5.2 AIR QUALITY

This section of the Draft SEIR evaluates the potential air quality impacts of the proposed project compared to the air quality impacts of the original project. The proposed project would install fourteen competitive sports lighting to the existing varsity baseball and softball fields (ballfields) at Del Norte High School (proposed project). The analysis focuses on air pollution from regional emissions and localized pollutant concentrations. In this section, "emissions" refers to the actual quantity of pollutant, measured in pounds per day (lbs/day), and "concentrations" refers to the amount of pollutant material per volumetric unit of air. Concentrations are measured in parts per million, parts per billion, or micrograms per cubic meter.

Criteria air pollutant emissions modeling is included in Appendix C, *Air Quality and Greenhouse Gas Emissions Data*, of this Draft SEIR. Cumulative impacts related to air quality are based on the regional boundaries of the San Diego Air Basin (SDAB).

5.2.1 Environmental Setting

5.2.1.1 AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_X), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, nitrogen dioxide (NO_2), PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for them. VOC and NO_X are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 are the principal secondary pollutants.

Each of the primary and secondary criteria air pollutants and its known health effects are described below.

- **Carbon Monoxide** is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (South Coast AQMD 2005; US EPA 2022a). The SDAB is designated under the California AAQS as being in attainment and under the National AAQS as being in unclassified/attainment of CO criteria levels (SDAPCD 2022).

- **Volatile Organic Compounds** are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such

as aerosols (South Coast AQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O_3, the County of San Diego uses the South Coast AQMD threshold of 75 pounds per day as its significance threshold (San Diego 2007). The health effects for ozone are described later in this section.

- **Nitrogen Oxides** are a byproduct of fuel combustion and contribute to the formation of O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_X are nitric oxide (NO) and NO_2. The principal form of NO_2 produced by combustion is NO, but NO reacts with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 part per million (ppm). NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including people with asthma, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between breathing elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (South Coast AQMD 2005; US EPA 2022a). The SDAB is designated as an attainment area for NO_2 under both the National and California AAQS (SDAPCD 2022).

- **Sulfur Dioxide** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. The SDAB is designated as attainment under the California and National AAQS (SDAPCD 2022).

- **Suspended Particulate Matter** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems.

  The US Environmental Protection Agency's (EPA) scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower

concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (South Coast AQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch) have human health implications because their toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (South Coast AQMD 2013). However, the EPA and the California Air Resources Board (CARB) have not adopted AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,[1] environmental damage,[2] and aesthetic damage[3] (South Coast AQMD 2005; US EPA 2022a). The SDAB is designated under the California AAQS as a nonattainment area for PM_{10} and $PM_{2.5}$ (SDAPCD 2022).

- **Ozone**, or O_3, is a key ingredient of "smog" and is a gas that is formed when VOCs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (South Coast AQMD 2005; US EPA 2022a). The SDAB is designated as nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (SDAPCD 2022).

- **Lead (Pb)** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (South Coast AQMD 2005; US EPA 2022a). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of

[1] $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

[2] Particulate matter can be carried over long distances by wind and then settle on ground or water, making lakes and streams acidic; changing the nutrient balance in coastal waters and large river basins; depleting the nutrients in soil; damaging sensitive forests and farm crops; and affecting the diversity of ecosystems.

[3] Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. Lead emissions have steadily declined due to catalytic converters and increased use of lead-free gasoline. San Diego is no longer required to monitor for lead (San Diego 2007). Because emissions of lead are found only in projects that are permitted by the San Diego Air Pollution Control District (SDAPCD), lead is not a pollutant of concern for the project.

Table 5.2-1, *Criteria Air Pollutant Health Effects Summary*, summarizes the potential health effects associated with the criteria air pollutants.

Table 5.2-1 Criteria Air Pollutant Health Effects Summary

Pollutant	Health Effects	Examples of Sources
Carbon Monoxide (CO)	• Chest pain in heart patients • Headaches, nausea • Reduced mental alertness • Death at very high levels	Any source that burns fuel such as cars, trucks, construction and farming equipment, and residential heaters and stoves
Ozone (O_3)	• Cough, chest tightness • Difficulty taking a deep breath • Worsened asthma symptoms • Lung inflammation	Atmospheric reaction of organic gases with nitrogen oxides in sunlight
Nitrogen Dioxide (NO_2)	• Increased response to allergens • Aggravation of respiratory illness	Same as carbon monoxide sources
Particulate Matter (PM_{10} and $PM_{2.5}$)	• Hospitalizations for worsened heart diseases • Emergency room visits for asthma • Premature death	Cars and trucks (particularly diesels) Fireplaces and woodstoves Windblown dust from overlays, agriculture, and construction
Sulfur Dioxide (SO_2)	• Aggravation of respiratory disease (e.g., asthma and emphysema) • Reduced lung function	Combustion of sulfur-containing fossil fuels, smelting of sulfur-bearing metal ores, and industrial processes
Lead (Pb)	• Behavioral and learning disabilities in children • Nervous system impairment	Contaminated soil

Source: CARB 2009.

