from demolition and construction activities. During the finishing phase of a building, paving operations and the application of architectural coatings and other building materials would potentially release VOCs. The assessment of construction air quality impacts considers each of these potential sources. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust, prevailing weather conditions. Construction emissions were compared to SCAQMD prescribed daily regional numerical indicators of significance, as discussed above. If construction emissions were to exceed any of the applicable numerical indicators in the SCAQMD CEQA Air Quality Handbook, the Project would potentially cause or substantially contribute to an exceedance of an ambient air quality standard, thus resulting in an existing or projected air quality violation.

The maximum daily construction emissions for the Project were estimated for each construction phase. Some individual construction phases potentially overlap and the maximum daily emissions include these overlaps by combining the relevant construction phase emissions. The maximum daily emissions are predicted values for a representative worst-case day and do not represent the emissions that would occur for every day of construction. Detailed emissions calculations are provided in Appendix C-2 of Appendix C of this Draft EIR.

The results of the criteria pollutant emissions calculations for VOC, $NO_X$, CO, $SO_X$, PM10 and PM2.5 are presented in **Table IV.B-6,** *Estimated Maximum Unmitigated Regional Construction Emissions (Pounds Per Day)*. These calculations assume compliance with applicable dust control measures required to be implemented during each phase of construction, as required by SCAQMD Rule 403 (Control of Fugitive Dust). As shown in Table IV.B-6, construction-related daily emissions would potentially exceed the SCAQMD numeric indicators of significance for $NO_X$ only. All other emissions levels would be below the applicable numeric indicators. The $NO_X$ exceedance results primarily from on-site construction equipment, and on-road hauling and concrete truck emissions generated during truck travel and idling activities during various phases of construction. **Therefore, with respect to regional emissions from construction activities, $NO_X$ impacts would be potentially significant. Therefore, mitigation measures would be required and are further discussed below in subsection IV.B.3.f, *Mitigation Measures*. As discussed therein, with the implementation of mitigation measures, regional $NO_X$ emissions would be reduced substantially, but still above the daily emission threshold and be considered significant during the two continuous concrete pouring foundations phases, which are expected to last up to approximately two days each.**

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

| Source | VOC | $NO_X$ | CO | $SO_2$ | PM10[b] | PM2.5[b] |
|---|---|---|---|---|---|---|
| **Individual Phases** | | | | | | |
| Demolition | 11 | 112 | 78 | <1 | 11 | 6 |
| Site Preparation | 8 | 78 | 63 | <1 | 4 | 4 |
| Grading | 9 | 157 | 70 | <1 | 9 | 5 |
| Foundation (North Tower) | 21 | 560 | 142 | 1.4 | 36 | 13 |
| Foundation (South Tower) | 19 | 477 | 124 | 1.2 | 31 | 12 |
| Subterranean Parking Structure Construction | 21 | 164 | 144 | <1 | 22 | 10 |
| Podium Construction | 19 | 149 | 135 | <1 | 21 | 9 |
| Building Construction | 16 | 121 | 121 | <1 | 20 | 9 |
| Building Construction/Architectural Coating | 30 | 109 | 124 | <1 | 22 | 9 |
| Building Construction/Paving/Architectural Coating | 31 | 124 | 153 | <1 | 23 | 9 |
| Existing Building Renovations [c] | 3 | 24 | 21 | <1 | 3 | 2 |
| **Maximum Daily Emissions** | 34 | **584** | 174 | 1.5 | 39 | 15 |
| **SCAQMD Numeric Indicators** | **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-2 of Appendix C of this Draft EIR.
b Emissions include fugitive dust control measures consistent with SCAQMD Rule 403.
c Renovations of existing buildings could occur concurrently during any phase of construction of the new residential mixed-use towers, therefore the maximum daily emissions of the existing renovations were added to the maximum daily emissions of residential mixed-use tower maximum daily emissions to serve as a conservative maximum daily emission estimate.

SOURCE: ESA, 2018.

### (2) Operational Emissions

Operational criteria air pollutant emissions were assessed for mobile, area, energy (natural gas), and stationary sources. Operational criteria pollutant emissions were calculated for the Project for the full buildout year. The analysis used the daily trip generation rates for the Project provided in the Transportation Impact Analysis.[104] Operational emission estimates include compliance with the Title 24 (2016) building energy efficiency standards, CALGreen Code, and City of Los Angeles Green Building Code.[105] Physical and operational Project characteristics for which sufficient data is available to quantify the Project's building energy and resource consumption have been included in the quantitative analysis, and include the installation of energy efficient appliances, applicable SCAQMD rules regarding Project operations such as Rule 1138 – Control of Emissions from Restaurant Operations and Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines (see subsection IV.B.2.(3)(iii)), and building energy demand factors consistent with the Title 24 (2016) building energy efficiency standards, CALGreen Code, and City of Los Angeles Green Building Code. Detailed emissions calculations are provided in Appendix C-3 of Appendix C of this Draft EIR.

The results of the criteria pollutant emission calculations for VOC, $NO_X$, CO, $SO_X$, PM10 and PM2.5 are presented in **Table IV.B-7,** *Maximum Unmitigated Regional Operational Emissions*. The Project's operational-related daily emissions would potentially exceed the SCAQMD numeric indicators of significance for $NO_X$. All other emissions levels would be below the applicable numeric indicators. Therefore, with respect to regional emissions from operational activities, $NO_X$ impacts would be potentially significant. Mitigation measures would be required and are further discussed below in subsection IV.B.3.f, *Mitigation Measures*. Implementation of MM AQ-3, MM AQ-4 and MM AQ-5 would reduce regional $NO_X$ emissions from operations by scheduling routine maintenance of emergency generators so that only one emergency generator is maintained on any given day. **With implementation of MM AQ-3, MM AQ-4 and MM AQ-5, the regional $NO_X$ emissions from operations would be reduced to below the regional numeric indicator and impacts related to regional $NO_X$ operational emissions would be mitigated to less than significant.**

[104] Fehr & Peers, Times Mirror Square Project Transportation Impact Analysis.

[105] Operational emissions calculations were made based on available client information in relation to achieving LEED Silver for the Project, including requirements fulfilled by meeting Title 24 (2016) building energy efficiency standards, CALGreen Code, and City of Los Angeles Green Building Code. Not all compliance measures to achieve points are necessary for LEED Silver certification/ meeting Title 24 (2016) building energy efficiency standards, CALGreen Code, and City of Los Angeles Green Building Code and result in quantifiable emissions reductions. Those compliance measures to achieve points that led to emissions reductions were included in the Operational Emissions calculations, for additional details see Appendix C-3.

