3.2 Air Quality

This section describes and evaluates the pollutant emission and related air quality impacts that could result from implementation of the Proposed Project. The section contains: (1) a description of the existing land uses as they pertain to air emissions, as well as a description of the Adjusted Baseline; (2) a summary of the federal, State, and local regulations related to air quality, including those set forth within the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (AQMP), and applicable City of Inglewood (City) plans; and (3) an analysis of the potential impacts related to air quality associated with the implementation of the Proposed Project, as well as identification of potentially feasible measures that could mitigate significant impacts.

Comments received in response to the NOP for the EIR regarding air quality can be found in Appendix B. Any applicable issues and concerns regarding potential impacts related to air quality as a result of implementation of the Proposed Project are analyzed within this section.

The analysis included in this section was developed based on project-specific construction and operational characteristics of the Proposed Project described in Chapter 2, Project Description, project-specific information included in the AB 987 application,[1] and information provided by the project applicant.

3.2.1 Environmental Setting

The Project Site is located within the South Coast Air Basin (Air Basin). The Air Basin covers approximately 6,745 square miles and is bounded by the Pacific Ocean to the west and south and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east (see **Figure 3.2-1)**. The air basin includes all of Orange County; the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties; and the San Gorgonio Pass area in Riverside County.

The Air Basin has some of the worst air pollution in the country. The air pollution problems are a consequence of the combination of emissions from the nation's second largest urban area, meteorological conditions unfavorable to the dispersion of those emissions, and mountainous terrain surrounding the Air Basin that traps pollutants as they are pushed inland with the sea breeze. Southern California also has abundant sunshine, which drives the photochemical reactions that form pollutants such as ozone (O_3) and a significant portion of particulate matter with an aerodynamic diameter less than or equal to 2.5 ($PM_{2.5}$).[2]

1 AECOM, AB 987 Application for the Inglewood Basketball and Event Center, November 2018.
2 South Coast Air Quality Management District, 2016 Air Quality Management Plan.

Pollutants and Related Health Effects

Criteria Air Pollutants

Elevated concentrations of certain air pollutants in the atmosphere have been recognized to cause notable health problems and consequential damage to the environment either directly or in reaction with other pollutants. In the US, such pollutants have been identified and are 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 (US EPA) and are subject to emissions control requirements adopted by federal, State and local regulatory agencies. These pollutants are referred to as "criteria air pollutants" as a result of the specific standards, or criteria, which have been adopted for them. These pollutants are considered to be pollutants of concern based on the potential emission sources associated with the construction and operation activities of the Proposed Project. 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 discussed below.

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 certain 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 US EPA, ozone can cause the muscles in the airways to constrict potentially leading to wheezing and shortness of breath.[3] 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.[4]

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.[5] According to the California Air Resources Board (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.[6]

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3 US 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.
4 US Environmental Protection Agency, Health Effects of Ozone Pollution.
5 US Environmental Protection Agency, Health Effects of Ozone Pollution.
6 California Air Resources Board, Ozone & Health, Health Effects of Ozone, https://ww2.arb.ca.gov/resources/ozone-and-health. Accessed January 8, 2018.

The US EPA 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.[7] Children are at greatest risk from exposure to ozone because their lungs are still developing and they are more likely to be active outdoors when ozone levels are high, which increases their exposure.[8] 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.[9] 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.[10] Further research may be able to better distinguish between health effects in children and adults.[11]

A recent study indicated approximately 11.2 percent of the population in Inglewood was diagnosed with asthma and 4.7 percent with heart disease for the year of 2014, which were lower than the average levels of the Los Angeles County (12.6 percent and 5.2 percent, respectively).[12]

Volatile Organic Compounds (VOCs): VOCs are organic chemical compounds of carbon and are not "criteria" air pollutants themselves; however, in combination with NOx they form ozone, and are regulated to prevent the formation of ozone.[13] 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.[14] 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.).[15]

Nitrogen Dioxide (NO_2) and Nitrogen Oxides (NO_X): 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.[16]

The principal 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. Major sources

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7 US Environmental Protection Agency, Health Effects of Ozone Pollution.
8 US Environmental Protection Agency, Health Effects of Ozone Pollution.
9 California Air Resources Board, Ozone & Health, Health Effects of Ozone.
10 California Air Resources Board, Ozone & Health, Health Effects of Ozone.
11 California Air Resources Board, Ozone & Health, Health Effects of Ozone.
12 Southern California Association of Governments, Profile of the City of Inglewood, May 2017. Available: https://www.scag.ca.gov/Documents/Inglewood.pdf, accessed March 2019.
13 US 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.
14 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 2018.
15 California Air Resources Board, Toxic Air Contaminants Monitoring, Volatile Organic Compounds.
16 California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health. Accessed January 2019.

of NO_X include emissions from cars, trucks and buses, power plants, and off-road equipment. 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 US EPA, 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.[17] According to CARB, controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics.[18]

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.[19] 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.[20]

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.[21]

Carbon Monoxide (CO): 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.[22]

According to the US EPA, 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

17 US Environmental Protection Agency, Nitrogen Dioxide (NO_2) Pollution.
18 California Air Resources Board, Nitrogen Dioxide & Health.
19 California Air Resources Board, Nitrogen Dioxide & Health.
20 California Air Resources Board, Nitrogen Dioxide & Health.
21 California Air Resources Board, Nitrogen Dioxide & Health.
22 California Air Resources Board, Carbon Monoxide & Health, https://ww2.arb.ca.gov/resources/carbon-monoxide-and-health. Accessed January 2019.

dizziness, confusion, unconsciousness and death.[23] 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.[24] 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.[25]

According to CARB, the most common effects of CO exposure are fatigue, headaches, confusion, and dizziness due to inadequate oxygen delivery to the brain.[26] 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.[27] 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.[28]

Sulfur Dioxide (SO_2): According to the US EPA, the largest source of SO_2 emissions in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities while smaller sources of SO2 emission include industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicle and heavy equipment that burn fuel with a high sulfur content.[29] 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.[30]

According to the US EPA, short-term exposures to SO_2 can harm the human respiratory system and make breathing difficult.[31] 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 parts per million (ppm)) results in increased incidence of pulmonary symptoms and disease,

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23 US 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.
24 US Environmental Protection Agency, Carbon Monoxide (CO) Pollution in Outdoor Air
25 US Environmental Protection Agency, Carbon Monoxide (CO) Pollution in Outdoor Air
26 California Air Resources Board, Carbon Monoxide & Health.
27 California Air Resources Board, Carbon Monoxide & Health.
28 California Air Resources Board, Carbon Monoxide & Health.
29 US 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.
30 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.
31 US Environmental Protection Agency, Sulfur Dioxide (SO_2) Pollution.

decreased pulmonary function, and increased risk of mortality.[32] Children, the elderly, and those with asthma, cardiovascular disease, or chronic lung disease (such as bronchitis or emphysema) are most likely to experience the adverse effects of SO_2.[33,34]

Particulate Matter (PM_{10} and $PM_{2.5}$): Particulate matter air pollution is a mixture of solid particles and liquid droplets found in the air.[35] 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.[36] Particles are defined by their diameter for air quality regulatory purposes: inhalable particles with diameters that are generally 10 micrometers and smaller (PM_{10}); and inhalable particles with diameters that are generally 2.5 micrometers and smaller ($PM_{2.5}$).[37] Thus, $PM_{2.5}$ comprises a portion or a subset of PM_{10}.