Toxic Air Contaminants

People exposed to toxic air contaminants (TAC) at sufficient concentrations and durations may have an increased chance of getting cancer or experiencing other serious health effects. These health effects can include damage to the immune system as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems (US EPA 2022b). By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. There are no air quality standards for TACs. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The majority of the estimated health risks from

TACs can be attributed to relatively few compounds, the most relevant to the proposed project being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified diesel particulate matter (DPM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs. Long-term (chronic) inhalation of DPM is likely a lung cancer risk. Short-term (i.e., acute) exposure can cause irritation and inflammatory systems and may exacerbate existing allergies and asthma (US EPA 2002).

5.2.1.2 REGULATORY BACKGROUND

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SDAB and is subject to the rules and regulations imposed by SDAPCD. However, SDAPCD reports to CARB, and all criteria emissions are also governed by the California and National AAQS. Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

Federal and State

Ambient Air Quality Standards

The Clean Air Act was passed in 1963 by the US Congress and has been amended several times. The 1970 amendments strengthened previous legislation and laid the foundation for the regulatory scheme of the 1970s and 1980s. In 1977, Congress again added several provisions, including nonattainment requirements for areas not meeting National AAQS and the Prevention of Significant Deterioration program. The 1990 amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The Clean Air Act allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California AAQS by the earliest practical date. The California AAQS tends to be more restrictive than the National AAQS.

The National and California AAQS are the levels of air quality considered to provide a margin of safety in the protection of the public health and welfare. They are designed to protect "sensitive receptors" most susceptible to further respiratory distress, such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

Both California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 5.2-2, *Ambient Air Quality Standards for Criteria Air Pollutants*. These pollutants are O_3, NO_2, CO, SO_2, PM_{10}, $PM_{2.5}$, and Pb. In addition, the state has set standards for sulfates, hydrogen sulfide,

vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 5.2-2 Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[4]	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)[5]	24 hours	25 µg/m^3	*	Industrial processes.
Visibility-Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

Table 5.2-2 Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.
Notes: ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter; ppb: parts per billion
* Standard has not been established for this pollutant/duration by this entity.
1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, 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.
2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 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 $\mu g/m^3$ 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.
3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
4 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM_{10} standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
5 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted many other regulations that reduce criteria pollutant emissions.

- **Assembly Bill (AB) 1493: Pavley Fuel Efficiency Standards.** Pavley I is a clean-car standard that reduces greenhouse gas emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016. In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025.

- **Senate Bill (SB) 1078 and SB 107: Renewables Portfolio Standards.** A major component of California's Renewable Energy Program is the renewables portfolio standard established under SB 1078 (Sher) and SB 107 (Simitian). Under the renewables portfolio standard, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent to reach at least 20 percent by December 30, 2010.

- **California Code of Regulations (CCR), Title 20: Appliance Energy Efficiency Standards.** The 2006 Appliance Efficiency Regulations (20 CCR Sections 1601–1608) were adopted by the California

Energy Commission on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances.

- **24 CCR, Part 6: Building and Energy Efficiency Standards.** Energy conservation standards for new residential and nonresidential buildings adopted by the California Energy Resources Conservation and Development Commission (now the California Energy Commission) in June 1977.