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

| Source | VOC | $NO_X$ | CO | $SO_2$ | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| **Existing** | | | | | | |
| Area (Coating, Consumer Products, Landscaping) | 8 | <1 | <1 | 0 | 1 | 1 |
| Energy (Natural Gas) | <1 | 2 | 1 | <1 | <1 | <1 |
| Mobile | 8 | 35 | 97 | <1 | 18 | 5 |
| Total | 16 | 37 | 98 | <1 | 18 | 5 |
| **Proposed Project** | | | | | | |
| Area (Coating, Consumer Products, Landscaping) | 36 | 1 | 93 | <1 | 1 | 1 |
| Stationary (Charbroilers) | <1 | - | - | - | 2 | 1 |
| Stationary (Cooling Towers) | - | - | - | - | <1 | <1 |
| Stationary (Emergency Generators) | 1 | 13 | 12 | <1 | <1 | <1 |
| Energy | 1 | 9 | 6 | <1 | 1 | 1 |
| Mobile | 17 | 70 | 193 | 1 | 62 | 17 |
| Total | 55 | 93 | 305 | 1 | 64 | 19 |
| **Net Increase** | | | | | | |
| Area (Coating, Consumer Products, Landscaping) | 29 | 1 | 93 | <1 | 1 | 1 |
| Stationary (Charbroilers) | <1 | - | - | - | 2 | 1 |
| Stationary (Cooling Towers) | - | - | - | - | <1 | <1 |
| Stationary (Emergency Generators) | 1 | 13 | 12 | <1 | <1 | <1 |
| Energy | 1 | 7 | 5 | <1 | <1 | <1 |
| Mobile | 8 | 35 | 97 | <1 | 44 | 12 |
| **Net Total Regional Emissions** | **39** | **56** | **207** | **1** | **47** | **14** |
| **SCAQMD Numeric Indicators** | **55** | **55** | **550** | **150** | **150** | **55** |
| Exceeds Thresholds? | No | **Yes** | No | No | No | No |

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C-3 of Appendix C of this Draft EIR.

SOURCE: ESA, 2018.

***Threshold c) 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***

The Project would result in the emission of criteria pollutants for which the Project area is in non-attainment during both construction and operation. The Air Basin is currently in non-attainment for ozone (NAAQS and CAAQS), PM10 (CAAQS), and PM2.5 (NAAQS and CAAQS).

### (1) Construction Emissions

According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. As shown in Table IV.B-6, maximum daily emissions from construction of the Project would exceed the applicable SCAQMD regional numerical indicator of significance for $NO_X$. The Project would therefore have the potential to result in a cumulatively considerable net increase of a criteria pollutant for which the Project region is in non-attainment under an applicable federal or state ambient air quality standard, and impacts would be considered potentially significant. Therefore, mitigation measures would be required and are further discussed below in subsection IV.B.3.f, *Mitigation Measures*. **With implementation of mitigation measures, regional NOx emissions would be reduced substantially, but still exceed the daily emissions threshold during the two continuous concrete pouring foundations phases, which are expected to last up to approximately two days each. Impacts related to regional $NO_X$ construction emissions therefore would be considered significant and unavoidable.**

In addition, according to the SCAQMD, individual project-level construction emissions are considered to determine cumulative impacts as well and will be further discussed below in subsection IV.B.3.e, *Cumulative Impacts*.

### (2) Operational Emissions

According to the SCAQMD, if an individual project results in air emissions of criteria pollutants that exceed the SCAQMD's recommended daily thresholds for project-specific impacts, then the project would also result in a cumulatively considerable net increase of these criteria pollutants. As shown in Table IV.B-7, maximum daily regional emissions from operation of the Project would exceed the applicable numeric indicators for NOx. Therefore, operational impacts would be considered potentially significant. Mitigation measures would be required and are further discussed below in subsection IV.B.3.f, *Mitigation Measures*. **With**

**implementation of mitigation measures, regional $NO_X$ emissions from operations would be reduced to below the regional numeric indicators and impacts related to regional $NO_X$ operational emissions would be mitigated to less than significant.**

In addition, according to the SCAQMD, individual project-level operational emissions are considered to determine cumulative impacts as well and will be further discussed below in subsection IV.B.3.e, *Cumulative Impacts*.

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

### (1) Localized Construction Impacts

The localized construction air quality analysis was conducted using the methodology prescribed in the SCAQMD Localized Significance Threshold Methodology (June 2003, revised July 2008). The screening criteria provided in the SCAQMD 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 localized significance thresholds are presented in **Table IV.B-8,** *Maximum Unmitigated Localized Construction Emissions for Residential Towers* and **Table IV.B-9,** *Maximum Unmitigated Localized Construction Emissions for Residential Towers and Existing Building Renovations*.[106] The same phasing and equipment assumptions, and compliance with SCAQMD Rule 403, were used as for the regional emissions calculations discussed above. As shown below, maximum localized construction emissions for sensitive receptors within 25 meters of the Project Site would exceed the localized screening indicators for $NO_X$, PM10, and PM2.5 based on the assumptions described in subsection IV.B.3.a(4), *Localized Emissions*. Therefore, with respect to localized construction emissions, impacts to existing and future receptors would be considered potentially significant. Mitigation measures would be required and are further discussed below in subsection IV.B.3.f, *Mitigation Measures*. **With implementation of mitigation measures, localized $NO_X$, PM10, and PM2.5 emissions from construction would be reduced to below the localized numeric indicators and impacts related to localized $NO_X$, PM10, and PM2.5 construction emissions would be mitigated to less than significant.**

[106] Based on methodology described in based on the assumptions described in subsection IV.B.3.a(4), *Localized Emissions*, of this section.

## TABLE IV.B-8
## ESTIMATED MAXIMUM UNMITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR RESIDENTIAL TOWERS (POUNDS PER DAY) [a]

| Source | $NO_X$ | CO | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|
| **On-site Construction Activities** | | | | |
| Demolition | 106 | 74 | 9.3 | 5.5 |
| Site Preparation | 78 | 60 | 3.8 | 3.5 |
| Grading | 66 | 48 | 3.0 | 2.6 |
| Foundation (North Tower) | 62 | 34 | 3.2 | 3.0 |
| Foundation (South Tower) | 62 | 34 | 3.2 | 3.0 |
| Subterranean Parking Structure Construction | 124 | 82 | 6.2 | 5.8 |
| Podium Construction | 107 | 77 | 5.3 | 4.9 |
| Building Construction | 88 | 66 | 4.6 | 4.3 |
| Building Construction/Architectural Coating | 79 | 64 | 4.0 | 3.7 |
| Building Construction/Paving/Architectural Coating | 95 | 96 | 4.6 | 4.4 |
| **Maximum Localized (On-Site) Emissions** | **124** | **96** | **9.3** | **5.8** |
| **SCAQMD Screening Numeric Indicator [c]** | **103** | **993** | **7.6** | **4.7** |
| Exceed Screening Numeric Indicator? | **Yes** | No | **Yes** | **Yes** |

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C-2 of Appendix C of this Draft EIR. The derivations of the localized significance thresholds are provided in Appendix C-4 of 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 1 (Central Los Angeles County) for a 1.84-acre site with sensitive receptors conservatively assumed to be located within 25 meters of the construction area.
SOURCE: ESA, 2018.

