

1. AIR QUALITY AND GREENHOUSE GAS BACKGROUND AND MODELING DATA

1.1 AIR QUALITY

1.1.1 Air Quality Regulatory Setting

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 SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (South Coast AQMD). However, South Coast AQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the US Congress and has been amended several times. The 1970 Clean Air Act 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 CAA allows states to adopt more stringent standards or to include other pollution species. The California Clean Air Act (CCAA), 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 tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

These National AAQS 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. As shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*, these pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (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 1 Ambient Air Quality Standards for Criteria 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}) ^{4,6}	Annual Arithmetic Mean	12 µg/m ³	9 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	

Table 1 **Ambient Air Quality Standards for Criteria Pollutants**

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
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.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H ₂ S) 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.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
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 2024a.

Notes: ppm: parts per million; $\mu\text{g}/\text{m}^3$: micrograms per cubic meter

* Standard has not been established for this pollutant/duration by this entity.

- California standards for O_3 , CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2 , and particulate matter (PM_{10} , $\text{PM}_{2.5}$, 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.
- 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 $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For $\text{PM}_{2.5}$, 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.
- On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- On December 14, 2012, the national annual $\text{PM}_{2.5}$ primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour $\text{PM}_{2.5}$ standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM_{10} standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
- 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.
- On February 7, 2024, the national annual $\text{PM}_{2.5}$ standard was lowered from $12 \mu\text{g}/\text{m}^3$ to $9 \mu\text{g}/\text{m}^3$. The existing national 24-hour $\text{PM}_{2.5}$ standards (primary and secondary), secondary annual $\text{PM}_{2.5}$ standard, and PM_{10} standards (primary and secondary) were retained

California has also adopted a host of other regulations that reduce criteria pollutant emissions, including:

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building and Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

AIR POLLUTANTS OF CONCERN

Criteria Air Pollutants

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. Air pollutants are categorized as primary or secondary pollutants. Primary air pollutants are those that are emitted directly from sources and include CO, VOC, NO₂, SO_x, PM₁₀, PM_{2.5}, and Pb. Of these, CO, SO₂, NO₂, PM₁₀, and PM_{2.5} are “criteria air pollutants,” which means that ambient air quality standards (AAQS) have been established for them. VOC and oxides of nitrogen (NO_x) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O₃) and NO₂ are the principal secondary pollutants. A description of each of the primary and secondary criteria air pollutants and their known health effects is presented below.

Carbon Monoxide (CO) is a colorless, odorless, toxic 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. Because CO is emitted directly from internal combustion, engines and motor vehicles operating at slow speeds are the primary source of CO in the SoCAB. 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 2025a). The SoCAB is designated as being in attainment under the California AAQS and attainment (serious maintenance) under the National AAQS (CARB 2025a).

Volatile Organic Compounds (VOC) 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 O₃, South Coast AQMD has established a significance threshold (South Coast AQMD 2023). The health effects for ozone are described later in this section.

Nitrogen Oxides (NO_x) are a by-product of fuel combustion and contribute to the formation of ground-level O₃, PM₁₀, and PM_{2.5}. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO₂). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_x produced by combustion is NO, but NO reacts quickly with oxygen to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO₂ is only potentially irritating. NO₂ absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO₂ exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO₂ 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 elevated short-term NO₂ concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (South Coast AQMD 2005; USEPA 2025a). The SoCAB is designated in attainment (maintenance) under the National AAQS and attainment under the California AAQS (CARB 2025a).¹

Sulfur Dioxide (SO₂) 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 SO₂. When sulfur dioxide forms sulfates (SO₄) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO₂ is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO₂ may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO₂, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing) at lower concentrations and when combined with particulates, SO₂ may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (South Coast AQMD 2005; USEPA 2025a). The SoCAB is designated as attainment under the California and National AAQS (CARB 2025a).

Suspended Particulate Matter (PM₁₀ and PM_{2.5}) 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 PM₁₀, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤0.01 millimeter). Inhalable fine particles, or PM_{2.5}, have an

¹ The CA-60 near-road portion of San Bernardino, Riverside and Los Angeles Counties has recently been redesignated as an attainment area based on data collected between 2018 and 2020 (South Coast AQMD 2022).

aerodynamic diameter of 2.5 microns or less (i.e., $\leq 0.002.5$ millimeter). 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 EPA's 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., ≤ 0.0001 millimeter) 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 is classified by CARB as a carcinogen (CARB 2025b). Particulate matter can also cause environmental effects such as visibility impairment,² environmental damage,³ and aesthetic damage⁴ (South Coast AQMD 2005; USEPA 2025a). The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2025a).⁵

Ozone (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

² $PM_{2.5}$ is the main cause of reduced visibility (haze) in parts of the United States.

³ 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.

⁴ Particulate matter can stain and damage stone and other materials, including culturally important objects such as statues and monuments.

⁵ CARB approved the South Coast AQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM_{10} standards from 2004 to 2007. The EPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

AQMD 2005; USEPA 2025a). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2025a).

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; USEPA 2018). 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 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. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted more strict lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.⁶ As a result of these violations, the Los Angeles County portion of the SoCAB is designated as nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2025a). However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's State Implementation Plan (SIP) revision was submitted to the EPA for approval. Because emissions of lead are found only in projects that are permitted by South Coast AQMD, lead is not a pollutant of concern for the proposed project.

Table 2, *Criteria Air Pollutant Health Effects Summary*, summarizes the potential health effects associated with the criteria air pollutants.

⁶ Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (South Coast AQMD 2012).

Table 2 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 2025c.

Toxic Air Contaminants

The public's exposure to air pollutants classified as toxic air contaminants (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 to reduce exposure to these contaminants to protect the public health. 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." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

California regulates TACs primarily through Assembly Bill (AB) 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics “Hot Spot” Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth 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 designated TACs. 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, all of which are identified as having no safe threshold.

Air toxics from stationary sources are also regulated in California under the Air Toxics “Hot Spot” Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant 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 in the form of notices and public meetings.

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. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 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 lung.

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

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 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

Community Risk

In addition, to reduce exposure to TACs, CARB developed and approved the *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) to provide guidance regarding the siting of sensitive land uses in the vicinity of freeways, distribution centers, rail yards, ports, refineries, chrome-plating facilities, dry cleaners, and gasoline-dispensing facilities. This guidance document was developed to assess compatibility and associated health risks when placing sensitive receptors near existing pollution sources. CARB's recommendations on the siting of new sensitive land uses were based on a compilation of recent studies that evaluated data on the adverse health effects from proximity to air pollution sources. The key observation in these studies is that proximity to air pollution sources substantially increases exposure and the potential for adverse health effects. There are three carcinogenic toxic air contaminants that constitute the majority of the known health risks from motor vehicle traffic, DPM from trucks, and benzene and 1,3-butadiene from passenger vehicles. CARB recommendations are based on data that show that localized air pollution exposures can be reduced by as much as 80 percent by following CARB minimum distance separations.

AIR QUALITY MANAGEMENT PLANNING

The South Coast AQMD is the agency responsible for improving air quality in the SoCAB and ensuring that the National and California AAQS are attained and maintained. South Coast AQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2022 AQMP

South Coast AQMD adopted the 2022 AQMP on December 2, 2022, which serves as an update to the 2017 AQMP. On October 1, 2015, the EPA strengthened the National AAQS for ground-level ozone, lowering the primary and secondary ozone standard levels to 70 parts per billion (ppb) (2015 Ozone National AAQS.). The SoCAB is currently classified as an "extreme" nonattainment for the 2015 Ozone National AAQS. Meeting the 2015 federal ozone standard requires reducing NO_x emissions, the key pollutant that creates ozone, by 67 percent more than is required by adopted rules and regulations in 2037. The only way to achieve the required NO_x reductions is through extensive use of zero emission (ZE) technologies across all stationary and mobile sources. South Coast AQMD's primary authority is over stationary sources which account for approximately 20 percent of NO_x emissions. The overwhelming majority of NO_x emissions are from heavy-duty trucks, ships and other State and federally regulated mobile sources that are mostly beyond the South Coast AQMD's control. The region will not meet the standard absent significant federal action. In addition to federal action, the 2022 AQMP requires substantial reliance on future deployment of advanced technologies to meet the standard. The control strategy for the 2022 AQMP includes aggressive new regulations and the development

of incentive programs to support early deployment of advanced technologies. The two key areas for incentive programs are (1) promoting widespread deployment of available ZE and low-NO_x technologies and (2) developing new ZE and ultra-low NO_x technologies for use in cases where the technology is not currently available. South Coast AQMD is prioritizing distribution of incentive funding in Environmental Justice areas and seeking opportunities to focus benefits on the most disadvantaged communities (South Coast AQMD 2022).

Lead State Implementation Plan

In 2008, EPA designated the Los Angeles County portion of the SoCAB nonattainment under the federal lead (Pb) classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in Vernon and the City of Industry exceeding the new standard. The rest of the SoCAB, outside the Los Angeles County nonattainment area remains in attainment of the new standard. On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to EPA for approval.

South Coast AQMD PM_{2.5} Redesignation Request and Maintenance Plan

In 1997, the EPA adopted the 24-hour fine PM_{2.5} standard of 65 micrograms per cubic meter (µg/m³). In 2006, this standard was lowered to a more health-protective level of 35 µg/m³. The SoCAB is designated nonattainment for both the 65 and 35 µg/m³ 24-hour PM_{2.5} standards (24-hour PM_{2.5} standards). In 2020, monitored data demonstrated that the SoCAB attained both 24-hour PM_{2.5} standards. The South Coast AQMD has developed the 2021 Redesignation Request and Maintenance Plan for the 1997 and 2006 24-hour PM_{2.5} Standards demonstrating that the SoCAB has met the requirements to be redesignated to attainment for the 24-hour PM_{2.5} standards (South Coast AQMD 2021a).

AB 617, Community Air Protection Program

Assembly Bill (AB) 617 (C. Garcia, Chapter 136, Statutes of 2017) requires local air districts to monitor and implement air pollution control strategies that reduce localized air pollution in communities that bear the greatest burdens. In response to AB 617, CARB has established the Community Air Protection Program.

Air districts are required to host workshops to help identify disadvantaged communities disproportionately affected by poor air quality. Once the criteria for identifying the highest priority locations have been identified and the communities have been selected, new community monitoring systems would be installed to track and monitor community-specific air pollution goals. In 2018 CARB prepared an air monitoring plan (Community Air Protection Blueprint), that evaluates the availability and effectiveness of air monitoring technologies and

existing community air monitoring networks. Under AB 617, the Blueprint is required to be updated every five years.

Under AB 617, CARB is also required to prepare a statewide strategy to reduce TACs and criteria pollutants in impacted communities; provide a statewide clearinghouse for best available retrofit control technology; adopt new rules requiring the latest best available retrofit control technology for all criteria pollutants for which an area has not achieved attainment of California AAQS; and provide uniform, statewide reporting of emissions inventories. Air districts are required to adopt a community emissions reduction program to achieve reductions for the communities impacted by air pollution that CARB identifies.

1.1.2 Existing Conditions

CLIMATE/METEOROLOGY

South Coast Air Basin

The project site lies in the South Coast Air Basin (SoCAB), which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean in the southwest quadrant, with high mountains forming the remainder of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (South Coast AQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The lowest average temperature is reported at 45°F in December, and the highest average temperature is 86°F in August. Rainfall averages 12.3 inches per year in the vicinity of the area (Weatherspark 2026).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as

high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the (South Coast AQMD 2005).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur, both in the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (South Coast AQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (South Coast AQMD 2005).

AREA DESIGNATIONS

The AQMP provides the framework for air quality basins to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan (SIP). Areas are classified as attainment or nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards. Severity classifications for ozone nonattainment range in magnitude from marginal, moderate, and serious to severe and extreme.

- **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 CAAQS for that pollutant was 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 a state 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.

The attainment status for the SoCAB is shown in Table 3, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*.

Table 3 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM ₁₀	Serious Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment ¹
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only) ²
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2025a.

- 1 The SoCAB is pending a resignation request from nonattainment to attainment for the 24-hour federal PM_{2.5} standards. The 2021 PM_{2.5} Redesignation Request and Maintenance Plan demonstrates that the South Coast meets the requirements of the CAA to allow US EPA to redesignate the SoCAB to attainment for the 65 µg/m³ and 35 µg/m³ 24-hour PM_{2.5} standards. CARB submitted the 2021 PM_{2.5} Redesignation Request to the US EPA as a revision to the California SIP (CARB 2021).
- 2 In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new 2008 federal AAQS as a result of large industrial emitters. Remaining areas for lead in the SoCAB are unclassified. However, lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011 (South Coast AQMD 2012). CARB's SIP revision was submitted to the US EPA for approval.

EXISTING AMBIENT AIR QUALITY

Existing levels of ambient air quality and historical trends and projections in the vicinity of the project site are best documented by measurements taken by the South Coast AQMD. The project site is located within Source Receptor Area (SRA) 16: North Orange County. The air quality monitoring station closest to the proposed project is the Anaheim-Pampas Lane Monitoring Station, which is one of the monitoring stations South Coast AQMD operates and maintains within the SoCAB.⁷ Data from this station includes O₃, PM₁₀, PM_{2.5}, and NO₂. Table 4, *Ambient Air Quality Monitoring Summary*, shows rare violations of the state and federal O₃ standards, state PM₁₀ standards, and federal PM_{2.5} standards in the last three years.

Table 4 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations ^{1,2}		
	2022	2023	2024
Ozone (O₃)			
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	1	0	3
State & Federal 8-hour ≥ 0.070 ppm (days exceed threshold)	1	2	3
Max. 1-Hour Conc. (ppm)	0.102	0.089	0.104
Max. 8-Hour Conc. (ppm)	0.076	0.076	0.079
Nitrogen Dioxide (NO₂)			
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0
Max. 1-Hour Conc. (ppb)	0.0530	0.0509	0.0531
Coarse Particulates (PM₁₀)			
State 24-Hour > 50 µg/m ³ (days exceed threshold)	1	1	0
Federal 24-Hour > 150 µg/m ³ (days exceed threshold)	0	0	0
Max. 24-Hour Conc. (µg/m ³)	67.0	97.8	118.9
Fine Particulates (PM_{2.5})			
Federal 24-Hour > 35 µg/m ³ (days exceed threshold)	0	1	5
Max. 24-Hour Conc. (µg/m ³)	33.1	45.6	49.7

Source: CARB 2026d.

Notes: ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter; * = Data not available

1 Data for O₃, PM_{2.5}, PM₁₀, and NO₂ from Anaheim-Pampas Lane Monitoring Station.

2 Most recent data available as of January 2026.

⁷ Locations of the SRAs and monitoring stations are shown here: <http://www.aqmd.gov/docs/default-source/default-document-library/map-of-monitoring-areas.pdf>.

MULTIPLE AIR TOXICS EXPOSURE STUDY V

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on existing ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In April 2021, South Coast AQMD released the latest update to the MATES study, MATES V. The first MATES analysis, MATES I, began in 1986 but was limited because of the technology available at the time. Conducted in 1998, MATES II was the first MATES iteration to include a comprehensive monitoring program, an air toxics emissions inventory, and a modeling component. MATES III was conducted in 2004 to 2006, with MATES IV following in 2012 to 2013.

MATES V uses measurements taken during 2018 and 2019, with a comprehensive modeling analysis and emissions inventory based on 2018 data. The previous MATES studies quantified the cancer risks based on the inhalation pathway only. MATES V includes information on the chronic noncancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic noncancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazards Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time.

The MATES V study showed that cancer risk in the SoCAB decreased to 454 in a million from 997 in a million in the MATES IV study. Overall, air toxics cancer risk in the SoCAB decreased by 54 percent since 2012 when MATES IV was conducted. MATES V showed the highest risk locations near the Los Angeles International Airport and the Ports of Long Beach and Los Angeles. Diesel particulate matter continues to be the major contributor to air toxics cancer risk (approximately 72 percent of the total cancer risk). Goods movement and transportation corridors have the highest cancer risk. Transportation sources account for 88 percent of carcinogenic air toxics emissions, and the remainder is from stationary sources, which include large industrial operations such as refineries and power plants as well as smaller businesses such as gas stations and chrome-plating facilities. (South Coast AQMD 2021b).