Sources of PM_{10} emissions include dust from construction sites, landfills and agriculture, wildfires and brush/waste burning, industrial sources, and wind-blown dust from open lands.[38] Sources of $PM_{2.5}$ emissions include combustion of gasoline, oil, diesel fuel, or wood.[39] PM_{10} and $PM_{2.5}$ 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.[40]

According to CARB, both PM_{10} and $PM_{2.5}$ can be inhaled, with some depositing throughout the airways; PM_{10} is more likely to deposit on the surfaces of the larger airways of the upper region of the lung, while $PM_{2.5}$ 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.[41] Short-term (up to 24 hours duration) exposure to PM_{10} has been associated primarily with worsening of respiratory diseases, including asthma and chronic obstructive pulmonary disease, leading to hospitalization and emergency department visits.[42] The effects of long-term (months or years) exposure to PM_{10} are less clear, although studies suggest a link between long-term PM_{10} exposure and respiratory mortality. The International Agency for Research on Cancer published a review in 2015 that concluded that particulate matter in outdoor air pollution causes lung cancer.[43]

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32 California Air Resources Board, Sulfur Dioxide & Health, https://ww2.arb.ca.gov/resources/sulfur-dioxide-and-health. Accessed January 2019.
33 California Air Resources Board, Sulfur Dioxide & Health.
34 US Environmental Protection Agency, Sulfur Dioxide (SO_2) Pollution.
35 US 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.
36 US Environmental Protection Agency, Particulate Matter (PM) Pollution.
37 US Environmental Protection Agency, Particulate Matter (PM) Pollution.
38 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.
39 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
40 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
41 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
42 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
43 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).

Short-term exposure to $PM_{2.5}$ 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 $PM_{2.5}$ has been linked to premature death, particularly in people who have chronic heart or lung diseases, and reduced lung function growth in children.[44] According to CARB, populations most likely to experience adverse health effects with exposure to PM_{10} and $PM_{2.5}$ 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 PM_{10} and $PM_{2.5}$ 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.[45]

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.[46] 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.[47]

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.[48] 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.[49] 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.[50]

Air Toxics

Toxic Air Contaminants

Toxic air contaminants (TACs) are generally defined as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard.[51] TACs are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects. TACs are emitted by a variety of industrial processes such as petroleum refining, electric utility and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust and TACs may

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44 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
45 California Air Resources Board, Inhalable Particulate Matter and Health (PM2.5 and PM10).
46 US 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.
47 US Environmental Protection Agency, Lead Air Pollution.
48 US Environmental Protection Agency, Lead Air Pollution.
49 California Air Resources Board, Lead & Health, https://ww2.arb.ca.gov/resources/lead-and-health. Accessed January 2019.
50 California Air Resources Board, Lead & Health.
51 US Environmental Protection Agency, Hazardous Air Pollutants, https://www.epa.gov/haps, Accessed April 2019.

exist as PM_{10} and $PM_{2.5}$ or as vapors (gases).[52] TACs include metals, other particles, gases absorbed by particles, and certain vapors from fuels and other sources. The emission of a ~~toxic chemical~~TAC does not automatically create a health hazard. Other factors, such as the amount of the TAC~~chemical~~, its toxicity, how it is released into the air, the weather, and the terrain, all influence whether the emission could be hazardous to human health. However, the emission of ~~toxic substances~~TACs into the air can be damaging to human health and to the environment. Human exposure to ~~these pollutants~~TACs at sufficient concentrations and durations can result in cancer, poisoning, and rapid onset of sickness, such as nausea or difficulty in breathing. Other less measurable effects include immunological, neurological, reproductive, developmental, and respiratory problems. ~~Pollutants~~ TACs deposited onto soil or into lakes and streams affect ecological systems and eventually human health through consumption of contaminated food. The carcinogenic potential of TACs is a particular public health concern because many scientists currently believe that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of contracting cancer.

The public's exposure to TACs is a significant public health issue in California. The Air Toxics "Hotspots" Information and Assessment Act is a State law requiring facilities to report emissions of TACs to air districts.[53] The program is designated to quantify the amounts of potentially hazardous air pollutants released, the location of the release, the concentrations to which the public is exposed, and the resulting health risks. The State Air Toxics Program (Assembly Bill 2588) identified over 200 TACs, including the 188 TACs identified in the Clean Air Act (CAA).[54]

The US EPA has assessed this expansive list ~~of toxics~~ and identified 21 TACs as Mobile Source Air Toxics (MSATs).[55] MSATs are compounds emitted from highway vehicles and non-road equipment. Some toxic compounds are present in fuel and are emitted to the air when the fuel evaporates or passes through the engine unburned. Other toxics are emitted from the incomplete combustion of fuels or as secondary combustion products. Metal air toxics also result from engine wear or from impurities in oil or gasoline. US EPA also extracted a subset of these 21 MSAT compounds that it now labels as the six priority MSATs: benzene, formaldehyde, acetaldehyde, diesel particulate matter/diesel exhaust organic gases, acrolein, and 1,3-butadiene. While these six MSATs are considered the priority transportation toxics, US EPA stresses that the lists are subject to change and may be adjusted in future rules.[56]

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52 US Environmental Protection Agency, Hazardous Air Pollutants: Sources and Exposure, https://www.epa.gov/haps/hazardous-air-pollutants-sources-and-exposure, Accessed April 2019

53 California Air Resources Board. *General Information About "Hot Spots."* https://www.arb.ca.gov/ab2588/general.htm. Accessed April 2019.

54 California Air Resources Board. *AB 25188 Air Toxics "Hot Spots" Program.* https://www.arb.ca.gov/ab2588/ab2588.htm. Accessed April 2019.

55 US Environmental Protection Agency. *Air Toxics Risk Assessment Reference Library, Volume 1 Technical Resource Manual.* April 2004. Page 2-1.

56 US Department of Transportation Federal Highway Administration. *Updated Interim Guidance on Mobile Source Air Toxic Analysis in NEPA Documents.* https://www.fhwa.dot.gov/environMent/air_quality/air_toxics/policy_and_guidance/msat/ Accessed April 2019.

Diesel Particulate Matter (DPM)

According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from the exhaust of diesel-fueled engines, i.e., diesel particulate matter (DPM).[57] DPM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances.