## TABLE IV.B-9
## ESTIMATED MAXIMUM UNMITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR RESIDENTIAL TOWERS AND EXISTING BUILDING RENOVATIONS (POUNDS PER DAY) [a]

| Source | $NO_X$ | CO | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|
| **On-site Construction Activities** | | | | |
| Demolition | 106 | 74 | 9.3 | 5.5 |
| Site Preparation | 78 | 60 | 3.8 | 3.5 |
| Grading | 66 | 48 | 3.0 | 2.6 |
| Foundations (North Tower) | 62 | 34 | 3.2 | 3.0 |
| Foundations (South Tower) | 62 | 34 | 3.2 | 3.0 |
| Subterranean Parking Structure Construction | 124 | 82 | 6.2 | 5.8 |
| Podium Construction | 107 | 77 | 5.3 | 4.9 |
| Building Construction - 2022 | 88 | 66 | 4.6 | 4.3 |

| Source | $NO_X$ | CO | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|
| Building Construction/Architectural Coating - 2021 | 79 | 64 | 4.0 | 3.7 |
| Building Construction/Paving/Architectural Coating - 2022 | 95 | 96 | 4.6 | 4.4 |
| Existing Buildings Renovations [d] | 16 | 13 | 1.3 | 1.2 |
| **Maximum Localized (On-Site) Emissions** | **141** | **109** | **10.6** | **7.0** |
| **SCAQMD Screening Numeric Indicator [c]** | **138** | **1,506** | **12.5** | **6.7** |
| Exceed Screening Numeric Indicator? | **Yes** | No | No | **Yes** |

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C-2 of Appendix C of this Draft EIR. The derivations of the localized significance thresholds are provided in Appendix C-4 of 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 1 (Central Los Angeles County) for a 3.6-acre site with sensitive receptors conservatively assumed to be located within 25 meters of the construction area.
d Renovations of existing buildings could occur concurrently during any phase of construction of the new residential mixed-use towers, therefore the maximum daily emissions of the existing renovations were added to the maximum daily emissions of residential mixed-use tower maximum daily emissions to serve as a conservative maximum daily emission estimate

SOURCE: ESA, 2018.

As shown in Table IV.B-6 above, regional $NO_X$ emissions associated with construction activities would result in a potentially significant impact without the incorporation of mitigation. The localized effects of on-site Project emissions on nearby receptors were evaluated according to the SCAQMD's LST methodology. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. These ambient air quality standards were established at levels that provide public health protection and allow adequate margin of safety, including protecting the health of sensitive populations such as asthmatics, children, and the elderly. As shown in Table IV.B-8 and IV.B-9, Project-related construction emissions would potentially exceed the LSTs, including for $NO_X$, PM10 and PM2.5 emissions. As a result, localized exceedances of the $NO_2$, PM10 and PM2.5 ambient air quality standards could potentially occur due to the $NO_X$, PM10 and PM2.5 emissions generated during construction.[107] Therefore, off-site receptors could be exposed to $NO_2$, PM10 and PM2.5 levels in excess of the health-based ambient air quality standards. Therefore, mitigation measures would be required and are further discussed below in subsection IV.B.3.f, *Mitigation Measures*.

[107] Although there is no ambient air quality standard for $NO_X$, an exceedance of $NO_X$ mass emissions thresholds can contribute to exceedance of local ambient air quality standards for $NO_2$, as discussed in subsection IV.B.2.b(1)(c), *Criteria Pollutants*.

Given that ozone formation occurs through a complex photo-chemical reaction between $NO_X$ and VOCs in the atmosphere with the presence of sunlight, the impacts of ozone are typically considered on a basin-wide or regional basis instead of a localized basis. The SCAQMD has not established an LST for ozone. The health-based ambient air quality standards for ozone are as concentrations of ozone and not as tonnages of their precursor pollutants (i.e., $NO_X$ and VOCs). It is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting ozone or particulate matter. Because of the complexity of ozone formation and the non-linear relationship of ozone concentration with its precursor gases, and given the state of environmental science modeling in use at this time, it is infeasible to convert specific emissions levels of $NO_X$ or VOCs emitted in a particular area to a particular concentration of ozone in that area. Meteorology, the presence of sunlight, seasonal impacts, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone.[108,109] Nonetheless, since Project construction would potentially exceed the numeric indicator for $NO_X$ emissions, it is possible that Project construction $NO_X$ emissions could result in an increase in ground-level ozone concentrations in proximity to the Project Site or elsewhere in the air basin and impacts would be potentially significant. Therefore, mitigation measures would be required and are further discussed below in subsection IV.B.3.f, *Mitigation Measures*. As discussed below, even with implementation of mitigation measures, regional emissions from construction would still be above the regional numeric indicators. Impacts related to regional $NO_X$ construction emissions would be significant and unavoidable for $NO_X$ emissions during the two continuous concrete pouring foundations phases, which are expected to last up to approximately two days each, and the Project would exceed the $NO_X$ regional air quality threshold for these four days.

As expressed in the *amicus curiae* brief submitted for the *Sierra Club v. County of Fresno* case (*Friant Ranch Case*),[110,111] the CEQA criteria pollutants significance thresholds from the air district were set at emission levels tied to the region's

108 SCAQMD, 2014, Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno.

109 SJVAPCD, 2014. Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno.

110 SCAQMD, 2014, Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and Brief of Amicus Curiae. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno.

111 SJVAPCD, 2014. Application for Leave to File Brief of Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in Support of Defendant and Respondent, County of Fresno and Real Party In Interest and Respondent, Friant Ranch, L.P. In the Supreme Court of California. Sierra Club, Revive the San Joaquin, and League of Women Voters of Fresno v. County of Fresno.

attainment status, they are emission levels at which stationary pollution sources permitted by the air district must offset their emissions and CEQA project must use feasible mitigations, and they are not intended to be indicative of any localized human health impact that a project may have. Therefore, the project's exceedance of the mass regional emissions threshold (i.e., pounds per day NOx thresholds) from project-related activities does not necessarily indicate that the project will cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

Furthermore, available models today are designed to determine regional, population-wide health impacts, and cannot accurately quantify ozone-related health impacts caused by $NO_X$ or VOCs emissions from project level. Therefore, it is infeasible to connect the Project level $NO_X$ emissions to ozone-related health impact at this time.

The primary health concern with exposure to $NO_X$ emissions is the secondary formation of ozone. Based on discussions with air quality management district staff,[112] and as the *amicus curiae* briefs submitted for the Friant Ranch Case suggested, because of the complexity of ozone formation and given the state of environmental science modeling in use at this time, it is infeasible to determine whether, or the extent to which, a single project's precursor (i.e., $NO_X$ and VOCs) emissions would potentially result in the formation of secondary ground-level ozone and the geographic and temporal distribution of such secondary formed emissions. Meteorology, the presence of sunlight, seasonal impacts, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone. Furthermore, available models today are designed to determine regional, population-wide health impacts, and cannot accurately quantify ozone-related health impacts caused by $NO_X$ or VOCs emissions from local level (project level). Notwithstanding these scientific constraints, the disconnect between Project level $NO_X$ emissions and ozone-related health impact cannot be bridged at this time.

Based on available information, the future mixed-use residential development planned for future construction over the future Metro station at the corner of 2nd Street and Broadway approximately 50 feet southwest of the Project Site is not reasonably expected to be in operation and occupied during construction of the Project. The Initial Study[113] for that project states that its construction will not begin until construction of the Metro Regional Connector portal and station within the site is complete. Therefore, construction of this related project would not begin until 2022 and would not be complete until 2025, which would be two years after completion the Project. Therefore, there is no evidence to assume that this future

112 SCAQMD, 2016. Communication with SCAQMD Staff, Jillian Wong (Planning and Rules Manager) and Michael Krause (Planning and Rules Manager), DTSC, and ESA PCR, August 26, 2016.

113 City of Los Angeles Department of City Planning, Initial Study, 222 West 2nd Project.

mixed-use residential development would be occupied by residents during construction of the Project, and as such, there would no exposure to these future residents from construction-related localized emissions from the Project.