SENSITIVE RECEPTORS

Some land uses are considered more sensitive to air pollution 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 cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors 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. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. 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 and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public. The nearest sensitive receptors to the project site are the residences to the south and west of the project site, in addition to onsite receptors of Troy High School.

1.1.3 Thresholds of Significance

The analysis of the proposed project's air quality impacts follows the guidance and methodologies recommended in South Coast AQMD's *CEQA Air Quality Handbook* and the significance thresholds on South Coast AQMD's website (South Coast AQMD 1993). CEQA allows 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. South Coast AQMD has established thresholds of significance for regional air quality emissions for construction activities and project operation. In addition to the daily thresholds listed above, projects are also subject to the AAQS. These are addressed through an analysis of localized CO impacts and localized significance thresholds (LSTs).

REGIONAL SIGNIFICANCE THRESHOLDS

The South Coast AQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 5, *South Coast AQMD Significance Thresholds*, lists South Coast AQMD's regional significance thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the US EPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

Table 5 South Coast AQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROGs)/ Volatile Organic Compounds (VOCs)	75 lbs/day	55 lbs/day
Nitrogen Oxides (NO _x)	100 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Sulfur Oxides (SO _x)	150 lbs/day	150 lbs/day
Particulates (PM ₁₀)	150 lbs/day	150 lbs/day
Particulates (PM _{2.5})	55 lbs/day	55 lbs/day

Source: South Coast AQMD 2023.

Projects that exceed the regional significance threshold contribute to the nonattainment designation of the SoCAB. The attainment designations are based on the AAQS, which are set at levels of exposure that are determined to not result in adverse health. Exposure to fine particulate pollution and ozone causes myriad health impacts, particularly to the respiratory and cardiovascular systems:

- Linked to increased cancer risk (PM_{2.5}, TACs)
- Aggravates respiratory disease (O₃, PM_{2.5})
- Increases bronchitis (O₃, PM_{2.5})
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O₃)
- Reduces resistance to infections and increases fatigue (O₃)
- Reduces lung growth in children (PM_{2.5})
- Contributes to heart disease and heart attacks (PM_{2.5})
- Contributes to premature death (O₃, PM_{2.5})
- Linked to lower birth weight in newborns (PM_{2.5}) (South Coast AQMD 2015a)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of PM_{2.5} is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists responsible for a landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (South Coast AQMD 2015b).

South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals exposed to elevated concentrations of air pollutants in the SoCAB and has established thresholds that would be protective of these individuals. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS. Mass emissions thresholds shown in Table 4 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. These thresholds are based on the trigger levels for the federal New Source Review Program, which was created to ensure projects are consistent with attainment of health-based federal AAQS. Regional emissions from a single project do not trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed previously. Projects that do not exceed the South Coast AQMD regional significance thresholds in Table 4 would not violate any air quality standards or contribute substantially to an existing or projected air quality violation.

If projects exceed the emissions levels presented in Table 4, then those emissions would cumulatively contribute to the nonattainment status of the air basin and would contribute to elevating health effects associated with these criteria air pollutants. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in

lung function. Health effects associated with particulate matter include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions in Table 4, it is speculative to determine how exceeding the regional thresholds would affect the number of days the region is in nonattainment, because mass emissions are not correlated with concentrations of emissions or how many additional individuals in the air basin would be affected by the health effects cited previously.

South Coast AQMD has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health to address the issue raised in *Sierra Club v. County of Fresno* (Friant Ranch, L.P.) (2018) 6 Cal.5th 502, Case No. S21978. South Coast AQMD currently does not have methodologies that would provide the City with a consistent, reliable, and meaningful analysis to correlate specific health impacts that may result from a proposed project's mass emissions.⁸ Ozone concentrations are dependent on a variety of complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground-level ozone concentrations in relation to the National and California AAQS, and the absence of modeling tools that could provide statistically valid data and meaningful additional information regarding health effects from criteria air pollutants generated by individual projects, it is not possible to link specific health risks to the magnitude of emissions exceeding the significance thresholds. However, if a project in the SoCAB exceeds the regional significance thresholds, the project could contribute to an increase in health effects in the basin until the attainment standards are met in the SoCAB.

CO HOTSPOTS

Areas of vehicle congestion have the potential to create pockets of CO called hot spots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm. Because CO is produced in greatest quantities from vehicle combustion and does not readily disperse into the atmosphere, adherence to ambient air quality standards is

⁸ In April 2019, the Sacramento Metropolitan Air Quality Management District (SMAQMD) published an Interim Recommendation on implementing *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 ("Friant Ranch") in the review and analysis of the proposed project under CEQA in Sacramento County. Consistent with the expert opinions submitted to the court in Friant Ranch by the San Joaquin Valley Air Pollution Control District (SJVAPCD) and South Coast AQMD, the SMAQMD guidance confirms the absence of an acceptable or reliable quantitative methodology that would correlate the expected criteria air pollutant emissions of projects to likely health consequences for people from project-generated criteria air pollutant emissions. The SMAQMD guidance explains that while it is in the process of developing a methodology to assess these impacts, lead agencies should follow the Friant Court's advice to explain in meaningful detail why this analysis is not yet feasible. Since this interim memorandum SMAQMD has provided methodology to address health impacts. However, a similar analysis is not available for projects within the South Coast AQMD region.

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. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined.

In 2007, the SoCAB was designated in attainment for CO under both the California AAQS and National AAQS. The CO hotspot analysis conducted for the attainment by the South Coast AQMD for busiest intersections in Los Angeles during the peak morning and afternoon periods plan did not predict a violation of CO standards.⁹ As identified in the South Coast AQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SoCAB in previous years, prior to redesignation, were a result of unusual meteorological and topographical conditions and not a result of congestion at a particular intersection. Since South Coast AQMD does not currently have an adopted CO hotspot screening criteria, Bay Area Air District's recommended threshold was used in this analysis. Under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection to 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 (Bay Area Air District 2023).

LOCALIZED SIGNIFICANCE THRESHOLDS

The South Coast AQMD developed LSTs for emissions of NO₂, CO, PM₁₀, and PM_{2.5} generated at the project site (offsite mobile-source emissions are not included in the LST analysis). LSTs represent the maximum emissions at a project site that are not expected to cause or contribute to an exceedance of the most stringent federal or state AAQS and are shown in Table 6, *South Coast AQMD Localized Significance Thresholds*.

⁹ The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

Table 6 South Coast AQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)	20 ppm
8-Hour CO Standard (CAAQS)	9.0 ppm
1-Hour NO ₂ Standard (CAAQS)	0.18 ppm
Annual NO ₂ Standard (CAAQS)	0.03 ppm
24-Hour PM ₁₀ Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM _{2.5} Standard – Construction (South Coast AQMD) ¹	10.4 µg/m ³
24-Hour PM ₁₀ Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³
24-Hour PM _{2.5} Standard – Operation (South Coast AQMD) ¹	2.5 µg/m ³

Source: South Coast AQMD 2023.

ppm – parts per million; µg/m³ – micrograms per cubic meter

1 Threshold is based on South Coast AQMD Rule 403. Since the SoCAB is in nonattainment for PM₁₀ and PM_{2.5}, the threshold is established as an allowable change in concentration. Therefore, background concentration is irrelevant.

To assist lead agencies, South Coast AQMD developed screening-level LSTs to back-calculate the mass amount (lbs. per day) of emissions generated onsite that would trigger the levels shown in Table 5 for projects under 5-acres. These “screening-level” LSTs tables are the localized significance thresholds for all projects of five acres and less; however, it can be used as screening criteria for larger projects to determine whether or not dispersion modeling may be required to compare concentrations of air pollutants generated by the project to the localized concentrations shown in Table 5.

In accordance with South Coast AQMD’s LST methodology, the screening-level construction LSTs are based on the acreage disturbed per day based on equipment use and SRA. The screening-level construction LSTs for the project site in SRA 16 are shown in Table 7, *South Coast AQMD Screening-Level Localized Significance Thresholds*, for sensitive receptors within minimum reference distance of 82 feet (25 meters) for NO_x, CO, PM₁₀ and PM_{2.5}.

Table 7 South Coast AQMD Screening-Level Localized Significance Thresholds

Acreage Disturbed	Threshold (lbs/day) ¹			
	Nitrogen Oxides (NO _x)	Carbon Monoxide (CO)	Coarse Particulates (PM ₁₀)	Fine Particulates (PM _{2.5})
≤1.00 Acre Disturbed Per Day	103	522	4.00	3.00
1.31 Acre Disturbed Per Day	117	597	4.63	3.31
2.19 Acre Disturbed Per Day	152	796	6.31	4.13
2.5 Acre Disturbed Per Day	159	854	6.83	4.33
3.5 Acre Disturbed Per Day	184	1,037	8.50	5.00

Source: South Coast AQMD 2008, 2011, and 2023a.

1 LSTs are based on sensitive receptors within 82 feet (25 meters) for NO_x, CO, PM₁₀ and PM_{2.5}.

HEALTH RISK

Whenever a project would require use of chemical compounds that have been identified in South Coast AQMD Rule 1401, placed on CARB's air toxics list pursuant to AB 1807, or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by the South Coast AQMD. Table 8, *South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. The type of land uses that typically generate substantial quantities of criteria air pollutants and TACs from operations include industrial (stationary sources) and warehousing (truck idling) land uses (CARB 2005). As beach uses do not use substantial quantities of TACs, these thresholds are typically applied to new industrial projects only. Additionally, 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)).

Table 8 South Coast AQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Incremental Cancer Risk	≥ 10 in 1 million
Hazard Index (project increment)	≥ 1.0
Cancer Burden in areas ≥ 1 in 1 million	> 0.5 excess cancer cases

Source: South Coast AQMD 2023.

Draft Operational Cumulative Health Risk Thresholds

South Coast AQMD initiated a Working Group to identify cumulative health risk thresholds for development projects in order to address community concerns of health risk impacts of new projects being developed in areas where there is a higher pollution burden. The cumulative health risk threshold methodology first utilizes a screening approach to identify whether projects can qualitatively address cumulative health risk or quantitatively address health risk:

- **Low Cancer Risk Project Types:** Residential, commercial, recreational, educational, and retail.
- **Medium Cancer Risk Project Types:** Truck yards, gas stations, small industrial projects, and linear projects.
- **High Cancer Risk Project Types.** Industrial, major transportation projects (airports, port, railyard, bus/train station), and major planning projects.

For projects with low and medium cancer risks, like the proposed project, a quantitative analysis is not warranted. For projects with the potential to cause high cancer risk impacts, a quantitative is recommended. The initial cumulative threshold is based on MATES V cancer risk percentile, which identifies a gradient of the effects of air pollution on cancer risk in the South Coast AQMD Region. If the project triggers additional criteria, then the initial cumulative threshold should be adjusted as shown in Table 9, *MATES V Adjusted Cumulative Significant Cancer Risk Thresholds*.

Table 9 MATES V Adjusted Cumulative Significant Cancer Risk Thresholds

Project's Background MATES V Cancer Risk¹	Revised Initial Thresholds based on Cancer Risk
Most Stringent	≥ 1 in 1 million
>90th Percentile	≥ 3 in 1 million
90th Percentile to 50th Percentile	≥ 5 in 1 million
50th Percentile to 30th Percentile	≥ 7 in 1 million
< 30th Percentile	≥ 10 in 1 million

Source: South Coast AQMD 2024.

1 Most current MATES V is based on 2018 data.

As stated previously, South Coast AQMD has identified that the initial thresholds in Table 9 should be adjusted if any of the following criteria apply:

- **Criteria #1 – Post-2018 Projects with High Volume Diesel Fueled Trucks.** Post-2018 projects are not accounted for in MATES V. Therefore, if new warehousing projects along the truck route¹⁰ have been constructed, then the initial thresholds will be adjusted to the next, more stringent level (e.g., cumulative threshold will adjust from 10 in one million to 7 in one million).
- **Criteria #2 – Health Sensitive Population.** If the project site is within SB 535 or AB 617 community, then the initial thresholds will be adjusted to the next, more stringent level (e.g., cumulative threshold will adjust from 7 in one million to 5 in one million).

¹⁰ Truck route is from the project site to major freeway, within certain distance to sensitive receptors, add all diesel-fueled trucks from post-2018 projects.

This type of project would be considered low to medium cancer risks; thus, an operational cancer risk analysis for the proposed project would not be warranted.

1.2 GREENHOUSE GAS EMISSIONS

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHG, to the atmosphere. Climate change is the variation of Earth's climate over time, whether due to natural variability or as a result of human activities. The primary source of these GHG is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHG—water vapor,¹¹ carbon (CO₂), methane (CH₄), and ozone (O₃)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHG identified by the IPCC that contribute to global warming to a lesser extent include nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).¹² The major GHG are briefly described below.

- **Carbon dioxide (CO₂)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.
- **Methane (CH₄)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.
- **Nitrous oxide (N₂O)** is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.
- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting

¹¹ Water vapor (H₂O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, but part of the feedback loop rather than a primary cause of change.

¹² Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing PM from diesel engines and burning activities (CARB 2017). However, state and national GHG inventories do not yet include black carbon due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.

- **Chlorofluorocarbons (CFCs)** are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down ozone. These gases are also ozone-depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.
- **Perfluorocarbons (PFCs)** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.
- **Sulfur Hexafluoride (SF_6)** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.
- **Hydrochlorofluorocarbons (HCFCs)** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.
- **Hydrofluorocarbons (HFCs)** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; US EPA 2025b).

GHGs are dependent on the lifetime or persistence of the gas molecule in the atmosphere. Some GHGs have stronger greenhouse effects than others. These are referred to as high GWP gases. The GWP of GHG emissions are shown in Table 10, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2* . The GWP is used to convert GHGs to CO_2 -equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fifth Assessment Report (AR5) GWP values for CH_4 , a project that generates 10 MT of CH_4 would be equivalent to 280 MT of CO_2 .¹³

¹³ The global warming potential of a GHG is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Table 10 **GHG Emissions and Their Relative Global Warming Potential Compared to CO₂**

GHGs	Fourth Assessment Report (AR4) Global Warming Potential Relative to CO ₂ ¹	Fifth Assessment Report (AR5) Global Warming Potential Relative to CO ₂ ¹	Sixth Assessment Report (AR6) Global Warming Potential Relative to CO ₂ ¹
Carbon Dioxide (CO ₂)	1	1	1
Methane ² (CH ₄)	25	28	30
Nitrous Oxide (N ₂ O)	298	265	273

Source: IPCC 2007, 2013, and 2023.

Notes: The IPCC published updated GWP values in its Sixth Assessment Report (AR6) that reflect latest information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO₂. However, GWP values identified in AR5 are used by the 2022 Scoping Plan for long-term emissions forecasting.

1 Based on 100-year time horizon of the GWP of the air pollutant compared to CO₂.

2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO₂ is not included.

1.2.1 GHG Regulatory Setting

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

The US Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings do not in and of themselves impose any emission reduction requirements but allow the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (US EPA 2009).

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and SF₆—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast AQMD guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO₂ per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2021 to 2026)

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon in 2025. On March 30, 2020, the EPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026. Under SAFE, the fuel economy standards will increase 1.5 percent per year compared to the 5 percent per year under the CAFE standards established in 2012. Overall, SAFE requires a fleet average of 40.4 MPG for model year 2026 vehicles (85 Federal Register 24174 (April 30, 2020)).

On December 21, 2021, under direction of Executive Order (EO) 13990 issued by President Biden, the National Highway Traffic Safety Administration repealed Safer Affordable Fuel Efficient Vehicles Rule Part One, which had preempted state and local laws related to fuel economy standards. In addition, on March 31, 2022, the National Highway Traffic Safety Administration finalized new fuel standards in response to EO 13990. Fuel efficiency under the standards proposed will increase 8 percent annually for model years 2024 to 2025 and 10 percent annual for model year 2026. Overall, the new CAFE standards require a fleet average of 49 MPG for passenger vehicles and light trucks for model year 2026, which would be a 10 MPG increase relative to model year 2021 (NHTSA 2022).