Diesel exhaust is composed of two phases, gas and particle, and both phases contribute to the health risk. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde and polycyclic aromatic hydrocarbons. The particle phase is also composed of many different types of particles by size or composition. Fine and ultra-fine diesel particulates are of the greatest health concern, and may be composed of elemental carbon with adsorbed compounds such as organic compounds, sulfate, nitrate, metals and other trace elements. Diesel exhaust is emitted from a broad range of diesel engines; the on-road diesel engines of trucks, buses and cars and the off-road diesel engines that include locomotives, marine vessels and heavy duty equipment. Although DPM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

The most common exposure to DPM is breathing the air that contains diesel exhaust. The fine and ultra-fine particles are respirable (similar to $PM_{2.5}$), which means that they can avoid many of the human respiratory system defense mechanisms and enter deeply into the lung. Exposure to DPM comes from both on-road and off-road engine exhaust that is either directly emitted from the engines or lingering in the atmosphere.

Diesel exhaust causes health effects from both short-term or acute exposures, and long-term chronic exposures. The type and severity of health effects depends upon several factors including the amount of chemical exposure and the duration of exposure. Individuals also react differently to different levels of exposure. There is limited information on exposure to just DPM but there is enough evidence to indicate that inhalation exposure to diesel exhaust causes acute and chronic health effects as well as having cancer-causing potential.

Because it is part of PM2.5, DPM also contributes to the same non-cancer health effects as $PM_{2.5}$ exposure. These effects include premature death, hospitalizations and emergency department visits for exacerbated chronic heart and lung disease, including asthma, increased respiratory symptoms, and decreased lung function in children. Several studies suggest that exposure to DPM may also facilitate development of new allergies. Those most vulnerable to non-cancer health

[57] California Air Resources Board. *The California Almanac of Emissions and Air Quality.* https://www.arb.ca.gov/aqd/almanac/almanac.htm. Accessed April 2019.

effects are children whose lungs are still developing and the elderly who often have chronic health problems.[58].

Existing Conditions

Regional Air Quality

The Air Basin's meteorological conditions, in combination with regional topography, are conducive to the formation and retention of ozone. 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.[59] The worst air pollution conditions throughout the Air Basin typically occur from June through September.

Attainment Status

California Health and Safety Code section 39607(e) requires CARB to establish and periodically review area designation criteria. **Table 3.2-1** provides a summary of the attainment status of the Los Angeles County portion of the Air Basin with respect to the federal and State standards. As was shown in Table 3.2-1, the Air Basin is designated under federal or State ambient air quality standards as nonattainment for ozone, PM_{10}, and fine particulate matter $PM_{2.5}$. It is noteworthy to mention that air quality in the Air Basin has improved substantially over the years, primarily due to the impacts of air quality control programs at the federal, State and local levels. The ozone and PM levels have fallen significantly compared to the worst years and are expected to continue to trend downward in the future despite increases in the economy and population in the Air Basin.[60]

TABLE 3.2-1
SOUTH COAST AIR BASIN ATTAINMENT STATUS (LOS ANGELES COUNTY)

Pollutant	Federal Standards	California Standards
O_3 (1-hour standard)	N/A[a]	Non-attainment – Extreme
O_3 (8-hour standard)	Non-attainment – Extreme	Non-attainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
PM_{10}	Attainment	Non-attainment
$PM_{2.5}$	Non-attainment	Non-attainment
Lead	Non-attainment (Partial, Los Angeles County)[b]	Attainment
Visibility Reducing Particles	N/A	Unclassified
Sulfates	N/A	Attainment

[58] California Air Resources Board. *Overview: Diesel Exhaust & Health.* https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health. Accessed April 2019.
[59] South Coast Air Quality Management District, 2016 Air Quality Management Plan (2017). Available: 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 January 2019.
[60] South Coast Air Quality Management District, Final 2016 Air Quality Management Plan, 2017 (page 1-6).

Pollutant	Federal Standards	California Standards
Hydrogen Sulfide	N/A	Unclassified
Vinyl Chloride	N/A	N/A [c]

NOTES:
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 Nonattainment 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 thi s pollutant.
SOURCE:

With respect to the State-identified criteria pollutants (sulfates, hydrogen sulfide, visibility reducing particles, and vinyl chloride) present in Table 3.2-1, the Proposed Project would either not result in emissions of those pollutants (hydrogen sulfide, vinyl chloride, and lead), or such emissions would be accounted for as part of the pollutants estimated in this analysis (~~sulfates and~~ visibility reducing particles are associated with particulate matter emissions, and sulfates are associated with SO_2 emissions). In addition, CARB determined there is not sufficient scientific evidence available to support the identification of a threshold exposure level for vinyl chloride and, therefore, ~~they~~ CARB does not monitor or make status designations for this pollutant.[61] ~~For example, visibility reducing particles are associated with particulate matter emissions and sulfates are associated with SO_2 emissions.~~

Types of Sources

As detailed in the AQMP, the major sources of air pollution in the Air Basin are divided into four major source classifications: point and area stationary sources, and on-road and off-road mobile sources. Point and area sources are the two major subcategories of stationary sources.[62] Point sources are permitted facilities that contain one or more emission sources at an identified location (e.g., power plants, refineries, emergency generator exhaust stacks). Area sources consist of many small emission sources (e.g., residential water heaters, architectural coatings, consumer products, restaurant charbroilers and permitted sources such as large boilers) which are distributed across the region. Mobile sources consist of two main subcategories: On-road sources (such as cars and trucks) and off-road sources (such as heavy construction equipment).

Local Area Conditions

Existing Ambient Air Quality in the Surrounding Area

In order to measure and establish ambient pollutant concentrations, the SCAQMD maintains a network of air quality monitoring stations located throughout the Air Basin. The monitoring station most representative of the Project Site is the LAX-Hastings Monitoring Station, located at 7201 West Westchester Parkway, Los Angeles (LAX-Hastings). Since $PM_{2.5}$ data are not available at the LAX-Hastings station, the monitoring data collected at the station located at 3648 N Long Beach Blvd Long Beach (Long Beach North) are used for it being relatively close to and

61 California Air Toxics Board, Toxic Air Contaminant Board, Toxic Air Contaminant Identification List, Accessed March 2019.
62 South Coast Air Quality Management District, 2016 Air Quality Management Plan, page 3-32.

having similar surroundings as the Proposed Project. The most recent data available from the SCAQMD for these two monitoring stations are from years 2015 to 2017.[63] The pollutant concentration data for ozone, NO_2, CO, SO_2, PM_{10}, and $PM_{2.5}$ for these years are summarized in **Table 3.2-2**. As shown in Table 3.2-2, the CAAQS and NAAQS were exceeded in the Project Site vicinity for O_3, PM_{10}, and $PM_{2.5}$ between 2015 and 2017.

Commented [1]: Revise per table.