- **24 CCR, Part 11: Green Building Standards Code.** Establishes planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.[4]

Toxic Air Contaminant Identification and Control Act and Air Toxics Hot Spot Information and Assessment Act

Public exposure to TACs is a significant environmental health issue in California. In 1983, the California legislature enacted a program to identify the health effects of TACs and reduce exposure to them. The California Health and Safety Code defines a TAC as "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" (17 CCR Section 93000). A substance that is listed as a hazardous air pollutant pursuant to Section 112(b) of the federal Clean Air Act is a TAC (42 US Code Section 7412[b]). Under state law, the California Environmental Protection Agency (CA EPA), acting through CARB, is authorized to identify a substance as a TAC if it is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through AB 1807 (Toxic Air Contaminant Identification and Control Act (Tanner 1983)) and AB 2588 (Air Toxics "Hot Spot" Information and Assessment Act of 1987). The Toxic Air Contaminant Identification and Control Act set up a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an "airborne toxics control measure" for sources that emit that TAC. If there is a safe threshold for a substance (i.e., a point below which there is no toxic effect), the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate "toxics best available control technology" to minimize emissions. To date, CARB has established formal control measures for 11 TACs that are identified as having no safe threshold.

Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public through notices and public meetings.

CARB has promulgated the following specific rules to limit TAC emissions.

[4] The green building standards became mandatory in the 2010 edition of the code.

- **13 CCR Chapter 10 Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.** Generally restricts on-road diesel-powered commercial motor vehicles with a gross vehicle weight rating of greater than 10,000 pounds from idling more than five minutes.
- **13 CCR Section 2477 and Article 8: Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate.** Regulations established to control emissions associated with diesel-powered TRUs.

Regional and Local

Air Quality Management Planning

The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the National AAQS and California AAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County. To ensure continued progress toward clean air and to comply with state and federal requirements, the SDAPCD, in conjunction with CARB and the San Diego Association of Governments (SANDAG), prepared the 2016 San Diego Regional Air Quality Strategy (RAQS) (SDAPCD 2016). The 2016 RAQS employs up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources.

The SDAB adopted its first RAQS in 1992, and it has undergone six revisions since. The amended and new rules considered in the current 2016 Triennial Revision of the RAQS are estimated to reduce NO_x by approximately 1.2 tons per day and VOC by approximately 0.3 ton per day. The 2016 RAQS provides additional reductions of O_3 precursor emissions compared to the 2009 RAQS, and therefore is more effective in improving air quality.

The SDAPCD is required to submit separate attainment plans to demonstrate to the EPA how the SDAB will achieve compliance with the federal Clean Air Act for nonattainment designations. These plans include:

- 2016 Attainment Plan – 8-Hour Ozone (2008 Standard)
- 2012 Maintenance Plan – 8-Hour Ozone (1997 Standard)
- 2007 Attainment Plan – 8-Hour Ozone (1997 Standard)
- 2005 Wildfire Natural Events Action Plan
- 2002 Maintenance Plan – 1-Hour Ozone (1979 Standard)

5.2.1.3 EXISTING CONDITIONS

The SDAB includes the entire County of San Diego. Emissions sources in the SDAB are primarily in the western region, and dispersion of air pollutants is highly affected by the region's climate and geography. The climate in the project area is dominated by the strength and position of the semipermanent high-pressure

center over the Pacific Ocean near Hawaii. This high-pressure center creates cool summers, mild winters, and infrequent rainfall and drives the cool, daytime breezes, maintaining a comfortable level of humidity and ample sunshine.

Meteorology

Temperature and Precipitation

The annual average temperature varies little throughout the 4,225-square-mile basin. The overall climate is Mediterranean, with average temperatures reaching 92˚F in the summer and 38˚F in the winter. High temperatures are often accompanied by very low relative humidity (often less than 20 percent). The Western Regional Climate Center maintains historical climate information for the western US. The climatological station nearest to the project site with temperature data is the Poway Valley Monitoring Station (ID No. 047111). The lowest average temperature is reported at 38.6°F in December, and the highest average temperature is 86.4°F in August (WRCC 2022).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. The total average annual precipitation is 13.24 inches as measured by the Western Regional Climate Center, and the majority of precipitation occurs between October and April (WRCC 2022).

Wind

Wind patterns across the south coastal region are characterized by westerly onshore winds during the day and occasional easterly breezes at night as a result of cold air drainage. Wind speed is somewhat greater during the dry summer months than during the rainy winter season. The onshore, light-to-moderate winds at San Diego Lindbergh Field average 6.6 knots. The offshore flow is less persistent in the winter, when occasional hot, dry Santa Ana winds blow from the east with great force (SDAPCD 2009).