On June 7, 2024, NHTSA announced final CAFE standards for passenger cars and light trucks built in model years 2027-2031 and final fuel efficiency standards for heavy-duty pickup trucks and vans built in model years 2030-2035. The final rules establish standards that would require an industry fleet-wide average of approximately 50.4 mpg for passenger cars and light trucks in model year 2031, by increasing fuel economy by 2 percent year over year for passenger cars (model years 2027-2031) and for light trucks (model years 2029-2031). For heavy-duty pickup trucks and vans, the final rule would increase fuel efficiency at a rate of 10 percent per year (model years 2030-2032) and 8 percent per year (model years 2033-2035) (NHTSA 2024).

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the EPA has developed regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for

existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule, which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence EO. It officially rescinded the Clean Power Plan rule issued during the Obama Administration and set emissions guidelines for states in developing plans to limit CO₂ emissions from coal-fired power plants. The Affordable Clean Energy rule was vacated by the United States Court of Appeals for the District of Columbia Circuit on January 19, 2021. The Biden Administration is assessing options on potential future regulations.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in EO S-03-05 and EO B-30-15, EO B-55-18, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), and SB 375.

Executive Order S-3-05

Executive Order S-3-05, signed June 1, 2005. Executive Order S-3-05 set the following GHG reduction targets for the State:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in EO S-03-05. CARB prepared the 2008 Scoping Plan to outline a plan to achieve the GHG emissions reduction targets of AB 32.

Executive Order B-30-15

EO B-30-15, signed April 29, 2015, set a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. EO B-30-15 also directed CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in EO S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, "Safeguarding California", in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, set a goal “to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter.” Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure that future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning that not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions should be offset by equivalent net removals of CO₂e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill 1279

AB 1279, signed by Governor Newsom in September 2022, codified the carbon neutrality targets of EO B-55-18 for year 2045 and sets a new legislative target for year 2045 of 85 percent below 1990 levels for anthropogenic GHG emissions. SB 1279 also requires CARB to update the Scoping Plan to address these new targets.

2022 Climate Change Scoping Plan

CARB adopted the *2022 Scoping Plan for Achieving Carbon Neutrality* (2022 Scoping Plan) on December 15, 2022, which lays out a path to achieve carbon neutrality by 2045 or earlier and to reduce the State’s anthropogenic GHG emissions (CARB 2022). The Scoping Plan provides updates to the previously adopted 2017 Scoping Plan and addresses the carbon neutrality goals of EO B-55-18 (discussed below) and the ambitious GHG reduction target as directed by AB 1279. Previous Scoping Plans focused on specific GHG reduction targets for our industrial, energy, and transportation sectors—to meet 1990 levels by 2020, and then the more aggressive 40 percent below that for the 2030 target. The 2022 Scoping Plan updates the target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045. Carbon neutrality takes it one step further by expanding actions to capture and store carbon including through natural and working lands and mechanical technologies, while drastically reducing anthropogenic sources of carbon pollution at the same time.

The path forward was informed by the recent Sixth Assessment Report (AR6) of the IPCC and the measures would achieve 85 percent below 1990 levels by 2045 in accordance AB 1279. CARB’s 2022 Scoping Plan identifies strategies as shown in Table 11, *Priority Strategies for Local Government Climate Action Plans*, that would be most impactful at the local level for ensuring substantial process towards the State’s carbon neutrality goals.

Table 11 Priority Strategies for Local Government Climate Action Plans

Priority Area	Priority Strategies
Transportation Electrification	Convert local government fleets to zero-emission vehicles (ZEV) and provide EV charging at public sites.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).
VMT Reduction	Reduce or eliminate minimum parking standards.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking
	Implement parking pricing or transportation demand management pricing strategies.
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing allowable density of the neighborhood).
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert “greenfield” land to urban uses (e.g., green belts, strategic conservation easements)
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances.
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing).

Priority Area	Priority Strategies
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings).

Source: CARB 2022.

Based on Appendix D of the 2022 CARB Climate Change Scoping Plan, for residential and mixed-use development projects, CARB recommends first demonstrating that these land use development projects are aligned with State climate goals based on the attributes of land use development that reduce operational GHG emissions while simultaneously advancing fair housing. Attributes that accommodate growth in a manner consistent with the GHG and equity goals of SB 32 have all the following attributes:

- **Transportation Electrification**
 - Provide EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in the California Green Building Standards Code at the time of project approval.
- **VMT Reduction**
 - Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently served by existing utilities and essential public services (e.g., transit, streets, water, sewer).
 - Does not result in the loss or conversion of the State’s natural and working lands;
 - Consists of transit-supportive densities (minimum of 20 residential dwelling units/acre), or is in proximity to existing transit stops (within a half mile), or satisfies more detailed and stringent criteria specified in the region’s Sustainable Communities Strategy (SCS);
 - Reduces parking requirements by:
 - Eliminating parking requirements or including maximum allowable parking ratios (i.e., the ratio of parking spaces to residential units or square feet); or
 - Providing residential parking supply at a ratio of <1 parking space per dwelling unit; or
 - For multifamily residential development, requiring parking costs to be unbundled from costs to rent or own a residential unit.
 - At least 20 percent of the units are affordable to lower-income residents;
 - Result in no net loss of existing affordable units.

- Building Decarbonization

- Use all electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking (CARB 2022).

If the first approach to demonstrating consistency is not applicable (such as in the case of this school modernization project), the second approach to project-level alignment with state climate goals is to achieve net zero GHG emissions. The third approach to demonstrating project-level alignment with state climate goals is to align with GHG thresholds of significance, which many local air quality management (AQMDs) and air pollution control districts (APCDs) have developed or adopted (CARB 2022).

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPO). The SCAG is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035 targets because a significant portion of the built environment in 2020 is defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 MMTCO_{2e} of reductions by 2020 and 15 MMTCO_{2e} of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. CARB adopted revised SB 375 targets for the MPOs in March 2018. The updated targets became effective in October 2018. All SCSs adopted after October 1, 2018, are subject to these new targets. CARB's updated SB 375 targets for the SCAG region were an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018).

The targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update (for SB 32), while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of “percent per capita” reductions in GHG emissions from automobiles and light trucks relative to 2005; this excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies, such as statewide road user pricing. The proposed targets call for greater per-capita GHG emission reductions from SB 375 than are currently in place, which for 2035 translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs to achieve the SB 375 targets. CARB foresees that the additional GHG emissions reductions in 2035 may be achieved from land use changes, transportation investment, and technology strategies (CARB 2018).

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan (RTP/SCS). For the SCAG region, the 2024-2050 RTP/SCS, Connect SoCal, was adopted on April 4, 2024, and is an update to the 2020-2045 RTP/SCS. In general, the RTP/SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would reduce VMT from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

Connect SoCal focuses on the continued efforts of the previous RTP/SCSs to integrate transportation and land use strategies in development of the SCAG region through the horizon year 2050 (SCAG 2024). Connect SoCal forecasts that the SCAG region will meet its GHG per capita reduction targets of 8 percent by 2020 and 19 percent by 2035. It also forecasts that implementation of the plan will reduce VMT per capita in year 2050 by 6.3 percent compared to baseline conditions for that year. Connect SoCal includes a “Core Vision” that centers on maintaining and better managing the transportation network for moving people and goods, while expanding mobility choices by locating housing, jobs, and transit closer together; and increasing investments in transit and complete streets (SCAG 2024).

Transportation Sector Specific Regulations

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model years 2017 through 2025 light-duty vehicles. (See also the discussion on the update to the Corporate Average Fuel Economy standards at the beginning of this Section 5.5.2 under “Federal.”) In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of ZE vehicles into a single package of standards. Under California’s Advanced Clean Car program, by 2025 new automobiles will emit 34 percent less GHG emissions and 75 percent less smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold in the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in CO₂e gram per unit of fuel energy sold in California. The LCFS required a reduction of 2.5 percent in the carbon intensity of California’s transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and uses market-based mechanisms to allow these providers to choose how they reduce emissions during the “fuel cycle” using the most economically feasible methods.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate ZE vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directed the number of ZE vehicles in California’s state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are ZE by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions to 80 percent below 1990 levels.

Executive Order N-79-20

On September 23, 2020, Governor Newsom signed Executive Order N-79-20, whose goal is that 100 percent of in-state sales of new passenger cars and trucks will be ZE by 2035. Additionally, the fleet goals for trucks are that 100 percent of drayage trucks are ZE by 2035, and 100 percent of medium- and heavy-duty vehicles in the state are ZE by 2045, where feasible. The Executive Order's goal for the State is to transition to 100 percent ZE off-road vehicles and equipment by 2035, where feasible.

Renewables Portfolio: Carbon Neutrality Regulations

Senate Bills 1078, 107, and X1-2 and Executive Order S-14-08

A major component of California's Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08, signed in November 2008, expanded the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon) was signed into law September 2015 and establishes tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100. Under SB 100, the RPS for public-owned facilities and retail sellers consist of 44 percent renewable energy by 2024, 52 percent by 2027, and 60 percent by 2030. SB 100 also established a new RPS requirement of 50 percent by 2026. Furthermore, the bill establishes an overall state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Energy Efficiency Regulations

California Building Energy Code: Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2024 (California Code of Regulations [CCR] Title 24, Part 6). Title 24 Part 6 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

In 2024, the CEC adopted the 2025 Building Energy Efficiency Standards, which were subsequently approved by the California Building Standards Commission. The 2025 standards become effective and replace the existing 2022 standards on January 1, 2026. The 2025 standards would require mixed-fuel single-family homes to be electric-ready to accommodate replacement of gas appliances with electric appliances. In addition, the new standards also include prescriptive photovoltaic system and battery requirements for high-rise, multifamily buildings (i.e., more than three stories) and noncommercial buildings such as hotels, offices, medical offices, restaurants, retail stores, schools, warehouses, theaters, and convention centers.¹⁴ The Building Energy and Efficiency Standards and CALGreen undergo a triennial update with a goal to achieve zero net energy for new buildings by 2030.

California Building Code: Green Building Standards (CALGreen)

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established 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.¹⁵ The mandatory provisions of CALGreen became effective January 1, 2011, and were most recently updated in 2024 (2025 CALGreen update). The 2025 CALGreen update becomes effective on January 1, 2026, and provides updates to the residential and non-residential voluntary measures.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC 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–

¹⁴ California Energy Commission, 2021, Amendments to the Building Energy Efficiency Standards (2022 Energy Code) Draft Environmental Report. CEC-400-2021-077-D.

¹⁵ The green building standards became mandatory in the 2010 edition of the code.

federally regulated appliances. Though these regulations are now often viewed as “business as usual,” they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Diversion Regulations

AB 939: Integrated Waste Management Act of 1989

California’s Integrated Waste Management Act of 1989 (AB 939, Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of CALGreen also requires that at least 65 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

AB 1327

The California Solid Waste Reuse and Recycling Access Act (AB 1327, Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

AB 1826

In October of 2014, Governor Brown signed AB 1826 requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses and multifamily residential dwellings with five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed with food waste.

Water Efficiency Regulations

SBX7-7

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed “SBX7-7.” SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 required urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

AB 1881: Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or an equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Short-Lived Climate Pollutant Reduction Strategy

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH₄. Black carbon is the light-absorbing component of fine particulate matter produced during the incomplete combustion of fuels. SB 1383 required the state board, no later than January 1, 2018, to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030. The bill also established targets for reducing organic waste in landfills. On March 14, 2017, CARB adopted the Short-Lived Climate Pollutant Reduction Strategy, which identifies the state’s approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s, despite the tripling of diesel fuel use (CARB 2017). In-use on-road rules were expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. South Coast AQMD is one of the air districts that requires air pollution control

technologies for chain-driven broilers, which reduces particulate emissions from these charbroilers by over 80 percent (CARB 2017). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the South Coast Air Basin.

CALIFORNIA'S GHG SOURCES AND RELATIVE CONTRIBUTION

In 2024, the statewide GHG emissions inventory was updated for 2000 to 2022 emissions using the GWPs in IPCC's AR4 and reported that California produced 371.1 MMTCO₂e GHG emissions in 2022 (2.4 percent lower than 2021 levels). The 2022 emissions data shows that California is continuing its established long-term trend of GHG emissions declines, despite the anomalous emissions trends from 2019 through 2021, due in large part to the impacts of the COVID-19 pandemic. In 2014, statewide GHG emissions dropped below the 2020 GHG Limit (AB 32 target for year 2020) and have remained below the Limit since that time. Additionally, the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross state product (GSP)) is declining (CARB 2024b).

California's transportation sector was the single-largest generator of GHG emissions, producing 37.7 percent of the state's total emissions. Industrial sector emissions made up 19.6 percent, and electric power generation made up 16.1 percent of the state's emissions inventory. Other major sectors of GHG emissions include residential and commercial (10.6 percent), agriculture and forestry (8.0 percent), high GWP (5.7 percent), and recycling and waste (2.2 percent).

Emissions from transportation sector decreased compared to 2021, primarily due to a greater share of fuels used for on-road transportation being produced from non-fossil resources. Industrial sector decreases from 2021 to 2022, most notably in the oil and gas production sector. Electricity emissions also decreased compared to 2021 from the continued growth of in-state solar generation and increases to in-state hydropower and imported wind power. High-GWP gases continue to replace ozone-depleting substances (ODS) being phased out under the 1987 Montreal Protocol and emissions from this sector have been stable from 2020 to 2022 (CARB 2024b).

1.2.2 Thresholds of Significance

The CEQA Guidelines recommend that a lead agency consider the following when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;

3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.¹⁶

SOUTH COAST AQMD WORKING GROUP

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). The South Coast AQMD Working Group (Meeting No. 15) identified a tiered approach for evaluating GHG emissions for development projects where South Coast AQMD is not the lead agency (South Coast AQMD 2010):

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, South Coast AQMD requires an assessment of GHG emissions. The South Coast AQMD Working Group identified a screening-level threshold of 3,000 MTCO₂e annually for all land use types or the following land-use-specific thresholds: 1,400 MTCO₂e for commercial projects, 3,500 MTCO₂e for residential projects, or 3,000 MTCO₂e for mixed-use projects. These bright-line thresholds are based on a review of the Governor's Office of Planning and Research database of CEQA projects. Based on their review of 711 CEQA projects, 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal, and therefore, less than cumulatively considerable impact on GHG emissions:

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

The South Coast AQMD Working Group has identified an efficiency target for projects that exceed the screening threshold of 4.8 MTCO₂e per year per service population (MTCO₂e/year/SP) for project-level analyses and 6.6 MTCO₂e/year/SP for plan level projects

¹⁶ The Governor's Office of Planning and Research recommendations include a requirement that such a plan must be adopted through a public review process and include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable, notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

(e.g., program-level projects such as general plans) for the year 2020.¹⁷ The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.

The bright-line screening-level criterion of 3,000 MTCO₂e/yr is used as the significance threshold for this project. Therefore, if the project operation-phase emissions exceed the 3,000 MTCO₂e/yr threshold, GHG emissions would be considered potentially significant in the absence of mitigation measures.

¹⁷ It should be noted that the Working Group also considered efficiency targets for 2035 for the first time in this Working Group meeting.