TABLE 3.2-2
AMBIENT AIR QUALITY IN THE PROJECT VICINITY

Pollutant/Standard [a]	2015	2016	2017
Southwest Coastal LA County			
Ozone, O_3 (1-hour)			
Maximum Concentration (ppm)	0.096	0.087	0.086
Days > CAAQS (0.09 ppm)	3	2	0
Ozone, O_3 (8-hour)			
Maximum Concentration (ppm)	0.077	0.080	0.070
Days > CAAQS (0.070 ppm)	0	0	0
Days > NAAQS (0.070 ppm)	0	0	0
Nitrogen Dioxide, NO_2 (1-hour)			
Maximum Concentration (ppm)	0.087	0.082	0.072
Days > CAAQS (0.18 ppm)	0	0	0
98th Percentile Concentration (ppm)	0.058	0.055	0.055
Days > NAAQS (0.100 ppm)	0	0	0
Nitrogen Dioxide, NO_2 (Annual)			
Annual Arithmetic Mean (0.030 ppm)	0.011	0.010	0.009
Carbon Monoxide, CO (1-hour)			
Maximum Concentration (ppm)	1.7	1.6	2.1
Days > CAAQS (20 ppm)	0	0	0
Days > NAAQS (35 ppm)	0	0	0
Carbon Monoxide, CO (8-hour)			
Maximum Concentration (ppm)	1.4	1.3	1.6
Days > CAAQS (9.0 ppm)	0	0	0
Days > NAAQS (9 ppm)	0	0	0
Sulfur Dioxide, SO_2 (1-hour)			
Maximum Concentration (ppm)	0.015	0.010	0.010
Days > CAAQS (0.25 ppm)	0	0	0
99th Percentile Concentration (ppm)	0.007	0.006	0.007
Days > NAAQS (0.075 ppm)	0	0	0
Sulfur Dioxide, SO_2 (24-hour)			
Maximum Concentration (ppm)	0.002	0.002	0.001
Days > CAAQS (0.04 ppm)	0	0	0

[63] South Coast Air Quality Management District, Historical Data by Year, (2014-2016). Available: http://www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year. Accessed January 2019.

TABLE 3.2-2
AMBIENT AIR QUALITY IN THE PROJECT VICINITY

Pollutant/Standard [a]	2015	2016	2017
Respirable Particulate Matter, PM_{10} (24-hour)			
Maximum Concentration (µg/m³)	42.0	43.0	46
Samples > CAAQS (50 µg/m³)	0	0	0
Samples > NAAQS (150 µg/m³)	0	0	0
Respirable Particulate Matter, PM_{10} (Annual)			
Annual Arithmetic Mean (20 µg/m³)	21.2	21.6	19.8
Long Beach North, 3648 N. Long Beach Blvd			
Fine Particulate Matter, $PM_{2.5}$ (24-hour)			
Maximum Concentration (µg/m³)	54.6	29.7	
98th Percentile Concentration (µg/m³)	32.1	23.6	55.3
Samples > NAAQS (35 µg/m³)	3	0	4
Fine Particulate Matter, $PM_{2.5}$ (Annual)			
Annual Arithmetic Mean (12 µg/m³)	10.8	10.4	10.9

NOTE:

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

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; US Environmental Protection Agency, AirData, http://www.epa.gov/airdata/ad_rep_mon.html. Accessed April 2019.

Existing Health Risk in the Surrounding Area

In 2015, the SCAQMD issued the Multiple Air Toxics Exposure Study (MATES IV),[64] which estimated long-term inhalation carcinogenic exposure risks from more than 30 air pollutants, including both gases and particulates, for the Air Basin. The monitoring study was accompanied by a computer modeling study in which SCAQMD estimated the risk of cancer from breathing toxic air pollution throughout the region based on emissions and weather data. The study concluded a background cancer risk of approximately 1,023 in one million and a population-weighted average risk of 997 in one million based on actual monitored data throughout the Air Basin.

These estimates used the cancer risk calculation methods adapted by the California Environmental Protection Agency Office of Environmental Health Hazard Assessment (OEHHA) in 2015. These methods utilize higher estimates of cancer potency during early life exposures and use different assumptions for breathing rates and length of residential exposures.[65] Under the updated OEHHA methodology, the relative reduction in the overall cancer risk from the MATES IV results compared to MATES III would be about 65 percent and 57 percent, respectively.

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[64] South Coast Air Quality Management District, Final Report – Multiple Air Toxics Exposure Study in the South Coast Air Basin, (2015), p. 2-11.

[65] California Environmental Protection Agency, Office of Health Hazard Assessment, Air Toxics Hot Spots Program, Guidance Manual for Preparation of Health Risk Assessments, (2015). Available: http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0. Accessed January 2019.

Based on the online MATES IV Carcinogenic Risk Interactive Map, the cancer risk estimate at the Project Site is 1,000 in one million.[66]

According to the MATES IV, approximately 68 percent of the airborne carcinogenic risk in the Air Basin is attributed to DPM emissions, approximately 22 percent to other toxics associated with mobile sources (including benzene, butadiene, and formaldehyde), and approximately 10 percent is attributed to stationary sources (which include industries and certain other businesses, such as dry cleaners and chrome plating operations).[67] Generally, the risk from air toxics is lower near the coastline and increases inland, with higher risks concentrated near large diesel sources (e.g., freeways, airports, and ports).

Existing Site Emissions

The Project Site is comprised of approximately 28 acres of land. More than 85 percent of the Project Site, or approximately 23 acres, is vacant or undeveloped. The remaining developed parcels include a fast-food restaurant, a motel, ~~commercial buildings,~~ a light manufacturing/warehouse facility, a warehouse, a commercial catering business ~~and candy manufacturing facilities~~, and a groundwater well ~~with~~ and related facilities. Air emissions are expected from the operation of these businesses. As ~~the entirety of these uses will be demolished (other than the groundwater well, which will be replaced elsewhere on the~~ Project Site~~) will be developed~~, the emissions from the existing businesses will no longer exist when the construction phase of the Proposed Project commences.

Table 3.2-3 presents the regional and localized emissions from the existing development to be removed from the Project Site.

TABLE 3.2-3
EXISTING SITE EMISSIONS TO BE REMOVED (POUNDS PER DAY) [a]

Source	VOC	NO_X	CO	SO_2	PM10	PM2.5
Existing Regional Emissions						
Area (Consumer Products, Landscaping)	99	99	99	99	99	99
Energy (Natural Gas)	99	99	99	99	99	99
Motor Vehicles	99	99	99	99	99	99
Total Regional Existing Emissions	99	99	99	99	99	99
Existing Localized Emissions						
Area (Consumer Products, Landscaping) / Energy (Natural Gas)	--	99	99	--	99	99
Total Localized Existing Emissions	--	99	99	--	99	99

NOTES:
[a] Totals may not add up exactly due to rounding in the modeling calculations. Detailed emissions calculations are provided in Appendix C.

SOURCE: ESA, 2019.