Inversions

The influence of this semipermanent high-pressure system results in strong high-altitude temperature inversions associated with warm descending air. The subsidence inversions within the SDAB generally occur during the warmer months (May through October), as descending air from the Pacific high-pressure cell comes into contact with cool marine air. Within the SDAB, the inversion layer is approximately 2,000 feet (610 meters) above mean sea level between May and October. During the winter months (November through April), the temperature inversion rises to approximately 3,000 feet (914 meters) above mean sea level. Inversion layers are important elements of local air quality because they inhibit the dispersion of pollutants, resulting in a temporary degradation of air quality. On days without inversions or on days of winds averaging over 15 miles per hour, smog potential is greatly reduced in the SDAB.

SDAB Nonattainment Areas

The RAQS provides the framework for areas to achieve attainment of the state and federal ambient air quality standards throughout the SDAB. Areas that meet ambient air quality standards are classified "attainment," and areas that do not meet these standards are classified "nonattainment." Severity

classifications for ozone nonattainment are marginal, moderate, serious, severe, and extreme. Following are descriptions of the attainment classifications, and the attainment status for the SDAB is in Table 5.2-2, *Attainment Status of Criteria Pollutants in the San Diego Air Basin*:

- ***Unclassified.*** A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- ***Attainment.*** A pollutant is in attainment if the AAQS for that pollutant were not violated at any site in the area during a three-year period.
- ***Nonattainment.*** A pollutant is in nonattainment if there was at least one violation of an AAQS for that pollutant in the area.
- ***Nonattainment/Transitional.*** A subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

Table 5.2-3 Attainment Status of Criteria Pollutants in the San Diego Air Basin

Pollutant	State	Federal
Ozone – 8-hour	Nonattainment	Nonattainment
Ozone – 1-hour	Nonattainment	Attainment/Revoked[2]
CO	Attainment	Attainment
PM_{10}	Nonattainment	Unclassifiable[3]
$PM_{2.5}$[1]	Nonattainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Attainment
All others	Attainment/Unclassified	No federal standard

Source: SDAPCD 2022.

[1] The SDAB is designated as nonattainment for fine particulate matter due to the 8-hour ozone nonattainment designation. $PM_{2.5}$ is precursor to ozone formation.

[2] The federal 1-hour standard of 12 parts per hundred million was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.

[3] At the time of designation, if the available data do not support a designation of attainment or nonattainment, the area is designated unclassifiable.

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the proposed project site are best documented by measurements taken by the SDAPCD. The SDAPCD air quality monitoring station closest to the project site is the San Diego-Kearny Villa Road Station, which monitors O_3, NO_2, PM_{10}, and $PM_{2.5}$. PM_{10} for the years 2019 and 2020 was supplemented from El Cajon-Lexington Elementary School Monitoring Station. The most current five years of data monitored at these monitoring stations are included in Table 5.2-4, *Ambient Air Quality Monitoring Summary*. The data show recurring violations of federal O_3 standards, occasional violations of state O_3 standards, and rare violations of federal $PM_{2.5}$ standards in the last five years.

Table 5.2-4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Thresholds Were Exceeded and Maximum Levels[1]				
	2016	2017	2018	2019	2020
Ozone (O_3)					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	0	2	1	0	2
Federal 8-hour ≥ 0.070 ppm (days exceed threshold)	3	6	5	1	10
Max. 1-Hour Conc. (ppm)	0.087	0.097	0.102	0.083	0.123
Max. 8-Hour Conc. (ppm)	0.075	0.083	0.077	0.075	0.102
Nitrogen Dioxide (NO_2)					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.053	0.054	0.045	0.046	0.052
Coarse Particulates (PM_{10})[2]					
State 24-Hour > 50 µg/m^3 (days exceed threshold)	0	0	0	0	0
Federal 24-Hour > 150 µg/m^3 (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m^3)	36.0	46.0	38.0	38.7	*
Fine Particulates ($PM_{2.5}$)					
Federal 24-Hour > 35 µg/m^3 (days exceed threshold)	0	0	0	0	2
Max. 24-Hour Conc. (µg/m^3)	19.4	27.5	32.2	16.2	47.5

Source: CARB 2022.
Notes: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter; * = Data not available
[1] Data obtained from the San Diego-Kearny Villa Road Monitoring Station.
[2] Data for years 2019 and 2020 obtained from the El Cajon-Lexington Elementary School Monitoring Station.

Existing Emissions

The project site is at the existing varsity baseball field and softball fields on the southeast corner of the existing Del Norte High School campus. The existing project site currently generates criteria air pollutant emissions from area sources (e.g., use of landscaping equipment).

Sensitive Receptors

Some land uses are considered more sensitive to air pollution (i.e., TACs) than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardiorespiratory diseases.