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CalEEMod Inputs- Sonora High School Field Improvements Project, Construction

Name: Sonora High School Field Improvements Project
Project Number: FHS-08, 02
Project Location: 401 S Palm St, La Habra, CA 90631
County: Orange
Climate Zone: 7
Land Use Setting: Urban
Gas Utility Company: Southern California Gas
Electric Utility Company: Southern California Edison
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 16 - North Orange County

Disturbed Site Acreage 7.90

Demolition	Footprint SQFT	Acres	Stories	Tons of Debris
<i>Buildings</i>				
Metal Storage Buildings	1,340	0.03	2	62
<i>Hardscape</i>				
Asphalt Pavement	6,570	0.15	NA	97
Other Concrete Hardscape	420	0.01	NA	6
Total	8,330	0.19		165

New Construction	Gross SQFT	Footprint SQFT	Acres	Stories
<i>Buildings</i>				
Field Building	3,015	2,615	0.06	2
<i>Building 400 Modernizations</i>				
Biology classrooms	3,990	3,990	0.09	1
Chemistry classrooms	4,194	4,194	0.10	1
Other Room Modernizations	924	924	0.02	1
<i>Landscaping</i>				
Auxiliary Field	42,257	42,257	0.97	NA
Synthetic Turf Field	91,803	91,803	2.11	NA
Golf Putting Green	23,576	23,576	0.54	NA
Landscaping	21,299	21,299	0.49	NA
<i>Hardscape</i>				
Concrete Hardscape	40,114	40,114	0.92	NA
Synthetic Track Surface	63,529	63,529	1.46	NA
Other Hardscape (e.g., decomposed granite)	44,764	44,764	1.03	NA
Total	330,357	329,957	7.78	

Field Lighting	Size Metric	Acres
Number of Light Poles ¹	24	NA
Area disturbed per light pole (SF) ²	216	0.00
Total Disturbance	5,184	0.12

Notes:

¹ Accounts for eight lights at the varsity baseball field, two lights at the auxiliary field, four lights at the varsity softball field, four lights at the junior varsity baseball field, and six lights at the track field.

² Based on applicant-provided information.

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet	Landscaped SQFT	Special Landscaped SQFT ¹
Educational	High School	3.015	1000 SQFT	4.17	3,015	63,556	115,379
Educational ²	High School	9.108	1001 SQFT	0.21	9,108		
Parking ³	Other Non-Asphalt Surface	5.184	1000 SQFT	0.12	5,184		
Parking	Other Non-Asphalt Surface	148.407	1000 SQFT	3.41	148,407		
				7.90			

Notes:

¹ Accounts for synthetic turf surfaces.

² Accounts for Building 400 classroom modernizations. Since these improvements would not change the operational characteristics of this building, only construction activities associated with these improvements are modeled.

³ Accounts for field lighting installation.

Demolition

Component	Amount to be Demolished	Haul Truck Capacity (Tons) ¹	Haul Distance (miles) ¹	Total Trip Ends	Duration (days)	Trip Ends Per Day
Demolition (Tons)	165	20	20	17	7	2

Notes:

¹ CalEEMod default used.

Architectural Coating

Percent Painted

Interior Painted:	100%
Exterior Painted:	100%

South Coast AQMD Rule 1113

Interior Paint VOC content:	50	grams per liter
Exterior Paint VOC content:	50	grams per liter
Parking Paint VOC content:	100	grams per liter

Field Improvements	Land Use Square Feet	CalEEMod Factor ²	Total Paintable Surface Area ³	Paintable Interior Area ¹	Paintable Exterior Area ¹
Non-Residential Structures					
Field Building	3,015	2.0	6,030	4,523	1,508
Building 400 Modernizations ⁴	9,108	2.0	18,216	13,662	0
				18,185	1,508
Parking					
Other Non-Asphalt Surface	153,591	6%	9,215	-	9,215
					9,215

Notes:

¹ CalEEMod methodology calculates the paintable interior and exterior areas by multiplying the total paintable surface area by 75 and 25 percent, respectively.

² CalEEMod assumes the total surface for painting equals 2 times the floor square footage for nonresidential square footage defined by user.

³ Assumes that all parking and non-parking asphalt will be striped. CalEEMod methodology assumes 6% of surface area is striped.

⁴ No exterior painting would occur during the modernizations work associated with the proposed project.

Fugitive Dust Rule Compliance

SCAQMD Rule 403

Water Unpaved Roads	Frequency:	2	per day
	PM ₁₀ :	55	% Reduction
	PM _{2.5} :	55	% Reduction

Water Exposed Area	Frequency:	2	per day
	PM ₁₀ :	61	% Reduction
	PM _{2.5} :	61	% Reduction

Unpaved Roads	Vehicle Speed:	25	mph
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SCAQMD Rule 1186

Clean Paved Road	9	% PM Reduction
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Mitigation Measure AIR-1

Water Exposed Area	Frequency:	3	per day
	PM ₁₀ :	74	% Reduction
	PM _{2.5} :	74	% Reduction

Pavement Volume to Weight Conversion

Component	Total SF of Area ¹	Assumed Thickness (foot) ²	Debris Volume (cu. ft)	Weight or Crushed Asphalt (lbs/cf) ³	AC Mass (lbs)	AC Mass (tons)
Asphalt Pavement	6,570	0.333	2,190	89	194,667	97.33
Other Concrete Hardscape	420	0.333	140	89	12,444	6.22
Total	6,990					104

¹ Based on information provided by the District

² Gibbons, Jim. 1999. Pavements and Surface Materials. Nonpoint Education for Municipal Officials, Technical Paper Number 8. University of Connecticut Cooperative Extension System. https://www.uni-groupusa.org/PDF/NEMO_tech_8.pdf

³ CalRecycle. 2019. Solid Waste Cleanup Program Weights and Volumes for Project Estimates. <https://www.delmar.ca.us/DocumentCenter/View/5668/CalRecycle-Conversion-Table>

Building Demolition Haul Trip Calculation

Source: CalEEMod User's Guide Version 2022, Appendix C

Conversion factors

0.046 ton/SF	Building Debris
2.0 CY/ton	Building Debris
1.2641662 tons/cy	Soil
20 tons	Truck Capacity in tons
16 CY	Truck Capacity in CY
0.8 CY/ton	Soil

Building	BSF Demo ¹	Tons/SF	Tons	CY of Building Materials	Haul Truck (CY)	Haul Truck (Ton)	Round Trips	Total Trip Ends
Building Demolition	1,340	0.046	62	123	16	20	8	16

Notes

¹ Based on information provided by the District.

Construction Activities and Schedule Assumptions

* based on schedule provided by District
8/1/2026-1/1/2027

CalEEMod Default Construction Schedule				
Construction Activities	Phase Type	Start Date	End Date	CalEEMod Duration (Workday)
Demolition	Demolition	8/3/2026	8/31/2026	21
Site Preparation	Site Preparation	9/1/2026	9/15/2026	11
Grading	Grading	9/16/2026	10/14/2026	21
Building Construction	Building Construction	10/15/2026	9/2/2027	231
Paving	Paving	9/3/2027	10/1/2027	21
Architectural Coating	Architectural Coating	10/2/2027	10/30/2027	20
Total Days				453

Normalization Calculations				
CalEEMod Defaults Construction Duration			Assumed Construction Duration	
453	days of construction		8/1/2026	1/1/2027
1.24	years of construction		153	days
14.89	months of construction		5.03	months

Norm Factor: 0.34

Revised Construction Schedule				
Construction Activities	Phase Type	Start Date	End Date	CalEEMod Duration (Workday)
Demolition	Demolition	8/3/2026	8/11/2026	7
Site Preparation	Site Preparation	8/12/2026	8/17/2026	4
Grading	Grading	8/18/2026	8/26/2026	7
Field Improvements and Modernizations Construction	Building Construction	8/27/2026	12/31/2026	91
Paving	Paving	12/23/2026	12/31/2026	7
Architectural Coating	Architectural Coating	12/23/2026	12/31/2026	7
Total Days				123

Notes:

Field improvements and modernizations construction conservatively assumed to overlap with architectural coating and paving activities.

CalEEMod Construction Off-Road Equipment Inputs

Source: CalEEMod defaults.

Construction Equipment Details			
Default Equipment	# of Equipment	hr/day	total trips per day
Building and Asphalt Demolition			
Concrete/Industrial Saws	1	8	
Excavators	3	8	
Rubber Tired Dozers	2	8	
Worker Trips			15
Vendor Trips			2
Hauling Trips			6
Water Trucks	Acres Disturbed:	1	6
	Onsite Travel (mi/day)	0.83	
Modified Vendor Trips			8
Site Preparation			
Tractors/Loaders/Backhoes	4	8	
Rubber Tired Dozers	3	8	
Worker Trips			18
Vendor Trips			1
Hauling Trips			0
Water Trucks (added to Vendor Trips)	Acres Disturbed:	3.50	18
	Onsite Travel (mi/day)	2.89	
Modified Vendor Trips			19
Grading			
Graders	1	8	
Tractors/Loaders/Backhoes	3	8	
Excavators	1	8	
Rubber Tired Dozers	1	8	
Worker Trips			15
Vendor Trips			3
Hauling Trips			0
Water Trucks (added to Vendor Trips)	Acres Disturbed:	2.5	14
	Onsite Travel (mi/day)	2.06	
Modified Vendor Trips			17

Building Construction			
Cranes	1	7	
Forklifts	3	8	
Generator Sets	1	8	
Tractors/Loaders/Backhoes	3	7	
Welders	1	8	
Worker Trips			5
Vendor Trips			2
Hauling Trips			0
Paving			
Pavers	1	8	
Paving Equipment	2	8	
Rollers	2	8	
Worker Trips			15
Vendor Trips			2
Hauling Trips			0
Architectural Coating			
Air Compressors	1	6	
Worker Trips			1
Vendor Trips			0
Hauling Trips			0

Water Truck Vendor Trip Calculation

Amount of Water (gal/acre/day) ¹	Water Truck Capacity (gallons) ²
10,000	4,000

Notes:

¹ Based on data provided in Guidance for Application for Dust Control Permit
Maricopa County Air Quality Department. 2005, June. Guidance for Application of Dust Control Permit.
https://www.epa.gov/sites/default/files/2019-04/documents/mr_guidanceforapplicationfordustcontrolpermit.pdf

² Based on standard water truck capacity:
McLellan Industries. 2025, January (access). Water Trucks. <https://www.mclellanindustries.com/trucks/water-trucks/>

³ Assumes that dozers, tractors/loaders/backhoes, and graders can disturb 0.50 acres per day and scrapers can disturb 1 acre per day.

CalEEMod Inputs- Sonora High School Field Improvements Project, Operation

Name: Sonora High School Field Improvements Project
Project Number: FHS-08, 02
Project Location: 401 S Palm St, La Habra, CA 90631
County: Orange
Climate Zone: 7
Land Use Setting: Urban
Gas Utility Company: Southern California Gas
Electric Utility Company: Southern California Edison
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 16 - North Orange County

Disturbed Site Acreage 7.90

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet	Landscaped SQFT	Special Landscaped SQFT
Educational	High School	3.015	1000 SQFT	4.17	3,015	63,556	115,379
Parking	Other Non-Asphalt Surfa	5.184	1000 SQFT	0.12	5,184		
Parking	Other Non-Asphalt Surfa	148.407	1000 SQFT	3.41	148,407		
				7.90			

Project Trips: The proposed project would result in a decrease in enrollment from the proposed modernizations and no new events result from the field improvements. Therefore, no net increase in mobile emissions would occur.

Water Use (CalEEMod default)¹

	Indoor (gals/year)	Outdoor (gals/year)	Total
High School	100,112	2,651,365	2,751,477

Notes

¹ Assumes 100% aerobic treatment.

Solid Waste (CalEEMod default)

Land Use	Total Solid Waste (tons/year)
High School	3.92

Electricity (Buildings)

Default CalEEMod Energy Use

Land Use Subtype	Total Annual Electricity Consumption (kWh/year)	Total Annual Natural Gas Consumption (kBTU/year)	Title-24 Electricity Energy Intensity (kWhr/size/year)*	Title-24 Natural Gas Energy Intensity (KBTU/size/year)*	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
High School	18,856.85	63,254.37	16,301.57	32,174.65	2,555.29	31,079.73

Converting Natural Gas Consumption to Electricity Consumption for All-Electric Buildings

Land Use Subtype	Title-24 Natural Gas Energy Intensity (KBTU/size/year)	Converted Title-24 Energy Intensity (kWh/size/year)*	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)	Converted Nontitle-24 Energy Intensity (kWh/size/year)*
High School	32,174.65	9.43	31,079.73	9.11

*Assumes 3,412 BTU per kWh.

Source: EIA. 2024 (last updated). Units and calculators explained British thermal units (Btu). <https://www.eia.gov/energyexplained/units-and-calculators/british-thermal-units.php>.

Adjusted CalEEMod Energy Use

Land Use Subtype	Total Annual Electricity Consumption (kWh/year)	Total Annual Natural Gas Consumption (kBTU/year)	Title-24 Electricity Energy Intensity (kWhr/size/year)*	Title-24 Natural Gas Energy Intensity (KBTU/size/year)*	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
High School	18,875.40	0.00	16,311.00	0.00	2,564.40	0.00

Lighting (Electricity Use)

	Total kW ¹	Events/Year ²	Hours ³	Kwh (Annual)
Practices/Games	179.70	103	4.50	83,291
Total Annual kWh				83,291

Calculation of GHGs from Field Lighting

CO ₂ ⁴	CH ₄ ⁴	N ₂ O ⁴	CO ₂ e	CO ₂ e
lbs/Mwh	lbs/Mwh	lbs/Mwh	lbs/Mwh	MT/Kwh
346.20	0.033	0.004	348.21	0.0002

CO₂e from Lighting (MT/Year)

13.16

Notes

¹ Based on the total light load for the proposed lighting as provided by the District in the Musco Lighting Plan.

² Based on the number of events that would change to a different time under proposed conditions.

³ Assumes lighting will be used from 4:30 PM to 8:00 PM

Architectural Coating (see Construction Inputs page)

Southern California Edison Carbon Intensity Factors¹

Forecasted Year	2026	
CO ₂ :	346.20	pounds per megawatt hour
CH ₄ :	0.033	pound per megawatt hour
N ₂ O:	0.004	pound per megawatt hour

Notes:

¹ CalEEMod default values.

Activity/Use ¹	Number of New Events	Start Time	End Time	Lighting in use (hrs) ²	Total Light Use per Year
Softball Practice	3	15:30	20:00	4.5	14
Football Practice	10	15:30	20:00	4.5	45
Soccer Practice	87	15:30	20:00	4.5	392
Powder Puff/Practice	3	15:30	20:00	4.5	14
Total	103			Hrs/Event	464
					4.5

¹

Based on Appendix B of the Sonora High School Athletic Fields Design Due Diligence and CEQA Scoping Study. This accounts for events that would change their time of use of the sports facilities under proposed conditions.

² Assume lighting in use past 4:30pm and all new proposed events would occur with use of lights.