66 South Coast Air Quality Management District, Multiple Air Toxics Exposure Study, MATES IV Carcinogenic Risk Interactive Map, accessed March 2019.
67 South Coast Air Quality Management District, Final Report – Multiple Air Toxics Exposure Study in the South Coast Air Basin, 2015, page ES-2.

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, i.e., sensitive receptors.

The Proposed Site encompasses four subareas where different features of the Proposed Project will be located: Arena Site, West Parking Garage Site, East Parking and Hotel Site, and Well Relocation Site. The Project Site is primarily surrounded by residential and commercial uses, as shown in **Figure 3.2-2**. Air quality sensitive land uses nearest to the Project Site are described below.

Arena Site

To the east of the Arena Site along West Century Boulevard is a non-operational structure (formerly the Airport Park View Motel) and a self-storage facility. To the east along South Doty Avenue are industrial and residential uses. To the north of West Century Boulevard is the Hollywood Park Specific Plan, under construction with the LASED Stadium and a mix of commercial, office, retail, residential, civic, and recreational uses. Residential uses, automotive body shops, and commercial uses are located to the west. To the south of the Arena Site is a religious facility and residential uses.

The nearest sensitive receptors to the Arena Site would be the residential uses located along the east side of South Prairie Avenue between West 102nd Street and West 103rd Street to the west (adjacent to the site) and the Southside Christian Church and residential uses along West 104th Street to the south (adjacent to the site).

West Parking Garage Site

To the north of the West Century Boulevard are commercial uses, Holly Crest Hotel, and Motel 6. Commercial uses are located immediately to the east, a religious facility and residential uses are located to the south, and a motel, religious facility, and residential uses are located to the west. The nearest sensitive receptors to the West Parking Garage Site would be residential uses to the west (adjacent to the site) and south (approximately 50 feet) of the site.

East Parking and Hotel Site

The Hollywood Park Casino is located to the north of the East Parking and Hotel Site, north of West Century Boulevard. To the west is an aquarium/pet store. To the south of the site are residential and commercial uses. A United Parcel Service (UPS) facility is located to the east of the East Parking Garage and Hotel Site. The nearest sensitive receptors would be the residential uses located approximately 50 feet to the south of the Site on the south side of West 102nd Street.

Well Relocation Site

To the north of the Well Relocation Site is an occupied warehousing and shipping company. To the east of the site are residential uses. A vacant lot and residential uses are located to the south. To the west of the site is an occupied commercial use. The nearest sensitive receptors would be the residential uses to the east and south, adjacent and approximately 60 feet from the site, respectively.

3.2.2 Adjusted Baseline Environmental Setting

As described in Chapter 3.0, Section 3.0.5, Section 3.2, Air Quality assumes the Adjusted Baseline Environmental Setting. Related to Air Quality, the changes associated with the HPSP Adjusted Baseline development include air emissions associated with the construction of new uses on the HPSP site and operational air emissions associated with new uses on the HPSP site.

The HPSP Adjusted Baseline development would emit air pollutants associated with vehicle trips, maintenance operations, energy consumption, etc., from all of its operational land uses. Specifically, vehicle trips associated with activities at the HPSP would begin taking place during mid-2020 (when the NFL Stadium begins operations), and would have an impact on local and regional air quality. Accordingly, the air pollutant emissions associated with this development within the HPSP area are considered as part of the Adjusted Baseline. The nearest sensitive receptors in the HPSP area under the Adjusted Baseline would be residences located approximately 950 feet north of the Proposed Project Site. No other changes to the existing environmental setting related to air quality would occur under the Adjusted Baseline.

3.2.3 Regulatory Setting

This section provides a summary of pertinent federal, State, and local statutes, regulations, plans, and policies that have been adopted that address air quality.

Federal

The 1963 Clean Air Act (CAA) 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, US EPA is responsible for implementation of certain portions of the CAA including mobile source requirements.

The CAA establishes federal air quality standards and specifies future dates for achieving compliance. The CAA also mandates that the State submit and implement a State Implementation Plan (SIP) for areas not meeting these standards. SIPs must include pollution control measures that demonstrate how the National Ambient Air Quality Standards (NAAQS) will be met. The 1990 amendments to the CAA 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 CAA that are most applicable to the project include Title I (Nonattainment Provisions).

Title I requirements are implemented for the purpose of attaining NAAQS for the following criteria air pollutants: O_3; NO_2; CO; SO_2; PM_{10}; and lead. The NAAQS were amended in July 1997 to include an 8-hour standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. The NAAQS were also amended in September 2006 to include an established methodology for calculating $PM_{2.5}$ as well as revoking the annual PM_{10} threshold. **Table 3.2-4** shows the NAAQS currently in effect for each criteria air pollutant.

TABLE 3.2-4
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/m3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m3)		0.070 ppm (137 µg/m3)		
NO_2[i]	1 Hour	0.18 ppm (339 µg/m3)	Gas Phase Chemi-luminescence	100 ppb (188 µg/m3)	None	Gas Phase Chemi-luminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)		53 ppb (100 µg/m3)	Same as Primary Standard	
CO	1 Hour	20 ppm (23 mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m3)	None	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m3)		9 ppm (10 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)		—	—	
SO_2[j]	1 Hour	0.25 ppm (655 µg/m3)	Ultraviolet Fluorescence	75 ppb (196 µg/m3)	—	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m3)	
	24 Hour	0.04 ppm (105 µg/m3)		0.14 ppm (for certain areas)[j]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[j]	—	
PM_{10}[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/m3		—		
$PM_{2.5}$[k]	24 Hour	No Separate State Standard		35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	12.0 µg/m3 k	15 µg/m3	

TABLE 3.2-4
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]
Lead[l,m]	30 Day Average	1.5 µg/m3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m3 (for certain areas)m	Same as Primary Standard	
	Rolling 3-Month Average m	--		0.15 µg/m3		
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/m3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m3)	Ultraviolet Fluorescence			
Vinyl Chloride[l]	24 Hour	0.01 ppm (26 µg/m3)	Gas Chromatography			

TABLE 3.2-4
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]

NOTES:
a California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, 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 PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms/per cubic meter (µg/m3) is equal to or less than one. For $PM_{2.5}$, 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 the California Air Resources Board 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 US EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the US EPA.
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 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 $PM_{2.5}$ primary standard was lowered from 15 µg/m3 to 12.0 µg/m3.
l The California Air Resources Board has identified lead and vinyl chloride as 'toxic air contaminants' 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/m3 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: CARB, Ambient Air Quality Standards (10/1/15), Accessed April 2019

State

California Clean Air Act

The California Clean Air Act (CCAA), signed into law in 1988, requires all areas of the State to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. The CAAQS are established to protect the health of the most sensitive groups and apply to the same criteria air pollutants as the federal Clean Air Act and also includes State-identified criteria air pollutants, which are sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride.[68] Table 3.2-4 shows the CAAQS currently in effect for each of the federally identified criteria air pollutants as well as the other State-identified criteria air pollutants ~~recognized by the state, including sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride~~.