### (2) Localized Operations Impacts

#### *(a) Existing and Future Sensitive Receptors*

The localized operational air quality analysis was conducted using the methodology prescribed in the SCAQMD Localized Significance Threshold Methodology (June 2003, revised July 2008). 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 (2016) building energy efficiency standards, CALGreen Code, and City of Los Angeles Green Building Code, were used in the analysis. The analysis was done to account for existing sensitive receptors and future sensitive receptors that are in the planning stages. As discussed in subsection IV.B.2.b(2)(d), *Sensitive Receptors and Locations*, the nearest future sensitive receptor is the mixed-use residential developments planned for construction over the future Metro Station at the corner of 2nd Street and Broadway.

The maximum daily localized emissions and localized significance thresholds are presented in **Table IV.B-10,** *Maximum Unmitigated Localized Operational Emissions*. As shown therein, the Project's maximum localized operational emissions would not exceed the localized screening indicators for $NO_X$ and CO, but would exceed localized screening criteria for PM10 and PM2.5. Therefore, with respect to localized operational emissions from operational activities, PM10 and PM2.5 impacts would be potentially significant. Mitigation measures would be required and are further discussed in subsection IV.B.3.f, *Mitigation Measures*. **With implementation of mitigation measures, localized PM10 and PM2.5 emissions from operations would be reduced to below the localized numeric indicators and impacts related to localized PM10 and PM2.5 operational emissions would be mitigated to less than significant.**

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

| Source | $NO_X$ | CO | PM10 | PM2.5 |
|---|---|---|---|---|
| Area (Coating, Consumer Products, Landscaping) | 1 | 93 | 0.52 | 0.52 |
| Energy | 7 | 5 | 0.58 | 0.58 |
| Stationary (Charbroilers) | – | – | 1.76 | 1.06 |
| Stationary (Cooling Towers) | – | – | 0.34 | 0.29 |

| Source | $NO_X$ | CO | PM10 | PM2.5 |
|---|---|---|---|---|
| Stationary (Emergency Generators) | 13 | 12 | 0.04 | 0.04 |
| **Total Localized (On-Site) Emissions** | **21** | **110** | **3.23** | **2.48** |
| **SCAQMD Screening Numeric Indicator [b]** | **138** | **1,506** | **3.13** | **2.00** |
| Exceeds Screening Numeric Indicator? | No | No | **Yes** | **Yes** |

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C-3 of Appendix C of this Draft EIR.
b The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County Costal) for a 3.6-acre site with sensitive receptors conservatively assumed to be located within 25 meters of the Project Site.

SOURCE: ESA, 2018.

### *(b) Toxic Air Contaminants*

#### *(i)* Construction Impacts

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during the construction phase of the Project. According to the Office of Environmental Health Hazard Assessment (OEHHA) and the SCAQMD *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (August 2003),[114] 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 and short-term construction schedule (approximately 48 months), the Project would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of Project construction.

As shown in Table IV.B-6 above, the Project would be consistent with applicable AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. The Project would comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation; compliance with these would minimize emissions of TACs during construction. The Project would also comply with the requirements of SCAQMD Rule 1403 if asbestos is found during the renovation and construction activities. **Therefore, impacts from TACs during construction would be less than significant.**

114 South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003, http://www.aqmd.gov/docs/default-source/ceqa/handbook/mobile-source-toxics-analysis.doc?sfvrsn=2. Accessed October 5, 2018.

### (ii) Operational Impacts

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.[115] Project operations would generate only minor amounts of diesel emissions from mobile sources, such as delivery trucks and occasional maintenance activities that would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. Furthermore, Project trucks are required to comply with the applicable provisions of the CARB 13 CCR, Section 2025 (Truck and Bus regulation) to minimize and reduce PM and $NO_X$ emissions from existing diesel trucks. Therefore, the Project operations would not be considered a substantial source of diesel particulates.

In addition, Project operations would only result in minimal emissions of air toxics from maintenance or other ongoing activities, such as from the use of architectural coatings and other products. Area sources that would generate TAC emissions include charbroiling activities associated with the restaurant uses and consumer products associated with re-applying architectural coatings and cleaning building surfaces. Charbroiling has the potential to generate small amounts of chemicals that are known or suspected by the State of California to cause human health impacts. However, restaurants incorporating charbroiling in the Air Basin would be required to comply with SCAQMD Rule 1138 (Control of Emissions from Restaurant Operations), which requires the installation of emissions controls on charbroilers. The emissions controls would minimize the already small amounts of TAC emissions associated with charbroiling (as seen in Table IV.B-7) by approximately 83 percent,[116] such that charbroiling would not cause or contribute to adverse health impacts at nearby sensitive receptors. The emergency generator would be required to comply with SCAQMD Rule 1470 (Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines), the purpose of which is to control and limit emissions of TACs from emergency generators and similar equipment. In accordance with Rule 1470, emissions from maintenance and testing would not occur daily, but rather periodically, up to 50 hours per year. Furthermore, the emergency generator would be certified to the most stringent CARB and SCAQMD Rule 1470 standards and minimize emissions to the lowest technically feasible and regulatory required level for equipment of this size and type. As shown in Table IV.B-10, PM10 and PM2.5 emissions (i.e., DPM emissions) from the emergency generator would be

115 South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003.

116 United States Environmental Protection Agency, National Emissions Inventory for Commercial Cooking.

0.04 pounds per day for only those periodic days in which maintenance and testing would occur. Compliance with Rule 1470 would ensure the TAC emissions from the emergency generator would not cause or contribute to adverse health impacts at nearby sensitive receptors. In addition, the cooling towers would generate small amounts of emissions at 0.3 pounds per day of particulate matter (entrained water droplets) conservatively assuming continuous operation. Therefore, the emissions would not pose a health risk to off-site receptors.

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

*(iii) Carbon Monoxide Hotspots*

The potential for the Project to cause or contribute to CO hotspots is 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 ambient air quality standards, 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 state standards. Maximum CO levels in recent years are 3.2 ppm (one-hour average) and 2.0 ppm (eight-hour average) compared to the criteria of 20 ppm (one-hour average) and 9.0 ppm (eight-hour average). Carbon monoxide decreased dramatically in the Air Basin with the introduction of the catalytic converter in 1975. No exceedances of CO have been recorded at monitoring stations in the Air Basin for some time and the Air Basin is currently designated as a CO attainment area for both the CAAQS and NAAQS. Thus, it is not reasonable to expect that CO levels at intersections analyzed in the Project Transportation Impact Analysis[117] would rise to the level of an exceedance of these standards.

[117] Fehr & Peers, Times Mirror Square Project Transportation Impact Analysis, 2018.

Additionally, the SCAQMD conducted CO modeling for the 2003 AQMP for the four worst-case intersections in the Air Basin. These include: (a) Wilshire Boulevard and Veteran Avenue; (b) Sunset Boulevard and Highland Avenue; (c) La Cienega Boulevard and Century Boulevard; and (d) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP CO attainment demonstration, the SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day.[118] Relevant information from the 2003 AQMP CO attainment demonstration relied upon in this assessment is provided in Appendix C-6 of 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 shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (one-hour average) and 3.2 (eight-hour average) at Wilshire Boulevard and Veteran Avenue.[119]

Based on the Project's Transportation Impact Analysis,[120] under future plus Project (2023) conditions, the intersection of Hill Street and 1st Street would have a maximum traffic volume of approximately 62,220 ADT, which are assumed to operate at very low or idling speeds at a congested roadway intersection.[121] As a result, CO concentrations are expected to be approximately 6.1 ppm (one-hour average) and 4.0 ppm (eight-hour average), which would not exceed the numerical indicators of significance.[122] Total traffic volumes at the maximum impacted intersection would likely have to more than double 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.[123] This comparison demonstrates that the Project would not contribute to the formation of CO hotspots and that no further

118 South Coast Air Quality Management District, 2003 Air Quality Management Plan, Appendix V: Modeling and Attainment Demonstrations, page V-4-24, 2003, https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp. Accessed December 2018.