Sonora HS Field Improvements Project (Construction) Custom Report

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 - 3.3. Site Preparation (2026) - Unmitigated
 - 3.5. Grading (2026) - Unmitigated
 - 3.7. Building Construction (2026) - Unmitigated
 - 3.9. Paving (2026) - Unmitigated
 - 3.11. Architectural Coating (2026) - Unmitigated
- 5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

7. Health and Equity Details

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

8.4.8. Architectural Coatings

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sonora HS Field Improvements Project (Construction)
Construction Start Date	8/3/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.8000
Location	401 S Palm St, La Habra, CA 90631, USA
County	Orange
City	La Habra
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5751
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.37

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
High School	3.01500	1000sqft	4.17000	3,015.00	63,556.0	115,379	—	—
High School	9.10800	1000sqft	0.20909	9,108.00	0.00000	0.00000	—	—

Other Non-Asphalt Surfaces	5.18400	1000sqft	0.11901	0.00000	0.00000	—	—	—
Other Non-Asphalt Surfaces	148.407	1000sqft	3.40696	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.85090	3.21621	29.8469	30.0481	0.05326	1.24691	9.13010	10.3770	1.14751	4.14570	5.29321	—	6,133.01	6,133.01	0.24878	0.13718	2.35173	6,182.46
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.5599	21.1725	18.0349	25.0620	0.03997	0.72257	0.31004	1.03261	0.66484	0.07410	0.73894	—	4,428.05	4,428.05	0.17390	0.06044	0.03313	4,450.45
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.84918	0.76977	3.67235	4.59494	0.00815	0.14354	0.21644	0.35998	0.13209	0.08331	0.21540	—	885.751	885.751	0.03583	0.01439	0.09575	891.032
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15498	0.14048	0.67020	0.83858	0.00149	0.02620	0.03950	0.06570	0.02411	0.01520	0.03931	—	146.646	146.646	0.00593	0.00238	0.01585	147.520

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.85090	3.21621	29.8469	30.0481	0.05326	1.24691	9.13010	10.3770	1.14751	4.14570	5.29321	—	6,133.01	6,133.01	0.24878	0.13718	2.35173	6,182.46
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	21.5599	21.1725	18.0349	25.0620	0.03997	0.72257	0.31004	1.03261	0.66484	0.07410	0.73894	—	4,428.05	4,428.05	0.17390	0.06044	0.03313	4,450.45
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.84918	0.76977	3.67235	4.59494	0.00815	0.14354	0.21644	0.35998	0.13209	0.08331	0.21540	—	885.751	885.751	0.03583	0.01439	0.09575	891.032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.15498	0.14048	0.67020	0.83858	0.00149	0.02620	0.03950	0.06570	0.02411	0.01520	0.03931	—	146.646	146.646	0.00593	0.00238	0.01585	147.520

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72490	2.28674	20.6515	19.0056	0.03253	0.84309	—	0.84309	0.77564	—	0.77564	—	3,426.59	3,426.59	0.13900	0.02780	—	3,438.35
Demolition	—	—	—	—	—	—	0.31899	0.31899	—	0.04830	0.04830	—	—	—	—	—	—	—
Onsite truck	0.00165	0.00061	0.01637	0.01126	0.00004	0.00004	0.30804	0.30807	0.00004	0.03079	0.03083	—	4.37127	4.37127	0.00098	0.00070	0.00576	4.61115

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.05226	0.04386	0.39606	0.36449	0.00062	0.01617	—	0.01617	0.01488	—	0.01488	—	65.7155	65.7155	0.00267	0.00053	—	65.9410
Demoliti on	—	—	—	—	—	—	0.00612	0.00612	—	0.00093	0.00093	—	—	—	—	—	—	—
Onsite truck	0.00003	0.00001	0.00032	0.00022	< 0.000005	< 0.000005	0.00560	0.00560	< 0.000005	0.00056	0.00056	—	0.08403	0.08403	0.00002	0.00001	0.00005	0.08857
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.00954	0.00800	0.07228	0.06652	0.00011	0.00295	—	0.00295	0.00271	—	0.00271	—	10.8800	10.8800	0.00044	0.00009	—	10.9173
Demoliti on	—	—	—	—	—	—	0.00112	0.00112	—	0.00017	0.00017	—	—	—	—	—	—	—
Onsite truck	0.00001	< 0.000005	0.00006	0.00004	< 0.000005	< 0.000005	0.00102	0.00102	< 0.000005	0.00010	0.00010	—	0.01391	0.01391	< 0.000005	< 0.000005	0.00001	0.01466
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05192	0.05060	0.04564	0.79052	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	195.324	195.324	0.00231	0.00711	0.67888	198.179
Vendor	0.01965	0.00533	0.25545	0.12787	0.00180	0.00180	0.06845	0.07025	0.00180	0.01891	0.02071	—	250.915	250.915	0.01252	0.03542	0.64828	262.430
Hauling	0.04034	0.00622	0.49128	0.21720	0.00278	0.00529	0.10859	0.11389	0.00529	0.03046	0.03575	—	411.163	411.163	0.03122	0.06508	0.83229	432.170
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00099	0.00096	0.00101	0.01359	0.00000	0.00000	0.00371	0.00371	0.00000	0.00087	0.00087	—	3.61381	3.61381	0.00005	0.00014	0.00562	3.66133

Vendor	0.00037	0.00010	0.00513	0.00248	0.00003	0.00003	0.00130	0.00133	0.00003	0.00036	0.00039	—	4.81307	4.81307	0.00024	0.00068	0.00538	5.02685
Hauling	0.00077	0.00011	0.00986	0.00418	0.00005	0.00010	0.00206	0.00216	0.00010	0.00058	0.00068	—	7.88650	7.88650	0.00060	0.00125	0.00689	8.28029
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00018	0.00018	0.00018	0.00248	0.00000	0.00000	0.00068	0.00068	0.00000	0.00016	0.00016	—	0.59831	0.59831	0.00001	0.00002	0.00093	0.60618
Vendor	0.00007	0.00002	0.00094	0.00045	0.00001	0.00001	0.00024	0.00024	0.00001	0.00007	0.00007	—	0.79686	0.79686	0.00004	0.00011	0.00089	0.83225
Hauling	0.00014	0.00002	0.00180	0.00076	0.00001	0.00002	0.00038	0.00040	0.00002	0.00011	0.00012	—	1.30570	1.30570	0.00010	0.00021	0.00114	1.37090

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74146	3.14387	29.1635	28.8082	0.04890	1.24251	—	1.24251	1.14311	—	1.14311	—	5,297.94	5,297.94	0.21491	0.04298	—	5,316.12
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00220	0.00066	0.02341	0.01394	0.00009	0.00013	1.07256	1.07269	0.00013	0.10721	0.10734	—	11.2654	11.2654	0.00143	0.00179	0.02004	11.8558
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04100	0.03445	0.31960	0.31571	0.00054	0.01362	—	0.01362	0.01253	—	0.01253	—	58.0596	58.0596	0.00236	0.00047	—	58.2589

Sonora HS Field Improvements Project (Construction) Custom Report, 2/3/2026

Dust From Material Movement	—	—	—	—	—	—	0.08401	0.08401	—	0.04318	0.04318	—	—	—	—	—	—	—
Onsite truck	0.00002	0.00001	0.00027	0.00015	< 0.000005	< 0.000005	0.01115	0.01115	< 0.000005	0.00111	0.00112	—	0.12357	0.12357	0.00002	0.00002	0.00009	0.12991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00748	0.00629	0.05833	0.05762	0.00010	0.00249	—	0.00249	0.00229	—	0.00229	—	9.61243	9.61243	0.00039	0.00008	—	9.64542
Dust From Material Movement	—	—	—	—	—	—	0.01533	0.01533	—	0.00788	0.00788	—	—	—	—	—	—	—
Onsite truck	< 0.000005	< 0.000005	0.00005	0.00003	< 0.000005	< 0.000005	0.00203	0.00203	< 0.000005	0.00020	0.00020	—	0.02046	0.02046	< 0.000005	< 0.000005	0.00002	0.02151
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06057	0.05903	0.05324	0.92228	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	227.878	227.878	0.00270	0.00829	0.79203	231.209
Vendor	0.04666	0.01265	0.60670	0.30369	0.00427	0.00427	0.16256	0.16683	0.00427	0.04491	0.04919	—	595.922	595.922	0.02974	0.08411	1.53966	623.270
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00066	0.00064	0.00067	0.00906	0.00000	0.00000	0.00248	0.00248	0.00000	0.00058	0.00058	—	2.40921	2.40921	0.00003	0.00009	0.00375	2.44089
Vendor	0.00051	0.00013	0.00697	0.00336	0.00005	0.00005	0.00176	0.00181	0.00005	0.00049	0.00053	—	6.53202	6.53202	0.00033	0.00092	0.00730	6.82215
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00012	0.00012	0.00012	0.00165	0.00000	0.00000	0.00045	0.00045	0.00000	0.00011	0.00011	—	0.39887	0.39887	0.00001	0.00002	0.00062	0.40412

Vendor	0.00009	0.00002	0.00127	0.00061	0.00001	0.00001	0.00032	0.00033	0.00001	0.00009	0.00010	—	1.08145	1.08145	0.00005	0.00015	0.00121	1.12948
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	—	0.64622	0.59452	—	0.59452	—	2,959.64	2,959.64	0.12006	0.02401	—	2,969.79
Dust From Material Movement	—	—	—	—	—	—	2.76221	2.76221	—	1.33565	1.33565	—	—	—	—	—	—	—
Onsite truck	0.00198	0.00064	0.02058	0.01286	0.00007	0.00009	0.76453	0.76462	0.00009	0.07642	0.07651	—	8.48769	8.48769	0.00125	0.00135	0.01429	8.93682
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.03756	0.03156	0.28710	0.33441	0.00052	0.01239	—	0.01239	0.01140	—	0.01140	—	56.7602	56.7602	0.00230	0.00046	—	56.9550
Dust From Material Movement	—	—	—	—	—	—	0.05297	0.05297	—	0.02562	0.02562	—	—	—	—	—	—	—
Onsite truck	0.00004	0.00001	0.00041	0.00025	< 0.000005	< 0.000005	0.01391	0.01391	< 0.000005	0.00139	0.00139	—	0.16297	0.16297	0.00002	0.00003	0.00012	0.17143

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00686	0.00576	0.05240	0.06103	0.00010	0.00226	—	0.00226	0.00208	—	0.00208	—	9.39729	9.39729	0.00038	0.00008	—	9.42954
Dust From Material Movement	—	—	—	—	—	—	0.00967	0.00967	—	0.00467	0.00467	—	—	—	—	—	—	—
Onsite truck	0.00001	< 0.000005	0.00007	0.00005	< 0.000005	< 0.000005	0.00254	0.00254	< 0.000005	0.00025	0.00025	—	0.02698	0.02698	< 0.000005	< 0.000005	0.00002	0.02838
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05192	0.05060	0.04564	0.79052	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	195.324	195.324	0.00231	0.00711	0.67888	198.179
Vendor	0.04175	0.01132	0.54284	0.27172	0.00382	0.00382	0.14545	0.14927	0.00382	0.04019	0.04401	—	533.194	533.194	0.02661	0.07526	1.37759	557.663
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00099	0.00096	0.00101	0.01359	0.00000	0.00000	0.00371	0.00371	0.00000	0.00087	0.00087	—	3.61381	3.61381	0.00005	0.00014	0.00562	3.66133
Vendor	0.00079	0.00021	0.01091	0.00527	0.00007	0.00007	0.00276	0.00283	0.00007	0.00076	0.00084	—	10.2278	10.2278	0.00051	0.00144	0.01143	10.6820
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00018	0.00018	0.00018	0.00248	0.00000	0.00000	0.00068	0.00068	0.00000	0.00016	0.00016	—	0.59831	0.59831	0.00001	0.00002	0.00093	0.60618
Vendor	0.00014	0.00004	0.00199	0.00096	0.00001	0.00001	0.00050	0.00052	0.00001	0.00014	0.00015	—	1.69332	1.69332	0.00008	0.00024	0.00189	1.76854
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31911	0.26702	2.45675	3.23271	0.00583	0.09440	—	0.09440	0.08685	—	0.08685	—	597.668	597.668	0.02424	0.00485	—	599.719
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05824	0.04873	0.44836	0.58997	0.00106	0.01723	—	0.01723	0.01585	—	0.01585	—	98.9508	98.9508	0.00401	0.00080	—	99.2904
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01762	0.01717	0.01549	0.26834	0.00000	0.00000	0.06655	0.06655	0.00000	0.01560	0.01560	—	66.3015	66.3015	0.00079	0.00241	0.23044	67.2708
Vendor	0.00488	0.00132	0.06345	0.03176	0.00045	0.00045	0.01700	0.01745	0.00045	0.00470	0.00514	—	62.3196	62.3196	0.00311	0.00880	0.16101	65.1796
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01751	0.01717	0.01779	0.23146	0.00000	0.00000	0.06655	0.06655	0.00000	0.01560	0.01560	—	63.0992	63.0992	0.00090	0.00241	0.00597	63.8468
Vendor	0.00479	0.00124	0.06602	0.03246	0.00045	0.00045	0.01700	0.01745	0.00045	0.00470	0.00514	—	62.3504	62.3504	0.00311	0.00880	0.00418	65.0535
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00437	0.00425	0.00444	0.05999	0.00000	0.00000	0.01639	0.01639	0.00000	0.00384	0.00384	—	15.9469	15.9469	0.00022	0.00060	0.02480	16.1566
Vendor	0.00121	0.00032	0.01657	0.00801	0.00011	0.00011	0.00420	0.00431	0.00011	0.00116	0.00127	—	15.5405	15.5405	0.00078	0.00219	0.01736	16.2307
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00080	0.00078	0.00081	0.01095	0.00000	0.00000	0.00299	0.00299	0.00000	0.00070	0.00070	—	2.64019	2.64019	0.00004	0.00010	0.00411	2.67491
Vendor	0.00022	0.00006	0.00302	0.00146	0.00002	0.00002	0.00077	0.00079	0.00002	0.00021	0.00023	—	2.57290	2.57290	0.00013	0.00036	0.00287	2.68718
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90546	0.76084	7.11822	9.93804	0.01395	0.31987	—	0.31987	0.29428	—	0.29428	—	1,510.59	1,510.59	0.06128	0.01226	—	1,515.78
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01736	0.01459	0.13651	0.19059	0.00027	0.00613	—	0.00613	0.00564	—	0.00564	—	28.9702	28.9702	0.00118	0.00024	—	29.0697
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00317	0.00266	0.02491	0.03478	0.00005	0.00112	—	0.00112	0.00103	—	0.00103	—	4.79635	4.79635	0.00019	0.00004	—	4.81281
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05159	0.05060	0.05241	0.68189	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	185.890	185.890	0.00265	0.00711	0.01758	188.092

Vendor	0.00482	0.00124	0.06646	0.03267	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	62.7596	62.7596	0.00313	0.00885	0.00421	65.4805
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00099	0.00096	0.00101	0.01359	0.00000	0.00000	0.00371	0.00371	0.00000	0.00087	0.00087	—	3.61381	3.61381	0.00005	0.00014	0.00562	3.66133
Vendor	0.00009	0.00002	0.00128	0.00062	0.00001	0.00001	0.00032	0.00033	0.00001	0.00009	0.00010	—	1.20327	1.20327	0.00006	0.00017	0.00134	1.25671
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00018	0.00018	0.00018	0.00248	0.00000	0.00000	0.00068	0.00068	0.00000	0.00016	0.00016	—	0.59831	0.59831	0.00001	0.00002	0.00093	0.60618
Vendor	0.00002	< 0.000005	0.00023	0.00011	< 0.000005	< 0.000005	0.00006	0.00006	< 0.000005	0.00002	0.00002	—	0.19921	0.19921	0.00001	0.00003	0.00022	0.20806
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14557	0.12031	0.85645	1.13283	0.00173	0.02315	—	0.02315	0.02130	—	0.02130	—	133.504	133.504	0.00542	0.00108	—	133.963
Architectural Coatings	19.1467	19.1467	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00279	0.00231	0.01643	0.02173	0.00003	0.00044	—	0.00044	0.00041	—	0.00041	—	2.56036	2.56036	0.00010	0.00002	—	2.56915
Architectural Coatings	0.36720	0.36720	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00051	0.00042	0.00300	0.00396	0.00001	0.00008	—	0.00008	0.00007	—	0.00007	—	0.42390	0.42390	0.00002	< 0.000005	—	0.42535
Architectural Coatings	0.06701	0.06701	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00350	0.00343	0.00356	0.04629	0.00000	0.00000	0.01331	0.01331	0.00000	0.00312	0.00312	—	12.6198	12.6198	0.00018	0.00048	0.00119	12.7694
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00007	0.00007	0.00007	0.00092	0.00000	0.00000	0.00025	0.00025	0.00000	0.00006	0.00006	—	0.24534	0.24534	< 0.000005	0.00001	0.00038	0.24856
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00001	0.00001	0.00001	0.00017	0.00000	0.00000	0.00005	0.00005	0.00000	0.00001	0.00001	—	0.04062	0.04062	< 0.000005	< 0.000005	0.00006	0.04115
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/3/2026	8/11/2026	5.00000	7.00000	—
Site Preparation	Site Preparation	8/12/2026	8/17/2026	5.00000	4.00000	—
Grading	Grading	8/18/2026	8/26/2026	5.00000	7.00000	—
Building Construction	Building Construction	8/27/2026	12/31/2026	5.00000	91.0000	—
Paving	Paving	12/23/2026	12/31/2026	5.00000	7.00000	—
Architectural Coating	Architectural Coating	12/23/2026	12/31/2026	5.00000	7.00000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000
Demolition	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000

Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Demolition	Vendor	8.00000	10.2000	HHDT,MHDT
Demolition	Hauling	6.00000	20.0000	HHDT
Demolition	Onsite truck	1.000000	0.83000	HHDT
Site Preparation	Worker	17.5000	18.5000	LDA,LDT1,LDT2
Site Preparation	Vendor	19.0000	10.2000	HHDT,MHDT

Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	1.000000	2.89000	HHDT
Grading	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	17.0000	10.2000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	1.000000	2.06000	HHDT
Building Construction	Worker	5.09166	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	1.98696	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	2.00000	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	1.01833	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	18,184.5	1,508.00	9,215.46

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	165.000	0.00000
Site Preparation	—	—	6.00000	0.00000	0.00000
Grading	—	—	7.00000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	3.52596

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	High School	0.00000	0%
Paving	High School	0.00000	0%
Paving	Other Non-Asphalt Surfaces	0.11901	0%
Paving	Other Non-Asphalt Surfaces	3.40696	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00000	531.983	0.03300	0.00400

7. Health and Equity Details

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Lot acreage for educational, high school land use category modified to account for acreage of landscaping improvements. Special Landscape Area modified to account for area of artificial turf improvements.
Construction: Construction Phases	Schedule modified to account for District-provided schedule duration of 8/1/2026 through 1/1/2027 and conservative assumption of overlap between building construction, architectural coating, and paving activities.
Construction: Architectural Coatings	Non-residential exterior area modified to remove the area of the Building 400 modernizations. No exterior coatings would be needed for this portion of the work.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.06921	4.17000
Landscape Area	sq. ft	—	63,556.0
Special Landscape Area	sq. ft	63,556.0	115,379

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	8/31/2026	8/11/2026
Demolition	Demolition	Work Days per Phase	20.0000	7.00000
Site Preparation	Site Preparation	Start Date	9/1/2026	8/12/2026
Site Preparation	Site Preparation	End Date	9/15/2026	8/17/2026
Site Preparation	Site Preparation	Work Days per Phase	10.00000	4.00000
Grading	Grading	Start Date	9/16/2026	8/18/2026
Grading	Grading	End Date	10/14/2026	8/26/2026
Grading	Grading	Work Days per Phase	20.0000	7.00000
Building Construction	Building Construction	Start Date	10/15/2026	8/27/2026
Building Construction	Building Construction	End Date	9/2/2027	12/31/2026
Building Construction	Building Construction	Work Days per Phase	230.000	91.0000
Paving	Paving	Start Date	9/3/2027	12/23/2026
Paving	Paving	End Date	10/1/2027	12/31/2026
Paving	Paving	Work Days per Phase	20.0000	7.00000
Architectural Coating	Architectural Coating	Start Date	10/2/2027	12/23/2026
Architectural Coating	Architectural Coating	End Date	10/30/2027	12/31/2026
Architectural Coating	Architectural Coating	Work Days per Phase	20.0000	7.00000

8.4.8. Architectural Coatings

Phase Name	Model Parameter	Units	Default Value	New Value
Architectural Coating	Non-Residential Exterior Area	sq ft	6,061.50	1,508.00

Sonora HS Field Improvements Project (Construction 3X Watering) Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sonora HS Field Improvements Project (Construction 3X Watering)
Construction Start Date	8/3/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.8000
Location	401 S Palm St, La Habra, CA 90631, USA
County	Orange
City	La Habra
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5751
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.37

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
High School	3.01500	1000sqft	4.17000	3,015.00	63,556.0	115,379	—	—
High School	9.10800	1000sqft	0.20909	9,108.00	0.00000	0.00000	—	—

Other Non-Asphalt Surfaces	5.18400	1000sqft	0.11901	0.00000	0.00000	—	—	—
Other Non-Asphalt Surfaces	148.407	1000sqft	3.40696	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.85090	3.21621	29.8469	30.0481	0.05326	1.24691	6.57469	7.82160	1.14751	2.83238	3.97989	—	6,133.01	6,133.01	0.24878	0.13718	2.35173	6,182.46
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.5599	21.1725	18.0349	25.0620	0.03997	0.72257	0.31004	1.03261	0.66484	0.07410	0.73894	—	4,428.05	4,428.05	0.17390	0.06044	0.03313	4,450.45
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.84918	0.76977	3.67235	4.59494	0.00815	0.14354	0.17077	0.31432	0.13209	0.06038	0.19247	—	885.751	885.751	0.03583	0.01439	0.09575	891.032
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.15498	0.14048	0.67020	0.83858	0.00149	0.02620	0.03117	0.05736	0.02411	0.01102	0.03513	—	146.646	146.646	0.00593	0.00238	0.01585	147.520

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.85090	3.21621	29.8469	30.0481	0.05326	1.24691	6.57469	7.82160	1.14751	2.83238	3.97989	—	6,133.01	6,133.01	0.24878	0.13718	2.35173	6,182.46
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	21.5599	21.1725	18.0349	25.0620	0.03997	0.72257	0.31004	1.03261	0.66484	0.07410	0.73894	—	4,428.05	4,428.05	0.17390	0.06044	0.03313	4,450.45
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.84918	0.76977	3.67235	4.59494	0.00815	0.14354	0.17077	0.31432	0.13209	0.06038	0.19247	—	885.751	885.751	0.03583	0.01439	0.09575	891.032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.15498	0.14048	0.67020	0.83858	0.00149	0.02620	0.03117	0.05736	0.02411	0.01102	0.03513	—	146.646	146.646	0.00593	0.00238	0.01585	147.520

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.72490	2.28674	20.6515	19.0056	0.03253	0.84309	—	0.84309	0.77564	—	0.77564	—	3,426.59	3,426.59	0.13900	0.02780	—	3,438.35
Demolition	—	—	—	—	—	—	0.31899	0.31899	—	0.04830	0.04830	—	—	—	—	—	—	—
Onsite truck	0.00165	0.00061	0.01637	0.01126	0.00004	0.00004	0.30804	0.30807	0.00004	0.03079	0.03083	—	4.37127	4.37127	0.00098	0.00070	0.00576	4.61115

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.05226	0.04386	0.39606	0.36449	0.00062	0.01617	—	0.01617	0.01488	—	0.01488	—	65.7155	65.7155	0.00267	0.00053	—	65.9410
Demoliti on	—	—	—	—	—	—	0.00612	0.00612	—	0.00093	0.00093	—	—	—	—	—	—	—
Onsite truck	0.00003	0.00001	0.00032	0.00022	< 0.000005	< 0.000005	0.00560	0.00560	< 0.000005	0.00056	0.00056	—	0.08403	0.08403	0.00002	0.00001	0.00005	0.08857
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.00954	0.00800	0.07228	0.06652	0.00011	0.00295	—	0.00295	0.00271	—	0.00271	—	10.8800	10.8800	0.00044	0.00009	—	10.9173
Demoliti on	—	—	—	—	—	—	0.00112	0.00112	—	0.00017	0.00017	—	—	—	—	—	—	—
Onsite truck	0.00001	< 0.000005	0.00006	0.00004	< 0.000005	< 0.000005	0.00102	0.00102	< 0.000005	0.00010	0.00010	—	0.01391	0.01391	< 0.000005	< 0.000005	0.00001	0.01466
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05192	0.05060	0.04564	0.79052	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	195.324	195.324	0.00231	0.00711	0.67888	198.179
Vendor	0.01965	0.00533	0.25545	0.12787	0.00180	0.00180	0.06845	0.07025	0.00180	0.01891	0.02071	—	250.915	250.915	0.01252	0.03542	0.64828	262.430
Hauling	0.04034	0.00622	0.49128	0.21720	0.00278	0.00529	0.10859	0.11389	0.00529	0.03046	0.03575	—	411.163	411.163	0.03122	0.06508	0.83229	432.170
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00099	0.00096	0.00101	0.01359	0.00000	0.00000	0.00371	0.00371	0.00000	0.00087	0.00087	—	3.61381	3.61381	0.00005	0.00014	0.00562	3.66133

Vendor	0.00037	0.00010	0.00513	0.00248	0.00003	0.00003	0.00130	0.00133	0.00003	0.00036	0.00039	—	4.81307	4.81307	0.00024	0.00068	0.00538	5.02685
Hauling	0.00077	0.00011	0.00986	0.00418	0.00005	0.00010	0.00206	0.00216	0.00010	0.00058	0.00068	—	7.88650	7.88650	0.00060	0.00125	0.00689	8.28029
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00018	0.00018	0.00018	0.00248	0.00000	0.00000	0.00068	0.00068	0.00000	0.00016	0.00016	—	0.59831	0.59831	0.00001	0.00002	0.00093	0.60618
Vendor	0.00007	0.00002	0.00094	0.00045	0.00001	0.00001	0.00024	0.00024	0.00001	0.00007	0.00007	—	0.79686	0.79686	0.00004	0.00011	0.00089	0.83225
Hauling	0.00014	0.00002	0.00180	0.00076	0.00001	0.00002	0.00038	0.00040	0.00002	0.00011	0.00012	—	1.30570	1.30570	0.00010	0.00021	0.00114	1.37090

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74146	3.14387	29.1635	28.8082	0.04890	1.24251	—	1.24251	1.14311	—	1.14311	—	5,297.94	5,297.94	0.21491	0.04298	—	5,316.12
Dust From Material Movement	—	—	—	—	—	—	5.11082	5.11082	—	2.62664	2.62664	—	—	—	—	—	—	—
Onsite truck	0.00220	0.00066	0.02341	0.01394	0.00009	0.00013	1.07256	1.07269	0.00013	0.10721	0.10734	—	11.2654	11.2654	0.00143	0.00179	0.02004	11.8558
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04100	0.03445	0.31960	0.31571	0.00054	0.01362	—	0.01362	0.01253	—	0.01253	—	58.0596	58.0596	0.00236	0.00047	—	58.2589

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Dust From Material Movement	—	—	—	—	—	—	0.05601	0.05601	—	0.02879	0.02879	—	—	—	—	—	—	—
Onsite truck	0.00002	0.00001	0.00027	0.00015	< 0.000005	< 0.000005	0.01115	0.01115	< 0.000005	0.00111	0.00112	—	0.12357	0.12357	0.00002	0.00002	0.00009	0.12991
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00748	0.00629	0.05833	0.05762	0.00010	0.00249	—	0.00249	0.00229	—	0.00229	—	9.61243	9.61243	0.00039	0.00008	—	9.64542
Dust From Material Movement	—	—	—	—	—	—	0.01022	0.01022	—	0.00525	0.00525	—	—	—	—	—	—	—
Onsite truck	< 0.000005	< 0.000005	0.00005	0.00003	< 0.000005	< 0.000005	0.00203	0.00203	< 0.000005	0.00020	0.00020	—	0.02046	0.02046	< 0.000005	< 0.000005	0.00002	0.02151
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06057	0.05903	0.05324	0.92228	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	227.878	227.878	0.00270	0.00829	0.79203	231.209
Vendor	0.04666	0.01265	0.60670	0.30369	0.00427	0.00427	0.16256	0.16683	0.00427	0.04491	0.04919	—	595.922	595.922	0.02974	0.08411	1.53966	623.270
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00066	0.00064	0.00067	0.00906	0.00000	0.00000	0.00248	0.00248	0.00000	0.00058	0.00058	—	2.40921	2.40921	0.00003	0.00009	0.00375	2.44089
Vendor	0.00051	0.00013	0.00697	0.00336	0.00005	0.00005	0.00176	0.00181	0.00005	0.00049	0.00053	—	6.53202	6.53202	0.00033	0.00092	0.00730	6.82215
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00012	0.00012	0.00012	0.00165	0.00000	0.00000	0.00045	0.00045	0.00000	0.00011	0.00011	—	0.39887	0.39887	0.00001	0.00002	0.00062	0.40412

Vendor	0.00009	0.00002	0.00127	0.00061	0.00001	0.00001	0.00032	0.00033	0.00001	0.00009	0.00010	—	1.08145	1.08145	0.00005	0.00015	0.00121	1.12948
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.95871	1.64586	14.9701	17.4372	0.02732	0.64622	—	0.64622	0.59452	—	0.59452	—	2,959.64	2,959.64	0.12006	0.02401	—	2,969.79
Dust From Material Movement	—	—	—	—	—	—	1.84147	1.84147	—	0.89043	0.89043	—	—	—	—	—	—	—
Onsite truck	0.00198	0.00064	0.02058	0.01286	0.00007	0.00009	0.76453	0.76462	0.00009	0.07642	0.07651	—	8.48769	8.48769	0.00125	0.00135	0.01429	8.93682
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.03756	0.03156	0.28710	0.33441	0.00052	0.01239	—	0.01239	0.01140	—	0.01140	—	56.7602	56.7602	0.00230	0.00046	—	56.9550
Dust From Material Movement	—	—	—	—	—	—	0.03532	0.03532	—	0.01708	0.01708	—	—	—	—	—	—	—
Onsite truck	0.00004	0.00001	0.00041	0.00025	< 0.000005	< 0.000005	0.01391	0.01391	< 0.000005	0.00139	0.00139	—	0.16297	0.16297	0.00002	0.00003	0.00012	0.17143

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Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00686	0.00576	0.05240	0.06103	0.00010	0.00226	—	0.00226	0.00208	—	0.00208	—	9.39729	9.39729	0.00038	0.00008	—	9.42954
Dust From Material Movement	—	—	—	—	—	—	0.00645	0.00645	—	0.00312	0.00312	—	—	—	—	—	—	—
Onsite truck	0.00001	< 0.000005	0.00007	0.00005	< 0.000005	< 0.000005	0.00254	0.00254	< 0.000005	0.00025	0.00025	—	0.02698	0.02698	< 0.000005	< 0.000005	0.00002	0.02838
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05192	0.05060	0.04564	0.79052	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	195.324	195.324	0.00231	0.00711	0.67888	198.179
Vendor	0.04175	0.01132	0.54284	0.27172	0.00382	0.00382	0.14545	0.14927	0.00382	0.04019	0.04401	—	533.194	533.194	0.02661	0.07526	1.37759	557.663
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00099	0.00096	0.00101	0.01359	0.00000	0.00000	0.00371	0.00371	0.00000	0.00087	0.00087	—	3.61381	3.61381	0.00005	0.00014	0.00562	3.66133
Vendor	0.00079	0.00021	0.01091	0.00527	0.00007	0.00007	0.00276	0.00283	0.00007	0.00076	0.00084	—	10.2278	10.2278	0.00051	0.00144	0.01143	10.6820
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00018	0.00018	0.00018	0.00248	0.00000	0.00000	0.00068	0.00068	0.00000	0.00016	0.00016	—	0.59831	0.59831	0.00001	0.00002	0.00093	0.60618
Vendor	0.00014	0.00004	0.00199	0.00096	0.00001	0.00001	0.00050	0.00052	0.00001	0.00014	0.00015	—	1.69332	1.69332	0.00008	0.00024	0.00189	1.76854
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31911	0.26702	2.45675	3.23271	0.00583	0.09440	—	0.09440	0.08685	—	0.08685	—	597.668	597.668	0.02424	0.00485	—	599.719
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05824	0.04873	0.44836	0.58997	0.00106	0.01723	—	0.01723	0.01585	—	0.01585	—	98.9508	98.9508	0.00401	0.00080	—	99.2904
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01762	0.01717	0.01549	0.26834	0.00000	0.00000	0.06655	0.06655	0.00000	0.01560	0.01560	—	66.3015	66.3015	0.00079	0.00241	0.23044	67.2708
Vendor	0.00488	0.00132	0.06345	0.03176	0.00045	0.00045	0.01700	0.01745	0.00045	0.00470	0.00514	—	62.3196	62.3196	0.00311	0.00880	0.16101	65.1796
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01751	0.01717	0.01779	0.23146	0.00000	0.00000	0.06655	0.06655	0.00000	0.01560	0.01560	—	63.0992	63.0992	0.00090	0.00241	0.00597	63.8468
Vendor	0.00479	0.00124	0.06602	0.03246	0.00045	0.00045	0.01700	0.01745	0.00045	0.00470	0.00514	—	62.3504	62.3504	0.00311	0.00880	0.00418	65.0535
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00437	0.00425	0.00444	0.05999	0.00000	0.00000	0.01639	0.01639	0.00000	0.00384	0.00384	—	15.9469	15.9469	0.00022	0.00060	0.02480	16.1566
Vendor	0.00121	0.00032	0.01657	0.00801	0.00011	0.00011	0.00420	0.00431	0.00011	0.00116	0.00127	—	15.5405	15.5405	0.00078	0.00219	0.01736	16.2307
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00080	0.00078	0.00081	0.01095	0.00000	0.00000	0.00299	0.00299	0.00000	0.00070	0.00070	—	2.64019	2.64019	0.00004	0.00010	0.00411	2.67491
Vendor	0.00022	0.00006	0.00302	0.00146	0.00002	0.00002	0.00077	0.00079	0.00002	0.00021	0.00023	—	2.57290	2.57290	0.00013	0.00036	0.00287	2.68718
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90546	0.76084	7.11822	9.93804	0.01395	0.31987	—	0.31987	0.29428	—	0.29428	—	1,510.59	1,510.59	0.06128	0.01226	—	1,515.78
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01736	0.01459	0.13651	0.19059	0.00027	0.00613	—	0.00613	0.00564	—	0.00564	—	28.9702	28.9702	0.00118	0.00024	—	29.0697
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00317	0.00266	0.02491	0.03478	0.00005	0.00112	—	0.00112	0.00103	—	0.00103	—	4.79635	4.79635	0.00019	0.00004	—	4.81281
Paving	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05159	0.05060	0.05241	0.68189	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	185.890	185.890	0.00265	0.00711	0.01758	188.092