68 California Air Resources Board, California Ambient Air Quality Standards (CAAQS), last reviewed August 10, 2017.

Mobile Source Regulations

Mobile sources are a significant contributor to the air pollution in California. CARB has established exhaust emission standards for automobiles, which are more stringent the federal emissions standards.

Through its Mobile Sources Program, CARB has developed programs and policies to reduce emissions from on-road heavy-duty diesel vehicles. Specifically, the On-Road Heavy-Duty Diesel Vehicle Regulation requires diesel trucks and buses that operate in the State to be upgraded to reduce emissions. By January 1, 2023, nearly all vehicles must have engines certified to 2010 model year engines or equivalent.

The Innovative Clean Transit Program sets emissions reduction standards for new public transit vehicles and requires major transit agencies to only purchase zero emission buses after 2029. The Solid Waste Collection Vehicle Regulation requires solid waste collection vehicles and heavy diesel-fueled on-road single engine cranes to be upgraded. The Rule for On-Road Heavy-Duty Diesel-Fueled Public and Utility Fleets requires fleets to install emission control devices on vehicles or purchase vehicles that run on alternative fuels or use advanced technologies to achieve emissions requirements by specified implementation dates. CARB also established an In-Use Off-Road Diesel-Fueled Fleets Regulation to impose limits on idling and require fleets to retrofit or replace older engines.

California Air Resources Board 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 diesel PM and other TACs. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight 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, PM_{10}, and $PM_{2.5}$ emissions from existing diesel vehicles operating in California. The requirements were amended in December 2010 and apply to nearly all diesel fueled trucks and busses with a gross vehicle weight rating greater than 14,000 pounds. For the largest trucks in the fleet (i.e., those with a gross vehicle weight rating greater than 26,000 pounds), there are two methods to comply with the requirements. The first method 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 eight years, starting in 2015 and would be fully implemented by 2023, meaning that all trucks operating in the State subject to this option would need to meet or exceed the 2010 engine emission standards for NO_X and PM by 2023. The second option, if chosen, requires fleet owners, starting in 2012, to retrofit a portion of their fleet with diesel particulate filters achieving at least 85 percent removal efficiency, so that by January 1, 2016, their entire fleet is equipped with diesel particulate filters. However, diesel particulate filters do not typically lower NO_X emissions.

Thus, fleet owners choosing the second method 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 promulgated emission standards for off-road diesel construction equipment of greater than 25 horsepower such as bulldozers, loaders, backhoes and forklifts, as well as many other self-propelled off-road diesel vehicles. The regulation adopted by the 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. Implementation is staggered based on fleet size (which is the total of all off-road horsepower under common ownership or control), with the largest fleets to begin compliance by January 1, 2014. 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 (e.g., engine retrofits) on a certain percentage of its total fleet horsepower. The compliance schedule requires that BACT turn overs or retrofits be fully implemented by 2023 in all equipment in large and medium fleets and across 100 percent of small fleets by 2028.

Commented [2]: Global comment: pick between "CARB" or "the CARB" and use one or the other consistently throughout.

Sustainable Communities and Climate Protection Act of 2008 (SB 375)

Senate Bill 375 (SB 375) directs CARB to set regional targets for reducing greenhouse gas emissions from cars and light trucks.[69] As part of the transportation planning process, each region's Metropolitan Planning Organization (MPO) is responsible for preparing a Sustainable Communities Strategies (SCS) that integrates transportation, land-use, and housing policies to plan for achievement of the emissions target for their region. Specifically, SB 375 focuses on reducing vehicle miles traveled (VMT) and encouraging more compact, complete, and efficient communities. Further, SB 375 established CEQA streamlining and relevant exemptions for projects that are determined to be consistent with the land use assumptions and other relevant policies of an adopted SCS.

Assembly Bill 987 (AB 987)

AB 987 was signed by Governor Jerry Brown on September 30, 2018. The bill added section 21168.6.8 to the California Public Resources Code (PRC) and provides for expedited judicial review in the event that the adequacy of this EIR is challenged, so long as certain requirements are met. The discussion of AB 987 below is focused on the provisions of PRC section 21168.6.8 that addresses air pollutant emissions, specifically criteria air pollutants and toxic air contaminants. A full description of AB 987 is provided in Chapter 1, Introduction.

AB 987 is described in this chapter under Regulatory Setting because it potentially applies to the project and addresses issues related to air pollutant emissions. However, it is not a regulatory

[69] Office of Planning and Research, http://opr.ca.gov/docs/SB375-Intro-Charts.pdf, accessed March 2019.

statute, per se, in that the Proposed Project is not required to comply with the provisions of PRC 21168.6.8. Rather, AB 987 established provisions by which the applicant for the Proposed Project may voluntarily decide to attempt to qualify under the provisions of the statute, and if deemed certified as qualified by the Governor's Office, then it would be afforded certain benefits of expedited judicial review related tofor any action brought to challenge the adequacy certification of this EIR or the approval of the Proposed Project. In the event that the Proposed Project does not qualify under the provisions of AB 987, the Proposed Project could still be reviewed and approved by the City, but judicial review would occur under the standard provisions provided inof CEQA.

The provisions of PRC section 21168.6.8 are similar to the provisions of the Jobs and Economic Improvement through Environmental Leadership Act of 2011 (AB 900; PRC sections 21178 through 21189.3), as subsequently amended, which first established expedited judicial review of certified Environmental Leadership Development Projects. In order to qualify for expedited judicial review under AB 987, the Proposed Project would have to provide trafficachieve certain vehicle trip reduction benefits goals and achieve a "no net new" greenhouse gas emissions standard, both of which would leading toalso result in reductions in criteria air pollutants and toxic air contaminants.[70] Further, as a condition of approval of the Proposed Project, the lead agency, in consultation with the SCAQMD, must require the project applicant, in consultation with the SCAQMD, to implement measures that will achieve criteria air pollutant and toxic air contaminant reductions over and above any reductions required by other laws or regulations in communities surrounding the Project Site, consistent with emission reduction measures that may be identified for those communities (pursuant to Section 44391.2 of the Health and Safety Code). At a minimum, these measures project applicant must achieve reductions ofreduce NOx emissions by 400 tons and 10 tons of $PM_{2.5}$ emissions by 10 tons over the 10 years following the commencement of construction of the Proposed Project, with a minimum reduction of 130 tons of NOx and 3 tons of $PM_{2.5}$ achieved within the first year following commencement of construction.[71] If the project applicant can demonstrate and verify to the South Coast Air Quality Management District that it has invested at least thirty million dollars ($30,000,000) to achieve the requirements of this subdivision, the requirements of this subdivision shall be deemed met, so long as one-half of the reductions set forth in paragraph (1) are met.

Regional

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.

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70 Office of the Governor, 2018. Assembly Bill 987 Signing Message. September 30.