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent because the majority of workers stay indoors most of the time. In addition, the workforce is generally the healthiest segment of the population. The nearest off-site sensitive receptors to the project site include the residences

to the east along Deer Ridge Road, the residences to the south along Camino San Bernardo, and the students and faculty on campus north of the project site.

5.2.2 Thresholds of Significance

According to Appendix G of the CEQA Guidelines, a project would normally have a significant effect on the environment if the project would:

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

AQ-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.

AQ-3 Expose sensitive receptors to substantial pollutant concentrations.

AQ-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

5.2.2.1 REGIONAL SIGNIFICANCE THRESHOLDS

CEQA allows for the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. However, the SDAPCD does not provide CEQA significance thresholds for any air pollutant source it does not directly regulate. The SDAPCD regulates emissions from stationary sources and not mobile sources under SDAPCD Regulation II, Rule 20.2, Table 20-2-1, Air Quality Impact Analysis (AQIA) Trigger Levels. Because the SDAPCD does not prescribe emissions thresholds for all air pollutants during construction and operation, the County of San Diego's guidelines were used to evaluate potential air quality impacts relative to CEQA (San Diego 2007). The County recognizes the SDAPCD's established screening level thresholds for air quality emissions (Rules 20.1 et seq.) as screening-level thresholds for land development projects. The County has also adopted the South Coast AQMD's screening threshold of 55 pounds per day or 10 tons per year as a screening level threshold for $PM_{2.5}$, and the South Coast AQMD's Coachella Valley screening threshold of 75 lbs per day or 13.7 tons per year significance threshold for VOCs (South Coast AQMD 2019). Table 5.2-5, *County of San Diego Screening-Level Thresholds for Air Quality Impact Analysis*, lists regional emissions thresholds used in the following analysis.

Table 5.2-5 County of San Diego Screening-Level Thresholds for Air Quality Impact Analysis

Air Pollutant	Threshold	
	lb/day	Tons/year
Volatile Organic Compounds (VOC)[1]	75 lbs/day	13.7 tons/year[2]
Nitrogen Oxides (NO_X)	250 lbs/day	40 tons/year
Carbon Monoxide (CO)	550 lbs/day	100 tons/year
Sulfur Oxides (SO_X)	250 lbs/day	40 tons/year
Coarse Inhalable Particulates (PM_{10})	100 lbs/day	15 tons/year
Fine Inhalable Particulates ($PM_{2.5}$)[3]	55 lbs/day	10 tons/year

Source: San Diego 2007; SDAPCD 2019a, 2019b, and 2019c; South Coast AQMD 2019.
Notes: Based on SDAPCD Regulation 2, 20.2 (d) (2): Operational Emission Thresholds, and SDAPCD Regulation 20.3.
[1] Threshold for VOCs based on the threshold of significance for VOCs from the South Coast AQMD threshold.
[2] 13.7 tons per year threshold based on 75 pounds per day multiplied by 365 days per year and divided by 2,000 pounds per ton.
[3] US EPA 2005. Also used by the South Coast AQMD.

CO Hotspots

The significance of localized project impacts depends on whether the project would cause substantial concentrations of CO. Prior to 1998 the SDAB was designated as nonattainment under the California and National AAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SDAB and in the state have steadily declined. In 1998, the SDAPCD was designated in attainment for CO under both the California and National AAQS and was under a 10-year federal maintenance plan for CO as a result of its redesignation. The current version of the maintenance plan is the 2004 Revision to the "California State Implementation Plan (SIP) for Carbon Monoxide Updated Maintenance Plan for Ten Federal Planning Areas," which was approved in January 2006 (CARB 2004).

5.2.3 Plans, Programs, and Policies

Plans, programs, and policies (PPP), including applicable regulatory requirements and project design features for air quality, are identified below.

PPP AIR-1 Construction activities will be conducted in compliance with California Code of Regulations Title 13, Section 2499, which requires that nonessential idling of construction equipment is restricted to five minutes or less.

PPP AIR-2 Construction activities will be conducted in compliance with any applicable San Diego Air Pollution Control District rules and regulations, including but not limited to:

- Rule 55, Fugitive Dust, for controlling fugitive dust emissions and avoiding nuisance.
- Rule 51, Nuisance, which 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."