Vendor	0.00482	0.00124	0.06646	0.03267	0.00045	0.00045	0.01711	0.01756	0.00045	0.00473	0.00518	—	62.7596	62.7596	0.00313	0.00885	0.00421	65.4805
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00099	0.00096	0.00101	0.01359	0.00000	0.00000	0.00371	0.00371	0.00000	0.00087	0.00087	—	3.61381	3.61381	0.00005	0.00014	0.00562	3.66133
Vendor	0.00009	0.00002	0.00128	0.00062	0.00001	0.00001	0.00032	0.00033	0.00001	0.00009	0.00010	—	1.20327	1.20327	0.00006	0.00017	0.00134	1.25671
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00018	0.00018	0.00018	0.00248	0.00000	0.00000	0.00068	0.00068	0.00000	0.00016	0.00016	—	0.59831	0.59831	0.00001	0.00002	0.00093	0.60618
Vendor	0.00002	< 0.000005	0.00023	0.00011	< 0.000005	< 0.000005	0.00006	0.00006	< 0.000005	0.00002	0.00002	—	0.19921	0.19921	0.00001	0.00003	0.00022	0.20806
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14557	0.12031	0.85645	1.13283	0.00173	0.02315	—	0.02315	0.02130	—	0.02130	—	133.504	133.504	0.00542	0.00108	—	133.963
Architectural Coatings	19.1467	19.1467	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00279	0.00231	0.01643	0.02173	0.00003	0.00044	—	0.00044	0.00041	—	0.00041	—	2.56036	2.56036	0.00010	0.00002	—	2.56915
Architectural Coatings	0.36720	0.36720	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00051	0.00042	0.00300	0.00396	0.00001	0.00008	—	0.00008	0.00007	—	0.00007	—	0.42390	0.42390	0.00002	< 0.000005	—	0.42535
Architectural Coatings	0.06701	0.06701	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00350	0.00343	0.00356	0.04629	0.00000	0.00000	0.01331	0.01331	0.00000	0.00312	0.00312	—	12.6198	12.6198	0.00018	0.00048	0.00119	12.7694
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00007	0.00007	0.00007	0.00092	0.00000	0.00000	0.00025	0.00025	0.00000	0.00006	0.00006	—	0.24534	0.24534	< 0.000005	0.00001	0.00038	0.24856
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00001	0.00001	0.00001	0.00017	0.00000	0.00000	0.00005	0.00005	0.00000	0.00001	0.00001	—	0.04062	0.04062	< 0.000005	< 0.000005	0.00006	0.04115
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/3/2026	8/11/2026	5.00000	7.00000	—
Site Preparation	Site Preparation	8/12/2026	8/17/2026	5.00000	4.00000	—
Grading	Grading	8/18/2026	8/26/2026	5.00000	7.00000	—
Building Construction	Building Construction	8/27/2026	12/31/2026	5.00000	91.0000	—
Paving	Paving	12/23/2026	12/31/2026	5.00000	7.00000	—
Architectural Coating	Architectural Coating	12/23/2026	12/31/2026	5.00000	7.00000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000
Demolition	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000

Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Demolition	Vendor	8.00000	10.2000	HHDT,MHDT
Demolition	Hauling	6.00000	20.0000	HHDT
Demolition	Onsite truck	1.000000	0.83000	HHDT
Site Preparation	Worker	17.5000	18.5000	LDA,LDT1,LDT2
Site Preparation	Vendor	19.0000	10.2000	HHDT,MHDT

Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	1.000000	2.89000	HHDT
Grading	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	17.0000	10.2000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	1.000000	2.06000	HHDT
Building Construction	Worker	5.09166	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	1.98696	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	2.00000	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	1.01833	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00000	0.00000	18,184.5	1,508.00	9,215.46

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	165.000	0.00000
Site Preparation	—	—	6.00000	0.00000	0.00000
Grading	—	—	7.00000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	3.52596

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	High School	0.00000	0%
Paving	High School	0.00000	0%
Paving	Other Non-Asphalt Surfaces	0.11901	0%
Paving	Other Non-Asphalt Surfaces	3.40696	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00000	531.983	0.03300	0.00400

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Lot acreage for educational, high school land use category modified to account for acreage of landscaping improvements. Special Landscape Area modified to account for area of artificial turf improvements.
Construction: Construction Phases	Schedule modified to account for District-provided schedule duration of 8/1/2026 through 1/1/2027 and conservative assumption of overlap between building construction, architectural coating, and paving activities.
Construction: Architectural Coatings	Non-residential exterior area modified to remove the area of the Building 400 modernizations. No exterior coatings would be needed for this portion of the work.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.06921	4.17000
Landscape Area	sq. ft	—	63,556.0
Special Landscape Area	sq. ft	63,556.0	115,379

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	8/31/2026	8/11/2026
Demolition	Demolition	Work Days per Phase	20.0000	7.00000
Site Preparation	Site Preparation	Start Date	9/1/2026	8/12/2026

Site Preparation	Site Preparation	End Date	9/15/2026	8/17/2026
Site Preparation	Site Preparation	Work Days per Phase	10.00000	4.00000
Grading	Grading	Start Date	9/16/2026	8/18/2026
Grading	Grading	End Date	10/14/2026	8/26/2026
Grading	Grading	Work Days per Phase	20.0000	7.00000
Building Construction	Building Construction	Start Date	10/15/2026	8/27/2026
Building Construction	Building Construction	End Date	9/2/2027	12/31/2026
Building Construction	Building Construction	Work Days per Phase	230.000	91.0000
Paving	Paving	Start Date	9/3/2027	12/23/2026
Paving	Paving	End Date	10/1/2027	12/31/2026
Paving	Paving	Work Days per Phase	20.0000	7.00000
Architectural Coating	Architectural Coating	Start Date	10/2/2027	12/23/2026
Architectural Coating	Architectural Coating	End Date	10/30/2027	12/31/2026
Architectural Coating	Architectural Coating	Work Days per Phase	20.0000	7.00000

8.4.8. Architectural Coatings

Phase Name	Model Parameter	Units	Default Value	New Value
Architectural Coating	Non-Residential Exterior Area	sq ft	6,061.50	1,508.00

Sonora HS Field Improvements Project (Operation) Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Sonora HS Field Improvements Project (Operation)
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80000
Precipitation (days)	18.8000
Location	401 S Palm St, La Habra, CA 90631, USA
County	Orange
City	La Habra
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5751
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.37

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
High School	3.01500	1000sqft	4.17000	3,015.00	63,556.0	115,379	—	—
Other Non-Asphalt Surfaces	5.18400	1000sqft	0.11901	0.00000	0.00000	—	—	—

Other Non-Asphalt Surfaces	148.407	1000sqft	3.40696	0.00000	0.00000	—	—	—
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1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11930	0.11750	0.00110	0.13113	0.00001	0.00023	0.00000	0.00023	0.00018	0.00000	0.00018	2.30421	49.5503	51.8545	0.23386	0.00084	0.01165	57.9631
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09597	0.09597	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.30421	49.0111	51.3153	0.23383	0.00084	0.01165	57.4219
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11195	0.11071	0.00076	0.08981	0.00001	0.00016	0.00000	0.00016	0.00012	0.00000	0.00012	2.30421	49.3804	51.6846	0.23385	0.00084	0.01165	57.7925
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.02043	0.02021	0.00014	0.01639	< 0.000005	0.00003	0.00000	0.00003	0.00002	0.00000	0.00002	0.38149	8.17549	8.55698	0.03872	0.00014	0.00193	9.56822

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.11930	0.11750	0.00110	0.13113	0.00001	0.00023	—	0.00023	0.00018	—	0.00018	—	0.53922	0.53922	0.00002	< 0.000005	—	0.54117
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	27.5107	27.5107	0.00171	0.00021	—	27.6150
Water	—	—	—	—	—	—	—	—	—	—	—	0.19184	21.5004	21.6922	0.02100	0.00063	—	22.4048
Waste	—	—	—	—	—	—	—	—	—	—	—	2.11237	0.00000	2.11237	0.21112	0.00000	—	7.39047
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01165	0.01165
Total	0.11930	0.11750	0.00110	0.13113	0.00001	0.00023	0.00000	0.00023	0.00018	0.00000	0.00018	2.30421	49.5503	51.8545	0.23386	0.00084	0.01165	57.9631
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.09597	0.09597	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	27.5107	27.5107	0.00171	0.00021	—	27.6150
Water	—	—	—	—	—	—	—	—	—	—	—	0.19184	21.5004	21.6922	0.02100	0.00063	—	22.4048
Waste	—	—	—	—	—	—	—	—	—	—	—	2.11237	0.00000	2.11237	0.21112	0.00000	—	7.39047
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01165	0.01165
Total	0.09597	0.09597	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	2.30421	49.0111	51.3153	0.23383	0.00084	0.01165	57.4219
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.11195	0.11071	0.00076	0.08981	0.00001	0.00016	—	0.00016	0.00012	—	0.00012	—	0.36933	0.36933	0.00002	< 0.000005	—	0.37066
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	27.5107	27.5107	0.00171	0.00021	—	27.6150
Water	—	—	—	—	—	—	—	—	—	—	—	0.19184	21.5004	21.6922	0.02100	0.00063	—	22.4048
Waste	—	—	—	—	—	—	—	—	—	—	—	2.11237	0.00000	2.11237	0.21112	0.00000	—	7.39047
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01165	0.01165
Total	0.11195	0.11071	0.00076	0.08981	0.00001	0.00016	0.00000	0.00016	0.00012	0.00000	0.00012	2.30421	49.3804	51.6846	0.23385	0.00084	0.01165	57.7925

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.02043	0.02021	0.00014	0.01639	< 0.000005	0.00003	—	0.00003	0.00002	—	0.00002	—	0.06115	0.06115	< 0.000005	< 0.000005	—	0.06137
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	4.55470	4.55470	0.00028	0.00003	—	4.57197
Water	—	—	—	—	—	—	—	—	—	—	—	0.03176	3.55964	3.59140	0.00348	0.00010	—	3.70937
Waste	—	—	—	—	—	—	—	—	—	—	—	0.34973	0.00000	0.34973	0.03495	0.00000	—	1.22358
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00193	0.00193
Total	0.02043	0.02021	0.00014	0.01639	< 0.000005	0.00003	0.00000	0.00003	0.00002	0.00000	0.00002	0.38149	8.17549	8.55698	0.03872	0.00014	0.00193	9.56822

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	27.5107	27.5107	0.00171	0.00021	—	27.6150
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	27.5107	27.5107	0.00171	0.00021	—	27.6150
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	27.5107	27.5107	0.00171	0.00021	—	27.6150

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	27.5107	27.5107	0.00171	0.00021	—	27.6150
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	4.55470	4.55470	0.00028	0.00003	—	4.57197
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	4.55470	4.55470	0.00028	0.00003	—	4.57197

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.07660	0.07660	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01937	0.01937	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02333	0.02153	0.00110	0.13113	0.00001	0.00023	—	0.00023	0.00018	—	0.00018	—	0.53922	0.53922	0.00002	< 0.000005	—	0.54117
Total	0.11930	0.11750	0.00110	0.13113	0.00001	0.00023	—	0.00023	0.00018	—	0.00018	—	0.53922	0.53922	0.00002	< 0.000005	—	0.54117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	0.07660	0.07660	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01937	0.01937	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.09597	0.09597	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.01398	0.01398	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00353	0.00353	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00292	0.00269	0.00014	0.01639	< 0.000005	0.00003	—	0.00003	0.00002	—	0.00002	—	0.06115	0.06115	< 0.000005	< 0.000005	—	0.06137
Total	0.02043	0.02021	0.00014	0.01639	< 0.000005	0.00003	—	0.00003	0.00002	—	0.00002	—	0.06115	0.06115	< 0.000005	< 0.000005	—	0.06137

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.19184	21.5004	21.6922	0.02100	0.00063	—	22.4048

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.19184	21.5004	21.6922	0.02100	0.00063	—	22.4048
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.19184	21.5004	21.6922	0.02100	0.00063	—	22.4048
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.19184	21.5004	21.6922	0.02100	0.00063	—	22.4048
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.03176	3.55964	3.59140	0.00348	0.00010	—	3.70937
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.03176	3.55964	3.59140	0.00348	0.00010	—	3.70937

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	2.11237	0.00000	2.11237	0.21112	0.00000	—	7.39047

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	2.11237	0.00000	2.11237	0.21112	0.00000	—	7.39047
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	2.11237	0.00000	2.11237	0.21112	0.00000	—	7.39047
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	2.11237	0.00000	2.11237	0.21112	0.00000	—	7.39047
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	0.34973	0.00000	0.34973	0.03495	0.00000	—	1.22358
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.34973	0.00000	0.34973	0.03495	0.00000	—	1.22358

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01165	0.01165
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01165	0.01165

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01165	0.01165
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01165	0.01165
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
High School	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00193	0.00193
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00193	0.00193

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
High School	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
High School	Wood Fireplaces	0	0
High School	Gas Fireplaces	0	0
High School	Propane Fireplaces	0	0
High School	Electric Fireplaces	0	0
High School	No Fireplaces	0	0
High School	Conventional Wood Stoves	0	0
High School	Catalytic Wood Stoves	0	0
High School	Non-Catalytic Wood Stoves	0	0
High School	Pellet Wood Stoves	0	0
Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0
Other Non-Asphalt Surfaces	Electric Fireplaces	0	0

Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0
Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0
Other Non-Asphalt Surfaces	Electric Fireplaces	0	0
Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	4,522.50	1,507.50	9,215.46

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
High School	18,875.4	531.983	0.0330	0.0040	0.00000
Other Non-Asphalt Surfaces	0.00000	531.983	0.0330	0.0040	0.00000
Other Non-Asphalt Surfaces	0.00000	531.983	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
High School	100,112	2,651,365
Other Non-Asphalt Surfaces	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
High School	3.91950	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
High School	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000

High School	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
High School	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
High School	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Lot acreage for educational, high school land use category modified to account for acreage of landscaping improvements. Special Landscape Area modified to account for area of artificial turf improvements.
Construction: Construction Phases	Schedule modified to account for District-provided schedule duration of 8/1/2026 through 1/1/2027 and conservative assumption of overlap between building construction, architectural coating, and paving activities.
Construction: Architectural Coatings	Non-residential exterior area modified to remove the area of the Building 400 modernizations. No exterior coatings would be needed for this portion of the work.
Operations: Vehicle Data	No increase in trips would occur as a result of the proposed project. Therefore, default trips are zero-ed out.