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

120 Fehr & Peers, Times Mirror Square Project Transportation Impact Analysis.

121 The traffic volume of approximately 62,220 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 http://www.fhwa.dot.gov/planning/tmip/publications/other_reports/tod_modeling_procedures/ch02.cfm).

122 The one-hour average and eight-hour average CO concentration values calculated for the intersection of Hill Street and 1st Street add the values of vehicle emissions to the ambient and are lower than the 20 ppm (one-hour average) and 9 ppm (eight-hour) CO standards mentioned above.

123 South Coast Air Quality Management District, 2003 Air Quality Management Plan, Chapter 6 Clean Air Act Requirements.

CO analysis is required. The Project would result in less than significant impacts with respect to CO hotspots.

**Therefore, as discussed above relative to LSTs, TACs, and CO hotspots, the Project would not expose sensitive receptors to substantial pollutant concentrations, and impacts pursuant to this threshold would be less than significant with mitigation to reduce localized emissions to below the applicable significance thresholds.**

***Threshold e) Would the Project create objectionable odors affecting a substantial number of people?***

As discussed in Section VI.F, *Effects Found Not to be Significant*, and in the Initial Study (Appendix A-2), the Project Site would not create objectionable odors affecting a substantial number of people and a less than significant impact would occur with respect to Threshold e. No further analysis is required.

## e) Cumulative Impacts

There are a number of cumulative projects in the Project area that have not yet been built or are currently under construction. Since the timing or sequencing of the cumulative projects is unknown, any quantitative analysis to ascertain daily construction emissions that assumes multiple, concurrent construction projects would be speculative. For this reason, the SCAQMD's recommended methodology to assess a project's cumulative impact differs from the cumulative impacts methodology employed elsewhere in this Section. The SCAQMD recommends using two different methodologies: (1) that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality;[124] and (2) that a project's consistency with the current AQMP be used to determine its potential cumulative impacts.

### (1) Project-Specific Impacts

The Project would result in the emission of criteria pollutants for which the region is in non-attainment during both construction and operation. Based on the Project-specific level of emissions, the Project's cumulative impacts would be potentially significant for construction due to regional $NO_X$ emissions, and localized $NO_X$, PM10 and PM2.5 emissions exceeding the numerical indicators of significance as shown in Table IV.B-6 for regional construction emissions and in Table IV.B-8 and Table IV.B-9 for localized construction emissions. Therefore, mitigation measures would be required are further discussed below in subsection IV.B.3.f, *Mitigation Measures*.

[124] South Coast Air Quality Management District, Potential Control Strategies to Address Cumulative Impacts from Air Pollution White Paper, 1993, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook. Accessed December 2018.

With implementation of mitigation measures, regional emissions from construction would be above the regional numeric indicators. Impacts related to regional $NO_X$ construction emissions would be significant and unavoidable for $NO_X$ emissions during the two continuous concrete pouring foundations phases, which are expected to last up to approximately two days each.

With implementation of mitigation measures, localized emissions from construction would be reduced to below the localized numeric indicators and impacts related to localized NOX, PM10 and PM2.5 construction emissions would be mitigated to less than significant.

Project-specific operational emissions would result in potentially significant impacts due to regional NOx emissions and localized PM10 and PM2.5 emissions at existing and future sensitive receptor locations exceeding the numerical indicators of significance as shown in Table IV.B-7 for regional operational emissions and in Table IV.B-10 for localized operational emissions. Therefore, mitigation measures would be required are further discussed below in subsection IV.B.3.f, *Mitigation Measures*.

With implementation of mitigation measures, regional and localized emissions from operations would be reduced to below the regional and localized numeric indicators and impacts related to regional $NO_X$ and localized PM10 and PM2.5. operational emissions would be mitigated to less than significant.

The accumulation and dispersion of air pollutant emissions within an air basin is dependent upon the size and distribution of emission sources in the region and meteorological factors such as wind, sunlight, temperature, humidity, rainfall, atmospheric pressure, and topography. The health impacts associated with exposure to criteria pollutants are evaluated by air districts on a regional level based on all sources in the region and the region's attainment of the NAAQS. The mass emissions significance thresholds used in CEQA air quality analysis are not intended to be indicative of any localized human health impact that a project may have; instead, they were tied to the region's attainment status and are emission levels at which stationary pollution sources permitted by the air district must offset their emissions using enhanced control technology and CEQA projects must implement feasible mitigations.[125] Therefore, the Project's exceedance of the mass regional $NO_X$ emissions threshold from temporary construction activities (in this case just for two days during concrete pours)[126] does not necessarily indicate

125 April 2015 Amicus Curiae Brief of the South Coast Air Quality Management District in *Sierra Club v. County of Fresno* (CA Supreme Court, S219783).

126 The two concrete pouring phases were described above based on calendar days per concrete pouring phase where each phase will be split over two calendar work days. However, in terms of activity hours, the two concrete pour will require up to 48 hours total, as such the concrete pouring activities will only require only two days in terms of activity hours.

that the Project will cause or contribute to the exposure of sensitive receptors to ground-level concentrations in excess of health-protective levels.

The health concerns associated with $NO_X$ emissions are related to its potential to result in the secondary formation of ground-level ozone. As discussed earlier, the Air Basin is designated as nonattainment for ozone. The formation of ground-level ozone is a complex process due to photochemical reactions of precursor pollutants (i.e., VOC and $NO_X$ emissions) in the atmosphere. It is not necessarily the amount of NOx and VOCs emitted that cause human health impacts, but the concentration of resulting ozone. Because of the complexity of ozone formation, a specific amount of NOx or VOC's emitted in a particular area does not equate to a particular concentration of ozone in an area.[127] Environmental science models today cannot determine whether, or the extent to which, a single project's precursor emissions would potentially result in the formation of secondary ground-level ozone and the geographic and temporal distribution of such secondary formed emissions. This is because available models today are designed to determine regional, population-wide health impacts and cannot accurately quantify ozone-related health impacts caused by $NO_X$ or VOCs emissions at a project level.[128] The use of these models for a small source of emissions such as the Project would not produce reliable or meaningful results.[129] Therefore, it is not reasonably feasible to correlate the Project's exceedance of the NOx significance threshold during two days of concrete pours to ozone-related health impact at this time.

### (2) Consistency with Air Quality Management Plan

Alternatively, the SCAQMD recommends assessing a project's cumulative impacts based on whether it is consistent with the AQMP. Section 15064(h)(3) of the State CEQA Guidelines provides guidance in determining the significance of cumulative impacts. Specifically, 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*

[127] April 2015 Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in *Sierra Club v. County of Fresno* (CA Supreme Court, S219783).

[128] April 2015 Amicus Curiae Brief of San Joaquin Valley Unified Air Pollution Control District in *Sierra Club v. County of Fresno* (CA Supreme Court, S219783).