5.2.4 Environmental Impacts

Summary of Impacts Identified in the Certified EIR

The Certified EIR found that although the approved project would exceed both long-term and short-term emissions thresholds for criteria pollutants, it responds to overcrowding at four other high schools in the area, and would assist the educational needs of the community. The approved project was anticipated to reduce vehicle emissions due to shorter travel distances. Therefore, the approved project was determined to be consistent with the San Diego RAQS and would not conflict with or obstruct implementation of the San Diego RAQS,.

The Certified EIR found that short-term construction emissions resulted in a net increase of NOx, VOCs, and PM_{10} emissions. Mitigation Measure 5.2-1 required the approved project to comply with limits for architectural coating application to ensure VOC emissions would stay below SDAPCD construction emissions thresholds. Mitigation Measure 5.2-2 required the approved project to implement certain measures to reduce fugitive dust (PM_{10}) emissions to a less than significant level. Mitigation Measure 5.2-3 entailed using Tier 2 or newer construction equipment during the grading phase of the approved project to reduce NOx emissions; however, no mitigation measures were feasible to reduce short-term NOx emissions. Therefore, construction emission impacts resulted in a net increase of this criteria air pollutant, and impacts were significant and unavoidable.

The long-term emissions of CO associated with vehicle trips during operation of the school, stadium, and aquatic events exceeded the SDAPCD operational emissions threshold, and impacts were significant and unavoidable. The Certified EIR determined that the approved project would not expose sensitive receptors to substantial pollutant concentrations and did not identify any significant localized impacts. Lastly, the Certified EIR found that the approved project would not create objectionable odors that would affect a substantial number of people, and impacts were found to be less than significant.

5.2.4.1 METHODOLOGY

This air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely to occur in conjunction with future development that would be accommodated by the proposed project.

Criteria Air Pollutant Emissions

Air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), version 2020.4 (CAPCOA 2021). CalEEMod compiles an emissions inventory of construction (fugitive dust, off-gas emissions, on-road emissions, and off-road emissions), area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only). Criteria air pollutant emissions modeling is in Appendix C of this SEIR. Following is a summary of the assumptions used for the proposed project analysis.

Construction Phase

Construction would entail hardscape demolition and debris hauling, site preparation and soil hauling, and lighting installation on less than one acre of the project site (see Appendix C). The proposed project was conservatively modeled over a construction period of 12 construction days in 2022 to provide a worst-case estimate of maximum daily construction emissions.

Operational Phase

The proposed project is limited to the installation of 14 light poles at the baseball and softball fields. There would not be an increase in the number of events, and the proposed project would not include uses typically associated with the generation of substantial emissions from stationary sources. Therefore, operational-phase impacts were analyzed qualitatively.

5.2.4.2 IMPACT ANALYSIS

The following impact analysis addresses the thresholds of significance; the applicable thresholds are identified in brackets after the impact statement.

Impact 5.2-1: The proposed project is consistent with the applicable air quality management plan. [Threshold AQ-1]

A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the San Diego RAQS. The most current RAQS is the 2016 RAQS (SDAPCD 2016). The RAQS fulfills the CEQA goal of informing decision-makers of the environmental efforts of the project under consideration at a stage early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether it is contributing to clean air goals in the RAQS. Only new or amended general plan elements, specific plans, and major projects need to undergo a consistency review. This is because the RAQS is based on projections from local general plans. Projects that are consistent with the local general plan or do not trigger SANDAG's intergovernmental review criteria are considered consistent with the RAQS.

The proposed project involves installation of 14 light poles in the varsity baseball and softball fields on the existing high school campus. No new permanent buildings would be developed, and no increase in staff would occur upon implementation of the proposed lighting installation. Furthermore, the proposed project would not have the potential to substantially affect housing, employment, and population projections in the San Diego region, which are the basis of the RAQS projections. Projects whose stationary source emissions do not exceed the County of San Diego's emission thresholds would not be considered to violate an air quality standard or contribute substantially to an existing or projected air quality violation. Implementation of the proposed project would generate a nominal increase in emissions from lighting, and therefore would not conflict with or obstruct implementation of the RAQS.

Level of Significance Before Mitigation: Less than significant impact.

Impact 5.2-2: Construction activities associated with the proposed project would generate short-term emissions that would not exceed the applicable screening-level threshold criteria. [Thresholds AQ-2 and AQ-3]

As stated, the SDAB is designated under the California and National AAQS as nonattainment for O_3 and under the California AAQS as nonattainment for PM_{10} and $PM_{2.5}$ (SDACPD 2022). Any project that produces a significant project-level regional air quality impact in an area that is in nonattainment adds to the cumulative impact. Air quality impacts of the proposed project were evaluated based on the SDAPCD thresholds. Development projects below the regional significance thresholds are not expected to generate sufficient criteria pollutant emissions to violate any air quality standard or contribute substantially to an existing or projected air quality violation.