71 AECOM, AB 987 Application for the Inglewood Basketball and Event Center, November 2018. Cal. Pub. Res. Code Section 21168.6.8(k).

Air Quality Management Plan

The SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to meet the CAAQS and NAAQS. In December 2012, the SCAQMD adopted the 2012 Air Quality Management Plan (AQMP), which incorporates scientific and technological information and planning assumptions, including growth projections.[72] The 2012 AQMP includes a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, and on-road and off-road mobile sources. 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 air pollutant standards within the timeframes allowed under the CAA.

The key undertaking of the 2012 AQMP is to bring the Air Basin into attainment with the NAAQS for the 24-hour $PM_{2.5}$ standard. It also intensifies the scope and pace of continued air quality improvement efforts toward meeting the 2024 8-hour O_3 standard deadline with new measures designed to reduce reliance on the CAA Section 182(e)(5) long-term measures for NO_X and VOC reductions. The SCAQMD expects exposure reductions to be achieved through implementation of new and advanced control technologies as well as improvement of existing technologies.

The SCAQMD Governing Board adopted the 2016 AQMP on March 3, 2017.[73] 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 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 planning efforts.[74] The strategies included in the 2016 AQMP are intended to demonstrate attainment of the NAAQS for the national non-attainment pollutants ozone and $PM_{2.5}$.[75] While the 2016 AQMP was adopted by the SCAQMD and CARB, it has not yet received US EPA approval for inclusion in the SIP. Therefore, until such time as the 2016 AQMP is approved by the US EPA, the 2012 AQMP remains the applicable AQMP; however, this analysis considers both the 2012 and 2016 AQMPs as appropriate.

South Coast Air Quality Management District CEQA Guidelines

SCAQMD's CEQA guidelines are voluntary initiatives recommended for consideration by local planning agencies. The *CEQA Air Quality Handbook* (Handbook) published by SCAQMD provides local governments with guidance for analyzing and mitigating project-specific air quality impacts.[76] The SCAQMD is currently updating some of the information and methods in

[72] South Coast Air Quality Management District, 2012 Air Quality Management Plan, Accessed April 2019.
[73] South Coast Air Quality Management District, 2016 Air Quality Management Plan (AQMP). Accessed April 2019.
[74] South Coast Air Quality Management District, 2016 Air Quality Management Plan (AQMP). Available: Accessed April 2019.
[75] South Coast Air Quality Management District, NAAQS/CAAQS and Attainment Status for South Coast Air Basin, (2016). Accessed April 2019.
[76] South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993. Accessed April 2019.

the Handbook, such as the screening tables for determining the air quality significance of a project and the on-road mobile source emission factors. While this process is underway, the SCAQMD recommends using other approved models to calculate emissions from land use projects, such as the California Emissions Estimator Model (CalEEMod) software.

The SCAQMD *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning* considers impacts to sensitive receptors from ~~TAC~~ TAC-emitting facilities.[77] SCAQMD's siting distance recommendations are the same as those provided by CARB (e.g., a 500-foot siting distance for sensitive land uses proposed in proximity to freeways and high-traffic roads, and the same siting criteria for distribution centers and dry cleaning facilities).

The SCAQMD *Final Localized Significance Threshold Methodology and Final Methodology to Calculate $PM_{2.5}$ and $PM_{2.5}$ Significance Thresholds* provides guidance when evaluating the localized effects of emissions in the CEQA evaluation.

Commented [3]: italics added assuming this is all in the title.

South Coast Air Quality Management District Rules and Regulations

Several SCAQMD rules adopted to implement portions of the AQMPs may apply to the Proposed Project. The Proposed 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 a project property line, restricts the net PM_{10} emissions to less than 50 micrograms per cubic meter (µg/m3) and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize one or more of the best available control measures, which may include adding freeboard to haul vehicles, covering loose material on haul vehicles, watering, using chemical stabilizers and/or ceasing all activities.

[77] South Coast Air Quality Management District, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*. May 06, 2005. Accessed April 2019.

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 Proposed Project:

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

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

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

- ***Rule 1186 – PM_{10} 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 PM_{10} 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 Proposed Project:

- ***Rule 1401 – New Source Review of Toxic Air Contaminants:*** This rule regulates new or modified facilities to limit cancer and non-cancer health risks from facilities located within the SCAQMD jurisdiction.

- ***Rule 1402 – Control of Toxic Air Contaminants from Existing Sources:*** This rule regulates facilities that are already operating in order to limit cancer and non-cancer health risks. Rule 1402 incorporates the requirements and methodology of the AB 2588 Air Toxics "Hot Spots" program.

- ***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.

SCAG Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization for the region in which the City of Inglewood is located. In April 2016, SCAG adopted the *2016 Regional Transportation Plan/Sustainable Communities Strategy: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life* (RTP/SCS), which is an update to the previous 2012 RTP/SCS.[78]

The 2016 RTP/SCS considers the role of transportation in the broader context of economic, environmental, and quality-of-life goals for the future, identifying regional transportation strategies to address mobility needs. The 2016 RTP/SCS describes how the region can attain the GHG emission-reduction targets set by CARB by achieving an 8 percent reduction in passenger vehicle GHG emissions on a per capita basis by 2020, 18 percent reduction by 2035, and 21 percent reduction by 2040 compared to the 2005 level. Although the focus of the 2016 RTP/SCS is on GHG emission-reduction, compliance with and implementation of 2016 RTP/SCS policies and strategies would also have the co-benefits of reducing per capita criteria air pollutant and toxic air contaminant emissions associated with reduced per capita vehicle miles traveled (VMT). Improved air quality with implementation of the 2016 RTP/SCS policies would decrease reactive organic gases (ROG) by 8 percent, CO by 9 percent, NOx by 9 percent, and $PM^{2.5}$ by 5 percent.[79]

SCAG's 2016 RTP/SCS builds on the land use policies that were incorporated into the 2012 RTP/SCS, and provides specific strategies for successful implementation. These strategies include development of "complete communities," defined as mixed-use districts that concentrate housing, employment, and a mix of retail and services in close proximity to each other; 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. The 2016 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment

[78] Southern California Association of Governments, 2016. *2016 Regional Transportation Plan/Sustainable Communities Strategy*. Accessed March 11, 2019. Adopted April 2016.
[79] Southern California Association of Governments, 2016. *2016 Regional Transportation Plan/Sustainable Communities Strategy*. Accessed March 11, 2019. Adopted April 2016.

in the region's high quality transit areas (HQTAs), which SCAG defines as areas within one-half mile of a well-serviced fixed guideway transit stop, and it includes bus transit corridors where buses pick up passengers every 15 minutes or less during peak commute hours.

In addition, the 2016 RTP/SCS includes goals and strategies to promote active transportation and improve transportation demand management (TDM). The 2016 RTP/SCS strategies support local planning and projects that serve short trips, increase access to transit, expand understanding and consideration of public health in the development of local plans and projects, and support improvements in sidewalk quality, local bike networks, and neighborhood mobility areas. The 2016 RTP/SCS proposes to better align active transportation investments with land use and transportation strategies, increase competitiveness of local agencies for federal and state funding, and to expand the potential for all people to use active transportation.