[129] April 2015 Amicus Curiae Brief of the South Coast Air Quality Management District in Sierra Club v. County of Fresno (CA Supreme Court, S219783).

*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 2012 AQMP and the 2016 AQMP, as discussed above.

The Project has incorporated strategies, as applicable, consistent with the AQMP. Construction of the Project would comply with SCAQMD Rule 403 requirements and the ATCM to limit heavy duty diesel motor vehicle idling to no more than 5 minutes at any given time. In addition, the Project would utilize a construction contractor(s) that complies with required and applicable BACT and the In-Use Off-Road Diesel Vehicle Regulation. Per SCAQMD rules and mandates, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted AQMP emissions control measures) would also be imposed on other construction projects in the Air Basin as required, which would include each of the cumulative projects in the Project Area. As such, Project construction would be consistent with the AQMP and impacts with respect to AQMP consistency would be less than significant.

The Project's location, design, and proposed land uses would be consistent with the AQMP (refer to subsection IV.B.3.d(1), *Consistency with the Air Quality Plan)*. The AQMP includes transportation control measures that are intended to reduce regional mobile source emissions.[130] The Project would locate residential and retail uses in a TOD that would be located within a quarter-mile of multiple public transportation options, including the Metro Civic Center/Grand Park Station that serves two subway lines, the Red Line and Purple Line and the future 2nd and Broadway Metro Station being constructed as part of the Regional Connector. The Red Line connects the Civic Center to Union Station, Hollywood, and North Hollywood. The Red and Purple Lines provide further connection to three light rail transit lines serving downtown Los Angeles: the Blue and Expo Lines at the 7th Street/Metro Center Station and the Gold Line at Union Station. The Project is also within a quarter mile of many Metro bus routes (e.g., local 2, 4, 10, 28, 81, 83, 90, 91, 94, and 302, which run northbound along Hill and Lines 30, 33, 40, 45, 68, 83, 84, 92, and 330, which run southbound along Spring Street), LADOT's Dash Downtown "D" line, and Metro's Rapid Lines 728, 733, 745, and 770. The Project would provide access to on-site uses from existing pedestrian pathways. The Project's proximity to public transit, including the Metro Civic Center Station, would allow the Project's projected growth to be accommodated by existing and under-construction transportation resources and decreases the time and cost of traveling

130 Through capital improvement programs, local governments 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.

as well as vehicular demand and associated pollutants. The Project's increase in population, housing, and employment would therefore be consistent with SCAG's RTP/SCS goals and would be consistent with SCAG's growth projections for the City as a whole (refer to Section IV.J, *Population and Housing*, of this Draft EIR). The Project would therefore also be consistent with the growth projections in the AQMP. Moreover, as discussed above, the Project's growth would occur on a site well-served by public transportation and in proximity to existing employment and commercial areas, which would minimize potential growth in transportation-related emissions. As such, as the Project would not conflict with or obstruct implementation of the 2016 AQMP and is would be consistent with the AQMP, the Project's cumulative operational impacts with respect to AQMP consistency would be less than significant.

## f) Mitigation Measures

### (1) Construction

The Project would require implementation of mitigation measures that would minimize construction emissions. As detailed in mitigation measures MM AQ-1 and MM AQ-2, construction of the Project would be required to utilize off-road diesel-powered construction equipment that meet or exceed the stringent CARB and USEPA Tier 4 off-road emissions standards for those equipment rated at 50 hp or greater during Project construction. The Project would also be required to implement other emissions control strategies such as ensuring equipment are maintained and operated in accordance with manufacturer specifications. These measures are intended to reduce emissions from on-road and off-road heavy-duty vehicles and equipment, and would accelerate the replacement of older engines that produce higher air quality emissions with newer engines that produce lower air quality emissions as a result of meeting the stringent Tier 4 emissions standards.

**MM-AQ-1:** The Applicant shall implement 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 will include the following:

a. During plan check, the Project representative shall make available to the lead agency and SCAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will 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, BACT documentation, and CARB or SCAQMD operating permit shall be provided on-site at the time of mobilization of each applicable unit of equipment to allow the Construction Monitor to

compare the on-site equipment with the inventory and certified Tier specification and operating permit. Off-road diesel-powered equipment that will be used an aggregate of 40 or more hours during any portion of the construction activities associated with grading/excavation/export phase shall meet the Tier 4 standards. Construction contractors supplying heavy duty diesel equipment greater than 50 horsepower shall be encouraged to apply for SCAQMD SOON funds. Information including the SCAQMD website shall be provided to each contractor which uses heavy duty diesel for on-site construction activities.

b. Equipment such as tower cranes and signal boards shall be electric or alternative fueled (i.e., non-diesel). Pole power shall be made available for use for electric tools, equipment, lighting, etc. Construction equipment such as tower cranes and signal boards shall utilize electricity from power poles or alternative fuels (i.e., non-diesel), rather than diesel power generators and/or gasoline power generators. If stationary construction equipment, such as diesel- or gasoline-powered generators, must be operated continuously, such equipment shall be located at least 100 feet from sensitive land uses (e.g., residences, schools, childcare centers, hospitals, parks, or similar uses), whenever possible.

c. Alternative-fueled generators shall be used when commercial models that have the power supply requirements to meet the construction needs of the Project are commercially available from local suppliers/vendors. The determination of commercial availability of such equipment will be made by the City prior to issuance of grading or building permits based on applicant-provided evidence of the availability or unavailability of alternative-fueled generators and/or evidence obtained by the City from expert sources such as construction contractors in the region.

**MM-AQ-2:** The Applicant shall implement the following measures to reduce the emissions of air pollutants generated by heavy-duty diesel-powered equipment operating at the Project Site:

a. Contractors shall maintain and operate construction equipment so as to minimize exhaust emissions. During construction, trucks and vehicles in loading and unloading queues shall have their engines turned off after 5 minutes when not in use, to reduce vehicle emissions.

b. All construction equipment shall 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.

c. 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.

### (2) Operation

The Project would result in potentially significant regional operational impacts associated with $NO_X$ and localized operational impacts associated with PM2.5 and PM10. Therefore, the mitigation measures listed below would be required.

**MM-AQ-3: Landscaping Equipment:** The Project representative will require that landscaping equipment used on the Project Site be electric- or battery-powered, rather than liquid fossil-fueled or use equipment that do not require a power or fuel source. Prior to occupancy of the residential towers, the Project representative shall provide documentation to the City of the use of landscaping contractors, service providers, or maintenance crews that will use equipment that meet the specified requirements. Documentation shall be maintained for the duration of landscaping services and made available to the City upon request.

**MM-AQ-4: Restaurant Charbroiling:** The Project representative will limit the number of restaurants permitted to utilize under-fired charbroiling equipment to two restaurants or less. Restaurants with under-fired charbroiling equipment will meet applicable SCAQMD emission control requirements. Prior to occupancy of the designated commercial spaces by restaurant tenants, the Project representative shall provide documentation to the City of the number of Project Site restaurants with under-fired charbroiling equipment. Documentation shall be maintained and made available to the City upon request.

**MM-AQ-5: Emergency Generators:** The Project representative will schedule routine maintenance and testing of the emergency generators installed on the Project Site on different days. Prior to the installation of emergency generators, the Project representative shall supply documentation to the City that emergency generator testing by contractors, service providers, or maintenance crews will be conducted in accordance with the specified requirements. The Project representative shall maintain records of emergency generator testing, including testing dates, which shall be made available to the City upon request.