Short-Term Air Quality Impacts

Construction activities would result in the generation of air pollutants. These emissions would primarily be 1) exhaust emissions from powered construction equipment; 2) dust generated by demolition, grading, earthmoving, and other construction activities; 3) motor vehicle emissions; and 4) emissions of VOCs from the application of asphalt, paints, and coatings.

For purposes of this analysis, construction activities from the proposed project are anticipated to occur on less than one acre of the project site. Construction would involve hardscape demolition and demolition hauling, site preparation, site preparation soil haul, and installation of light poles in the sport fields. Construction activities are anticipated to start and end in September 2022. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), Version 2020.4., based on the project's preliminary construction schedule. Results of the modeling are in Table 5.2-6, *Maximum Daily Regional Construction Emissions*. As shown in the table, air pollutant emissions from project-related construction activities would not exceed the County's emissions thresholds. Therefore, air quality impacts from project-related construction activities would be less than significant.

Table 5.2-6 Maximum Daily Regional Construction Emissions

Construction Phase	Pollutants (lb/day)[1, 2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Proposed Project - Year 2022						
Demolition and Debris Haul, Site Preparation and Soil Haul	2	16	17	<1	1	1
Demolition, Site Preparation and Soil Haul	2	16	17	<1	1	1
Demolition, Site Preparation and Soil Haul, and Light Pole Installation	2	21	23	<1	1	1
Maximum Daily Construction Emissions						
Proposed Project Maximum Daily Emissions	2	21	23	<1	1	1
San Diego County Thresholds[3]	**75**	**250**	**550**	**250**	**100**	**55**
Significant?	No	No	No	No	No	No

Source: CalEEMod, Version 2020.0.4; San Diego 2007; SDACPD 2019a and 2019b; SCAQMD 2019

[1] Air quality modeling based on a conservative construction schedule of one month. Where specific information regarding project-related construction activities was not available, construction assumptions were based on CalEEMod defaults, which are based on construction surveys conducted by South Coast AQMD of construction equipment and phasing for comparable projects.

[2] Modeling includes implementation of fugitive dust control measures required by SDAPCD under Rule 55. Rule 55 prohibits construction activity that would discharge fugitive dust emissions into the atmosphere beyond the property line.

Level of Significance Before Mitigation: Less than significant impact.

Impact 5.2-3: Long-term operation of the project would not generate additional vehicle trips and associated emissions in exceedance of SDAPCD's threshold criteria. [Thresholds AQ-2 and AQ-3]

Typical long-term air pollutant emissions generated by a land use would be generated by area sources (e.g., landscape fuel use, aerosols, and architectural coatings), mobile sources from vehicle trips, and energy use associated with the land use. Because the proposed project only involves installation of lighting to the existing baseball and softball fields, the proposed project would not result in an increase in staff or students or introduce new community events. There would be no new trips generated. In addition, the lighting equipment would result in only a nominal increase in electricity demand and would not result in direct generation of criteria air pollutants. Thus, the proposed project would not generate operation-related criteria air pollutant emissions that would exceed the SDAPCD regional operation-phase significance thresholds. Impacts to the regional air quality associated with operation of the proposed project would be less than significant.

Level of significance Before Mitigation: Less than significant impact.

Impact 5.2-4: Construction and operational activities associated with the proposed project would not expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-3]

The significance of localized project impacts depends on whether the project would cause substantial concentrations of criteria air pollutants for which the SDAB is designated nonattainment under the California or National AAQS.

Localized Impacts

Pursuant to the County of San Diego guidelines (San Diego 2007), a project whose stationary source emissions exceed the screening level thresholds in above Table 5.2-5 would be required to conduct an air quality impact analysis to demonstrate that the project's ground-level concentrations, including appropriate background levels, do not exceed the National and California AAQS. As seen in Table 5.2-6, construction of the proposed project would not result in emissions that exceed the County's emissions thresholds. In addition, operation of the proposed project would generate a nominal increase in electricity use from lighting, which would not generate criteria air pollutant emissions. Therefore, the localized emissions generated by the proposed project would be a less than significant impact.

CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to AAQS is typically demonstrated through an analysis of localized CO concentrations. Hot spots are typically produced at intersections, where traffic congestion is highest because vehicles queue for longer periods and are subject to reduced speeds. The SDAB has been designated

nonattainment for CO under the California and National AAQS. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017). As stated in Impact 5.2-3, operation of the proposed project would not generate new trips. Therefore, the project would not increase CO hotspots at intersections in the vicinity of the project site, and impacts would be less than significant.

Health Risk

Construction

The SDAPCD does not require a health risk assessment to be conducted for short-term emissions from construction equipment. Emissions from construction equipment primarily consist of DPM. The Office of Environmental Health Hazards Assessment issued new guidance for the preparation of health risk assessments in March 2015 (OEHHA 2015). The Office of Environmental Health Hazards Assessment developed a cancer risk factor and noncancer chronic reference exposure level for DPM, but these factors are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM. It is assumed that the proposed project would be developed in approximately two weeks based on data from similar lighting projects. The SDAPCD currently does not require the evaluation of long-term excess cancer risk or chronic health impacts for a short-term project. In addition, construction activities would not exceed the significance thresholds. For these reasons, it is anticipated that construction emissions would not pose a threat to on- and off-site receptors at or near the sport fields, and project-related construction health impacts would be less than significant.

Operation

The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment, not the significant effects of the environment on the proposed project. *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (Case No. S213478). In general, CEQA does not require an environmental evaluation to analyze the environmental effects of attracting development and people to an area. However, the environmental evaluation must analyze the impacts of environmental hazards on future users when the proposed project exacerbates an existing environmental hazard or condition, or if there is an exception to this exemption identified in the Public Resources Code. Schools, residential, commercial, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects. However, Section 21151.8 of the Public Resources Code requires evaluation of air quality hazards for school site acquisition or construction of a K-12 schools.

The proposed project involves the installation of light poles at the varsity baseball and softball fields at the existing high school and would not include uses typically associated with generating substantial stationary sources of emissions. The ball field lighting would only generate a nominal increase in electricity demand and would not directly generate criteria pollutants. Therefore, the proposed project would not expose receptors to substantial concentrations of criteria air pollutants, operational criteria air pollutant emissions would not exceed the California AAQS, and impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant impact.

Impact 5.2-5: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. [Threshold AQ-4]

The threshold for odor is if a project creates an odor nuisance pursuant to SDAPCD Rule 51, Public Nuisance, which states:

> 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. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities. The proposed project would not fall within the aforementioned land uses, and the proposed project would not result in a change in land use that would generate odors. No objectionable odors are anticipated to result from the operational phase of the proposed project.

During the development of the proposed project, emissions from construction equipment, such as diesel exhaust, may generate odors. However, these odors would be low in concentration and temporary, would disperse rapidly, and are not expected to affect a substantial number of people. Any odors produced during the light pole installation process are not expected to be significant or highly objectionable and would be in compliance with SDAPCD Rule 51, which prohibits the discharge of air contaminants or other materials that would be a nuisance or annoyance to the public.

Level of Significance Before Mitigation: Less than significant impact.

5.2.5 Cumulative Impacts

The proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the San Diego Air Basin is nonattainment under an applicable federal or state ambient air quality standard.

Construction

The SDAB is designated under the California and National AAQS as nonattainment for O_3 and under the California AAQS as nonattainment for PM_{10}, and $PM_{2.5}$. As discussed under Impact 5.2-2, implementation of project-related construction emissions would be below the County's significance thresholds on a project and cumulative basis. Therefore, the proposed project's contribution to cumulative air quality impacts would not be cumulatively considerable.

Operation

Operational impacts from land development activities are predominantly the result of vehicular traffic associated with projects. For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold value is not considered by SDAPCD to be a substantial source of air pollution and does not add significantly to a cumulative impact. Operation of the proposed project would not increase existing vehicle trips and therefore would not result in emissions in excess of the SDAPCD regional emissions thresholds. Therefore, air pollutant emissions associated with the proposed project would not be cumulatively considerable.

5.2.6 Level of Significance Before Mitigation

Upon implementation of plans, programs, and policies, some impacts would be less than significant: 5.2-1, 5.2-2, 5.2-3, 5.2-4, and 5.2-5.

5.2.7 Mitigation Measures

No mitigation measures are required.

5.2.8 Level of Significance After Mitigation

Not applicable.

5.2.9 References

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5. Environmental Analysis
AIR QUALITY

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