In June 2016, CARB accepted SCAG's quantification of GHG emission reductions from the 2016 RTC/SCS and the determination that the 2016 RTP/SCS would, if implemented, achieve the 2020 and 2035 GHG emission reduction targets established by CARB.[80]

The Proposed Project would not be inconsistent with the strategies and principles of the 2016 RTP/SCS that are designed to reduce VMT and ~~the~~ criteria air ~~quality~~ pollutant and toxic air contaminant emissions, including criteria air pollutants associated with on-road vehicle travel. The Proposed Project would be an infill development that provides a dense mix of recreational, entertainment, office, retail, restaurant, community, and hotel uses, on parcels of infill urban land accessible to and served by public transit and near existing and planned housing. The Proposed Project has been designed with the "complete communities" concept in mind by integrating community design with land use planning and transportation planning, and by providing temporary construction jobs and permanent jobs for a variety of skills and education, recreational and cultural events, and a full-range of shopping, entertainment and services all within a relatively short distance.

The Proposed Project meets the HQTA criteria of being within one-half mile of a fixed guideway transit stop or a bus transit corridor where buses pick up passengers at a frequency of every 15 minutes or less during peak commute hours. The Project Site is adjacent to two bus lines (the 117 line that travels east-west on Century Boulevard, and the 212/312 lines that run north-south on Prairie Avenue, both of which stop at the intersection of West Century Boulevard and South Prairie Avenue), and within one-half mile of a third bus route (the combined 740/40 Metro bus line that travels north-south on Hawthorne Boulevard/La Brea Avenue, stopping at the intersection at Century ~~Blvd~~ Boulevard), all of which are bus lines that pick up passengers at intervals of 15 minutes or less during peak commute hours.

[80] California Air Resources Board, 2016. *Southern California Association of Governments' (SCAG) 2016 Sustainable Communities Strategy (SCS) ARB Acceptance of GHG Quantification Determination,* Available: https://www.arb.ca.gov/cc/sb375/scag_executive_order_g_16_066.pdf. Accessed March 11, 2019. June 2016.

As described in Section 2.5.5 Circulation, the Proposed Project would include an Event Transportation Management Plan (TMP) designed to facilitate multi-modal travel to and from events at the Project Site in a safe and efficient manner during event days. In addition, the Proposed Project would implement a Transportation Demand Management (TDM) program designed to reduce vehicle trips by attendees, employees, visitors, and customers through the use of alternate modes of transportation including transit, shuttles, ridesharing, walking, and biking.

The Proposed Project's consistency with the 2016-2040 RTP/SCS is evaluated in more detail in Section 3.7.4, Analysis, Impacts and Mitigation.

Local

City of Inglewood General Plan

The City of Inglewood General Plan sets forth goals, objectives, and policies for the future development of the City and designates the location of desired future land uses within the City.

The following goal from the Land Use Element[81] of the City of Inglewood General Plan are relevant to air pollutant emissions.

> **Circulation Goal**: Promote and support adequate public transportation within the City and the region.

As described in Chapter 2, Project Description, the Proposed Project constitutes a large-scale development integrating commercial, office, entertainment uses that supports public transportation. The Proposed Project would include provisions that would promote the use of public transportation as a means of travel to and from the Proposed Arena, including a Transportation Hub at the East Parking Garage site, shuttle stops on Prairie Avenue, and a shuttle system for large events that would connect the Proposed Project to nearby Metro stations. For these reasons, the Proposed Project would not be inconsistent with the General Plan Land Use Element circulation goal listed above. Ultimately, it is within the authority of the City Council to determine whether the Proposed Project is consistent with the City of Inglewood General Plan.

Inglewood Energy and Climate Action Plan

The Inglewood Energy and Climate Action Plan (ECAP) presents the City's community and municipal inventories, emission forecasts, and recommended reduction targets for emissions to mitigate the City's impact on air quality and climate change.[82] Although the strategies within the ECAP are primarily directed towards GHG emission-reductions, as are discussed in further detail in Section 3.7, Greenhouse Gas Emissions, the measures in the ECAP would also achieve the co-benefits of reducing criteria and toxic air pollutants and toxic air contaminants. The ECAP's reduction strategies focus on actions within, or associated with activity in, the City that can result

Commented [4]: Consider providing a more specific cross-reference.

[81] City of Inglewood, Department of Community Development and Housing, 1980. Land Use Element of the Inglewood General Plan, January 1980, Amended September 14, 2016.

[82] City of Inglewood, Inglewood Energy and Climate Action Plan, https://www.cityofinglewood.org/DocumentCenter/View/148/Inglewood-Energy-and-Climate-Action-Plan-ECAP-Adopted-2013-PDF, accessed March 2019.

in a breakreductions from business-as-usual energy use and/or emissions. The City's GHG emission reduction targets are 15 percent below 2005 levels by 2020 and 35.5 percent below 2005 levels by 2035. The ECAP quantifies GHG reductions from five implementation strategies and actions: leading by example, increasing energy efficiency, supporting renewable energy generation, improving transportation options, and reducing consumption and waste, all of which are described in detail in Section 3.7, Greenhouse Gas Emissions. Two The following two of the five strategies and their related actions also have the potential for co-benefits potential of reducing criteria air pollutants and toxic air contaminants:

Commented [5]: Confirm. GHG section says 32.5%.

Commented [6]: Consider providing a more specific cross-reference.

Strategy 1 – Lead by Example with Municipal Government Actions

Accelerate city vehicle fleet replacement

Continue commute trip reduction program

Planning for electric vehicle infrastructure

Strategy 4: Improve Transportation Options and Manage Transportation Demand

Make roadways more efficient

Improve transit

Improve bicycle facilities

Make parking more efficient

Reduce commute trips

Encourage land use intensification and diversity

The Proposed Project would provide a dense mix of recreation, entertainment, office, retail, restaurant, community, and hotel uses on parcels of infill urban land accessible to and served by public transit and near existing and planned housing. In addition, as described above, the Proposed Project would implement a TDM program designed to reduce vehicle trips by attendees, employees, visitors, and customers through the use of alternate modes of transportation including transit, shuttles, ridesharing, walking, and biking. As such, the Proposed Project would not be inconsistent with the ECAP, as the Proposed Project would directly support implementation of the following ECAP actions:

- Improve transit,
- Reduce commute trips, and
- Encourage land use intensification and diversity.

Commented [7]: Consider adding "improve bicycle facilities" to this list.

3.2.4 Analysis, Impacts and Mitigation

Significance Criteria

A significant impact would occur if the Proposed Project would:

1. Conflict with or obstruct implementation of the applicable air quality plan;

2. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard;
3. Expose sensitive receptors to substantial pollutant concentrations; or
4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.