# g) Level of Significance after Mitigation

## (1) Construction

Implementation of MM AQ-1 and MM AQ-2 would minimize localized $NO_X$, PM10, and PM2.5 emissions from all construction phases to below the localized numeric indicators. Therefore, impacts related to localized $NO_X$, PM10 and PM2.5 construction emissions would be mitigated to less than significant.

The Project's mitigated regional and localized construction emissions are summarized in **Table IV.B-11**, *Estimated Maximum Mitigated Regional Construction Emissions,* **Table IV.B-12,** *Estimated Maximum Mitigated Localized Construction Emissions for Residential Towers* and **Table IV.B-13,** *Estimated Maximum Mitigated Localized Construction Emissions for Residential Towers and Existing Building Renovations.* Implementation of MM AQ-1 and MM AQ-2 would minimize regional $NO_X$ emissions to below the SCAQMD regional numeric indicators for all phases of Project construction except for regional $NO_X$ emissions during the two continuous concrete pouring foundations phases, which would be expected to last up to a total of approximately two days each. Since concrete trucks from a variety of area concrete suppliers would be required to deliver the volume of concrete necessary for the continuous concrete pouring foundations phases, there are no feasible mitigation measures that would reduce the $NO_X$ emissions from the concrete trucks to below the regional numeric indicator. It is not possible to reduce the number of concrete trucks needed to complete the continuous concrete pouring phase without compromising the integrity of the building foundations. Therefore, impacts related to regional $NO_X$ construction emissions would be temporarily significant during the two continuous concrete pouring foundations phases, which are expected to last up to approximately two days each. Regional construction impacts would be significant and unavoidable for $NO_X$. The Project's contribution to cumulatively significant construction impacts to air quality would be potentially significant for regional $NO_X$ during the approximately two continuous concrete pouring construction activities lasting up to two days each. While the Project would result in regionally significant and unavoidable $NO_X$ and ozone precursor impacts during the two continuous concrete pouring activities lasting up to two days each, the short-term duration and limited magnitude of the impact limits the potential for exposure and health impacts to sensitive receptors and would not jeopardize long-term air quality plans to attain the health-based ambient air quality standards in the Air Basin. Ozone formation occurs through a complex photo-chemical reaction between $NO_X$ and VOCs in the atmosphere with the presence of sunlight and the impacts of ozone are typically considered on a basin-wide or regional basis. Because the concrete trucks would come from various facilities in the area and would be distributed along the roadway network, the total $NO_X$ emissions from the concrete trucks would not be concentrated at a single site. Through atmospheric and geographical dispersion, $NO_X$-related health

impacts from the short-term concrete pouring activities would not be expected to occur to a measurable degree.

**With implementation of feasible mitigation, regional emissions from construction would be above the regional numeric indicators and impacts related to regional $NO_X$ construction emissions and would be significant and unavoidable for $NO_X$ emissions during the two continuous concrete pouring foundations phases, which are expected to last up to approximately two days each and the Project would exceed the $NO_X$ regional air quality standard.**

**In addition, with implementation of MM AQ-1 and MM AQ-2, the localized $NO_X$, PM10 and PM2.5 emissions from construction would be reduced to below the localized numeric indicators and impacts related to localized $NO_X$, PM10 and PM2.5 construction emissions would be mitigated to less than significant.**

**TABLE IV.B-11**
**ESTIMATED MAXIMUM MITIGATED REGIONAL CONSTRUCTION EMISSIONS (POUNDS PER DAY) [a]**

| Source | VOC | $NO_X$ | CO [d] | $SO_2$ | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|---|---|
| **Individual Phases** | | | | | | |
| Demolition | 2 | 15 | 91 | <1 | 5 | 1 |
| Site Preparation | 2 | 8 | 75 | <1 | 1 | <1 |
| Grading | 5 | 99 | 89 | <1 | 7 | 2 |
| Foundation (North Tower) | 16 | 502 | 125 | 1.4 | 33 | 11 |
| Foundation (South Tower) | 13 | 420 | 107 | 1.2 | 28 | 9 |
| Subterranean Parking Structure Construction | 10 | 52 | 148 | <1 | 16 | 5 |
| Podium Construction | 9 | 54 | 137 | <1 | 16 | 5 |
| Building Construction | 9 | 43 | 117 | <1 | 16 | 5 |
| Building Construction/Architectural Coating | 23 | 40 | 122 | <1 | 18 | 5 |
| Building Construction/Paving/Architectural Coating | 23 | 42 | 159 | <1 | 19 | 5 |
| Existing Building Renovations [c] | 1 | 9 | 21 | <1 | 2 | 1 |
| **Maximum Daily Emissions** | **25** | **512** | **180** | **1.5** | **35** | **11** |
| **SCAQMD Numeric Indicators** | **75** | **100** | **550** | **150** | **150** | **55** |
| Exceeds Thresholds? | No | **Yes** | No | No | No | No |

| Source | VOC | $NO_X$ | CO [d] | $SO_2$ | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|---|---|

[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C-2 of Appendix C of this Draft EIR.

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

[c] Renovations of existing buildings could occur concurrently during any phase of construction of the new residential mixed-use towers, therefore the maximum daily emissions of the existing renovations were added to the maximum daily emissions of residential mixed-use tower maximum daily emissions to serve as a conservative maximum daily emission estimate.

[d] CO emissions for multiple phases may be higher after mitigation due to Tier 4 CO emission factors from CalEEMod being higher than the unmitigated vehicle CO emissions factors.

SOURCE: ESA, 2018.

## TABLE IV.B-12
## ESTIMATED MAXIMUM MITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR RESIDENTIAL TOWERS (POUNDS PER DAY) [a]

| Source | $NO_X$ | CO [d] | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|
| **On-site Construction Activities** | | | | |
| Demolition | 9 | 87 | 1.8 | 0.5 |
| Site Preparation | 8 | 73 | 0.2 | 0.2 |
| Grading | 9 | 67 | 0.3 | 0.3 |
| Foundation (North Tower) | 5 | 17 | 0.2 | 0.2 |
| Foundation (South Tower) | 5 | 17 | 0.2 | 0.2 |
| Subterranean Parking Structure Construction | 13 | 86 | 0.4 | 0.4 |
| Podium Construction | 12 | 80 | 0.4 | 0.4 |
| Building Construction - 2022 | 10 | 62 | 0.3 | 0.3 |
| Building Construction/Architectural Coating - 2021 | 10 | 62 | 0.3 | 0.3 |
| Building Construction/Paving/Architectural Coating - 2022 | 14 | 103 | 0.4 | 0.4 |
| **Maximum Localized (On-Site) Emissions** | **14** | **103** | **1.8** | **0.5** |
| **SCAQMD Screening Numeric Indicator [c]** | **103** | **993** | **7.6** | **4.7** |
| Exceed Screening Numeric Indicator? | No | No | No | No |

| Source | $NO_X$ | CO [d] | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C-2 of Appendix C of this Draft EIR. The derivations of the localized significance thresholds are provided in Appendix C-4 of 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 1 (Central Los Angeles County) for a 1.84-acre site with sensitive receptors conservatively assumed to be located within 25 meters of the construction area.
d CO emissions for multiple phases may be higher after mitigation due to Tier 4 CO emission factors from CalEEMod being higher than the unmitigated vehicle CO emissions factors.

SOURCE: ESA, 2018.

## TABLE IV.B-13
## ESTIMATED MAXIMUM MITIGATED LOCALIZED CONSTRUCTION EMISSIONS FOR RESIDENTIAL TOWERS AND EXISTING BUILDING RENOVATIONS (POUNDS PER DAY) [a]

| Source | $NO_X$ | CO [e] | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|
| **On-site Construction Activities** | | | | |
| Demolition | 9 | 87 | 1.8 | 0.5 |
| Site Preparation | 8 | 73 | 0.2 | 0.2 |
| Grading | 9 | 67 | 0.3 | 0.3 |
| Foundations (North Tower) | 5 | 17 | 0.2 | 0.2 |
| Foundations (South Tower) | 5 | 17 | 0.2 | 0.2 |
| Subterranean Parking Structure Construction | 13 | 86 | 0.2 | 0.4 |
| Podium Construction | 12 | 80 | 0.4 | 0.4 |
| Building Construction - 2022 | 10 | 62 | 0.4 | 0.3 |
| Building Construction/Architectural Coating - 2021 | 10 | 62 | 0.3 | 0.3 |
| Building Construction/Paving/Architectural Coating - 2022 | 14 | 103 | 0.4 | 0.4 |
| Existing Buildings Renovations [d] | 1 | 13 | 0.04 | 0.04 |
| **Maximum Localized (On-Site) Emissions** | **15** | **115** | **1.9** | **0.5** |
| **SCAQMD Screening Numeric Indicator [c]** | **138** | **1,506** | **12.5** | **6.7** |
| Exceed Screening Numeric Indicator? | No | No | No | No |

| Source | $NO_X$ | CO [e] | PM10 [b] | PM2.5 [b] |
|---|---|---|---|---|

a Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C-2 of Appendix C of this Draft EIR. The derivations of the localized significance thresholds are provided in Appendix C-4 of 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 1 (Central Los Angeles County) for a 3.6-acre site with sensitive receptors conservatively assumed to be located within 25 meters of the construction area.
d Renovations of existing buildings could occur concurrently during any phase of construction of the new residential mixed-use towers, therefore the maximum daily emissions of the existing renovations were added to the maximum daily emissions of residential mixed-use tower maximum daily emissions to serve as a conservative maximum daily emission estimate.
e CO emissions for multiple phases may be higher after mitigation due to Tier 4 CO emission factors from CalEEMod being higher than the unmitigated vehicle CO emissions factors.

SOURCE: ESA, 2018.

### (2) Operation

The Project would result in potentially significant operational impacts due to regional emissions of $NO_X$ above the regional numeric indicator. In addition, the Project would result in potentially significant operational impacts due to localized emissions of PM10 and PM2.5 above the localized numeric indicators. Therefore, mitigation measures MM AQ-3, MM AQ-4 and MM AQ-5 would be required to reduce operations-related emissions. The Project's mitigated regional and localized operational emissions are summarized below in **Table IV.B-14**, *Estimated Maximum Mitigated Regional Operational Emissions* and **Table IV.B-15**, *Estimated Maximum Mitigated Localized Operational Emissions*.

Implementation of MM AQ-3, MM AQ-4 and MM AQ-5 would minimize regional $NO_X$ emissions from operations by scheduling routine maintenance of emergency generators so that only one emergency generator is maintained on any given day. With implementation of MM AQ-3, MM AQ-4 and MM AQ-5, the regional $NO_X$ emissions from operations would be reduced to below the regional numeric indicator and impacts related to regional $NO_X$ operational emissions would be mitigated to less than significant.

Implementation of MM AQ-3, MM AQ-4 and MM AQ-5 would also minimize localized PM10 and PM2.5 emissions from operations of the Project by limiting the number of restaurants permitted to utilize under-fired charbroiling equipment to two restaurants or less. With implementation of MM AQ-3, MM AQ-4 and MM AQ-5, the localized PM10 and PM2.5 emissions from operations would be reduced to below the localized numeric indicators and impacts related to localized PM10 and PM2.5 operational emissions would be mitigated to less than significant.

## TABLE IV.B-14
## ESTIMATED MAXIMUM MITIGATED REGIONAL OPERATIONAL EMISSIONS (POUNDS PER DAY) [a]

| Source | VOC | $NO_X$ | CO | $SO_2$ | PM10 | PM2.5 |
|---|---|---|---|---|---|---|
| **Existing** | | | | | | |
| Area (Coating, Consumer Products, Landscaping) | 8 | <1 | <1 | 0 | 1 | 1 |
| Energy | <1 | 2 | 1 | <1 | <1 | <1 |
| Mobile | 8 | 35 | 96 | <1 | 18 | 5 |
| Total | 16 | 37 | 98 | <1 | 18 | 5 |
| **Proposed Project** | | | | | | |
| Area (Coating, Consumer Products, Landscaping) | 36 | 1 | 93 | <1 | 1 | 1 |
| Stationary (Charbroilers) | <1 | - | - | - | 2 | 1 |
| Stationary (Cooling Towers) | - | - | - | - | <1 | <1 |
| Stationary (Emergency Generators) | 1 | 13 | 12 | <1 | <1 | <1 |
| Energy | 1 | 9 | 6 | <1 | 1 | 1 |
| Mobile | 17 | 70 | 193 | 1 | 62 | 17 |
| Total | 55 | 93 | 305 | 1 | 64 | 19 |
| **Net Increase** | | | | | | |
| Area (Coating, Consumer Products, Landscaping) | 29 | 1 | 93 | <1 | 1 | 1 |
| Stationary (Charbroilers) | <1 | - | - | - | 1 | 1 |
| Stationary (Cooling Towers) | - | - | - | - | <1 | <1 |
| Stationary (Emergency Generators) | 1 | 8 | 7 | <1 | <1 | <1 |
| Energy | 1 | 7 | 5 | <1 | <1 | <1 |
| Mobile | 8 | 35 | 97 | <1 | 44 | 12 |
| **Net Total Regional Emissions** | **38** | **51** | **202** | **1** | **46** | **14** |
| **SCAQMD Numeric Indicators** | **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-3 of Appendix C of this Draft EIR.

SOURCE: ESA, 2018.

## TABLE IV.B-15
## ESTIMATED MAXIMUM MITIGATED LOCALIZED OPERATIONAL EMISSIONS (POUNDS PER DAY) [a]

| Source | $NO_X$ | CO | PM10 | PM2.5 |
|---|---|---|---|---|
| Area (Coating, Consumer Products, Landscaping) | 1 | 93 | 0.52 | 0.52 |
| Energy | 7 | 5 | 0.58 | 0.58 |
| Stationary (Charbroilers) | – | – | 0.88 | 0.53 |
| Stationary (Cooling Towers) | – | – | 0.34 | 0.29 |
| Stationary (Emergency Generators) | 8 | 7 | 0.03 | 0.03 |
| **Total Localized (On-Site) Emissions** | **16** | **105** | **2.34** | **1.94** |
| **SCAQMD Screening Numeric Indicator [b]** | **138** | **1,506** | **3.13** | **2.00** |
| Exceeds Screening Numeric Indicator? | 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-3 of Appendix C of this Draft EIR.
b The SCAQMD LSTs are based on Source Receptor Area 1 (Central Los Angeles County for a 3.6-acre site with sensitive receptors assumed to be located within 25 meters of the Project Site.

SOURCE: ESA, 2018.