Operations: Energy Use	Default natural gas converted to electricity to account for all-electric building design of field building.
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8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.06921	4.17000
Landscape Area	sq. ft	—	63,556.0
Special Landscape Area	sq. ft	63,556.0	115,379

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
High School	Weekday Trip Rate	size/day	14.0700	0.00000
High School	Saturday Trip Rate	size/day	3.98000	0.00000
High School	Sunday Trip Rate	size/day	1.71000	0.00000

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
High School	Electricity	kWh/yr	18,856.9	18,875.4
High School	Electricity (Subject to Title 24)	kWh/yr	16,301.6	16,311.0
High School	Electricity (Not Subject to Title 24)	kWh/yr	2,555.29	2,564.40
High School	Natural Gas	kBTU/yr	63,254.4	0.00000
High School	Natural Gas (Subject to Title 24)	kBTU/yr	32,174.6	0.00000
High School	Natural Gas (Not Subject to Title 24)	kBTU/yr	31,079.7	0.00000

Sonora HS Improvements Regional Construction Emissions Worksheet:

3.1. Demolition (2026) - Unmitigated

		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite	Summer						
	Off-Road Equipment	2.29	20.65	19.01	0.03	0.84	0.78
	Dust From Material Movement	0.00	0.00	0.00	0.00	0.32	0.05
	Onsite truck	0.00	0.02	0.01	0.00	0.31	0.03
	Total	2.29	20.67	19.02	0.03	1.47	0.85
Offsite							
	Worker	0.05	0.05	0.79	0.00	0.20	0.05
	Vendor	0.01	0.26	0.13	0.00	0.07	0.02
	Hauling	0.01	0.49	0.22	0.00	0.11	0.04
	Total	0.06	0.79	1.14	0.00	0.38	0.10
TOTAL		2.35	21.46	20.15	0.04	1.85	0.96

3.3. Site Preparation (2026) - Unmitigated

		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite	Summer						
	Off-Road Equipment	3.14	29.16	28.81	0.05	1.24	1.14
	Dust From Material Movement	0.00	0.00	0.00	0.00	7.67	3.94
	Onsite truck	0.00	0.02	0.01	0.00	1.07	0.11
	Total	3.14	29.19	28.82	0.05	9.98	5.19
Offsite							
	Worker	0.06	0.05	0.92	0.00	0.23	0.05
	Vendor	0.01	0.61	0.30	0.00	0.17	0.05
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.07	0.66	1.23	0.00	0.40	0.10
TOTAL		3.22	29.85	30.05	0.05	10.38	5.29

3.5. Grading (2026) - Unmitigated

		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite	Summer						
	Off-Road Equipment	1.65	14.97	17.44	0.03	0.65	0.59
	Dust From Material Movement	0.00	0.00	0.00	0.00	2.76	1.34
	Onsite truck	0.00	0.02	0.01	0.00	0.76	0.08
	Total	1.65	14.99	17.45	0.03	4.17	2.01
Offsite							
	Worker	0.05	0.05	0.79	0.00	0.20	0.05
	Vendor	0.01	0.54	0.27	0.00	0.15	0.04
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.06	0.59	1.06	0.00	0.35	0.09
TOTAL		1.71	15.58	18.51	0.03	4.52	2.10

3.7. Building Construction (2026) - Unmitigated

		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite	Summer						
	Off-Road Equipment	1.07	9.85	12.97	0.02	0.38	0.35
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.07	9.85	12.97	0.02	0.38	0.35
Offsite							
	Worker	0.02	0.02	0.27	0.00	0.07	0.02
	Vendor	0.00	0.06	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.02	0.08	0.30	0.00	0.08	0.02
TOTAL		1.09	9.93	13.27	0.02	0.46	0.37

3.9. Paving (2026) - Unmitigated

		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite	Winter						
	Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	0.29
	Paving Equipment	0.00	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.76	7.12	9.94	0.01	0.32	0.29
Offsite							
	Worker	0.05	0.05	0.68	0.00	0.20	0.05
	Vendor	0.00	0.07	0.03	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.05	0.12	0.71	0.00	0.21	0.05
TOTAL		0.81	7.24	10.65	0.01	0.53	0.35

3.11. Architectural Coating (2026) - Unmitigated

		ROG	NOx	CO	SO ₂	PM10 Total	PM2.5Total
Onsite		Winter					
	Off-Road Equipment	0.12	0.86	1.13	0.00	0.02	0.02
	Architectural Coatings	19.15	0.00	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	19.27	0.86	1.13	0.00	0.02	0.02
Offsite							
	Worker	0.00	0.00	0.05	0.00	0.01	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.05	0.00	0.01	0.00
TOTAL		19.27	0.86	1.18	0.00	0.04	0.02
Field Improvements							
<i>Demolition (2026)</i>		2	21	20	0	2	1
<i>Site Preparation (2026)</i>		3	30	30	0	10	5
<i>Grading (2026)</i>		2	16	19	0	5	2
<i>Building Construction (2026)</i>		1	10	13	0	0	0
<i>Paving (2026)</i>		1	7	11	0	1	0
<i>Architectural Coating (2026)</i>		19	1	1	0	0	0
<i>Building Construction, Paving, and Architectural Coating Overlap</i>		21	18	25	0	1	1
MAX DAILY		21	30	30	0	10	5
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Sonora HS Improvements Construction LST Worksheet:

3.1. Demolition (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5Total
Onsite					
	Off-Road Equipment	20.65	19.01	0.84	0.78
	Demolition	0.00	0.00	0.32	0.05
	Onsite truck	0.02	0.01	0.31	0.03
	Total	20.65	19.01	1.16	0.82

3.3. Site Preparation (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5Total
Onsite					
	Off-Road Equipment	29.16	28.81	1.24	1.14
	Dust From Material Movement	0.00	0.00	7.67	3.94
	Onsite truck	0.02	0.01	1.07	0.11
	Total	29.19	28.82	9.98	5.19

3.5. Grading (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5Total
Onsite					
	Off-Road Equipment	14.97	17.44	0.65	0.59
	Dust From Material Movement	0.00	0.00	2.76	1.34
	Onsite truck	0.02	0.01	0.76	0.08
	Total	14.99	17.45	4.17	2.01

3.7. Building Construction (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5Total
Onsite					
	Off-Road Equipment	9.85	12.97	0.38	0.35
	Onsite truck	0.00	0.00	0.00	0.00
	Total	9.85	12.97	0.38	0.35

3.9. Paving (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5Total
Onsite					
	Off-Road Equipment	7.12	9.94	0.32	0.29
	Paving	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	7.12	9.94	0.32	0.29

3.11. Architectural Coating (2026) - Unmitigated

		NOx	CO	PM10 Total	PM2.5Total
Onsite					
	Off-Road Equipment	0.86	1.13	0.02	0.02
	Architectural Coatings	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	0.86	1.13	0.02	0.02

	NOx	CO	PM10 Total	PM2.5 Total
Demolition (2026)	21	19	1	1
1.0 Acre LST	103	522	4	3
Exceeds LST?	no	no	no	no
Site Preparation (2026)	29	29	10	5
3.5 Acre LST	184	1,037	9	5
Exceeds LST?	no	no	yes	yes
Grading (2026)	15	17	4	2
2.5 Acre LST	159	854	7	4
Exceeds LST?	no	no	no	no
Building Construction, Paving, and Architectural Coating Overlap	18	24	1	1
1.31 Acre LST	117	597	5	3
Exceeds LST?	no	no	no	no

Sonora HS Improvements Construction LST Worksheet (with Mitigation):

3.3. Site Preparation (2026) - Unmitigated

	NOx	CO	PM10 Total	PM2.5Total
Onsite				
Off-Road Equipment	29.16	28.81	1.24	1.14
Dust From Material Movement	0.00	0.00	5.11	2.63
Onsite truck	0.02	0.01	1.07	0.11
Total	29.19	28.82	7.43	3.88
Site Preparation (2026)	29	29	7	4
3.5 Acre LST	184	1,037	9	5
Exceeds LST?	no	no	no	no

Regional Operation Emissions Worksheet

¹ CalEEMod, Version 2022.1.

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.12	0.00	0.13	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.12	0.00	0.13	0.00	0.00	0.00

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Area	0.10	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.10	0.00	0.00	0.00	0.00	0.00

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0	0	0	0	0	0
Area	0	0	0	0	0	0
Energy	0	0	0	0	0	0
Total	0.12	0.00	0.13	0.00	0.00	0.00

Regional Thresholds (lb/day)

	55	55	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Sonora HS Improvements Project: GHG Emissions Inventory

Construction¹

	MTCO ₂ e
2026	148
Total Construction	148
30-Year Amortization ²	5

¹ CalEEMod, Version 2022.1.

² Total construction emissions are amortized over 30 years per SCAQMD methodology; SCAQMD, 2009, November 19: Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting 14. [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-14/ghg-meeting-14-main-presentation.pdf?sfvrsn=2).

Operation¹

Field Improvements	MTCO ₂ e/Year ²	
	Operations	%
Mobile	0	0%
Area	0	0%
Energy	5	17%
Water	4	13%
Solid Waste	1	4%
Refrigerants	0	0%
School Field Lightings ³	13	48%
30-Year Construction Amortization	5	18%
	28	100%
South Coast AQMD Bright-Line Screening		
Threshold	3,000	
Exceed Threshold?	No	

¹ CalEEMod, Version 2022.1.;

² MTCO₂e=metric tons of carbon dioxide equivalent.

³ Includes GHG calculations from proposed field lighting.

Construction Localized Significance Thresholds: 1.00 acre (Demolition)

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
16	1.00	25	82	25	82	1.00
Source Receptor Distance (meters)	North Orange County	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25					
NOx	103	Tractors	0.5	0.0625		0
CO	522	Graders	0.5	0.0625		0
PM10	4.00	Dozers	0.5	0.0625	8	2
PM2.5	3.00	Scrapers	1	0.125		0
					Acres	1.00
	Acres	25	50	100	200	500
NOx	1	103	104	121	159	252
	1	103	104	121	159	252
		103	104	121	159	252
CO	1	522	685	1014	1975	6531
	1	522	685	1014	1975	6531
		522	685	1014	1975	6531
PM10	1	4	10	24	53	137
	1	4	10	24	53	137
		4	10	24	53	137
PM2.5	1	3	4	9	20	74
	1	3	4	9	20	74
		3	4	9	20	74
North Orange County						
1.00 Acres						
	25	50	100	200	500	
NOx	103	104	121	159	252	
CO	522	685	1014	1975	6531	
PM10	4	10	24	53	137	
PM2.5	3	4	9	20	74	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
16	1	16	1
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: 3.5 Acre (Site Preparation)

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)	
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)		
16	3.50	25	82	25	82	3.50	
Source Receptor Distance (meters)	North Orange County	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
	25						
NOx	184	Tractors	0.5	0.0625	8	4	2
CO	1,036	Graders	0.5	0.0625			0
PM10	8.50	Dozers	0.5	0.0625	8	3	1.5
PM2.5	5.00	Scrapers	1	0.125			0
					Acres		3.50
	Acres	25	50	100	200	500	
NOx	3	172	166	179	207	285	
	4	196	189	203	228	301	
		184	178	191	218	293	
CO	3	945	1250	1688	2831	7665	
	4	1128	1491	1981	3218	8210	
		1037	1371	1835	3025	7938	
PM10	3	8	23	37	66	152	
	4	9	28	43	72	158	
		9	26	40	69	155	
PM2.5	3	5	7	12	27	84	
	4	5	8	14	31	90	
		5	8	13	29	87	
North Orange County							
	3.50 Acres						
	25	50	100	200	500		
NOx	184	178	191	218	293		
CO	1037	1371	1835	3025	7938		
PM10	9	26	40	69	155		
PM2.5	5	8	13	29	87		

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
16	3	16	4
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: 2.5 Acre (Grading)

SRA No.	Acres	NOx & CO		PM10 & PM2.5		Construction / Project Site Size (Acres)
		Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	
16	2.50	25	82	25	82	2.50

Source Receptor	North Orange County	Equipment	Acres/8-hr Day		Daily hours	Equipment Used	Acres
Distance (meters)	25						
NOx	159	Tractors	0.5	0.0625	8	3	1.5
CO	853	Graders	0.5	0.0625	8	1	0.5
PM10	6.83	Dozers	0.5	0.0625	8	1	0.5
PM2.5	4.33	Scrapers	1	0.125			0
						Acres	2.50

	Acres	25	50	100	200	500
NOx	2	147	143	156	186	269
	3	172	166	179	207	285
		159	155	168	197	277
CO	2	762	1010	1395	2444	7121
	3	945	1250	1688	2831	7665
		854	1130	1542	2638	7393
PM10	2	6	17	31	60	145
	3	8	23	37	66	152
		7	20	34	63	148
PM2.5	2	4	6	11	24	79
	3	5	7	12	27	84
		4	7	12	26	82
North Orange County						
	2.50 Acres					
	25	50	100	200	500	
NOx	159	155	168	197	277	
CO	854	1130	1542	2638	7393	
PM10	7	20	34	63	148	
PM2.5	4	7	12	26	82	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
16	2	16	3
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Localized Significance Thresholds: 1.31 Acre (Building Construction, Architectural Coating, Paving)

		NOx & CO		PM10 & PM2.5			
SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Construction / Project Site Size (Acres)	
16	1.31	25	82	25	82	1.31	
Source Receptor Distance (meters)	North Orange County	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
	25						
NOx	117	Tractors	0.5	0.0625	7	3	1.3125
CO	597	Graders	0.5	0.0625			0
PM10	4.62	Dozers	0.5	0.0625			0
PM2.5	3.31	Scrapers	1	0.125			0
					Acres		1.31
	Acres	25	50	100	200	500	
NOx	1	103	104	121	159	252	
	2	147	143	156	186	269	
CO		117	116	132	167	257	
	1	522	685	1014	1975	6531	
PM10	2	762	1010	1395	2444	7121	
		597	787	1133	2122	6715	
PM2.5	1	4	10	24	53	137	
	2	6	17	31	60	145	
PM2.5		5	12	26	55	140	
	1	3	4	9	20	74	
PM2.5	2	4	6	11	24	79	
		3	5	10	21	76	
North Orange County							
	1.31 Acres						
	25	50	100	200	500		
NOx	117	116	132	167	257		
CO	597	787	1133	2122	6715		
PM10	5	12	26	55	140		
PM2.5	3	5	10	21	76		

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
16	1	16	2
Distance Increment Below			
25			
Distance Increment Above			
25			

Updated: 10/21/2009 - Table C-1. 2006 – 2008

Construction Risk Assessment Emissions Worksheet

Total Construction Workdays:
2026 8/3/2026 #####
total 109 109 workdays

Onsite Emissions

Tons/Year

Year	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
2026	0.13889	0.65945	0.81400	0.00143	0.02613	0.03171	0.05784	0.02404	0.01328	0.03732

Pounds/Day

Year	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
2026	2.54836	12.10005	14.93574	0.02619	0.47941	0.58187	1.06128	0.44105	0.24373	0.68478

Offsite Emissions

Tons/Year

Year	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
2026	0.00160	0.01075	0.02458	0.00006	0.00007	0.00779	0.00786	0.00007	0.00192	0.00199

Pounds/Day

Year	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
2026	0.02932	0.19728	0.45098	0.00110	0.00126	0.14289	0.14415	0.00126	0.03525	0.03651

Maximum Emissions per phase (tons/year)

3.1 Demolition (2026) - Unmitigated

	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
Onsite										
Off-Road Equipment	0.0080036	0.07228	0.06652	0.00011384	0.002950805		0.002950805	0.002714741		0.002714741
Demolition						0.001116467	0.001116467		0.000169065	0.000169065
Onsite truck	1.9931E-06	5.87E-05	3.99E-05	1.41E-07	1.28E-07	0.001022636	0.001022636	1.28E-07	0.000102232	0.000102236
Total	0.00801	0.07234	0.06656	0.00011	0.00295	0.00214	0.00509	0.00271	0.00027	0.00299
Offsite										
Worker	0.00017593	0.000183	0.002481	0	0	0.000677939	0.000677939	0	0.000158779	0.000158779
Vendor	1.8025E-05	0.000937	0.000452	6.2964E-06	6.2964E-06	0.000237129	0.000237129	6.2964E-06	6.55787E-05	7.18751E-05
Hauling	2.0834E-05	0.001799	0.000763	9.7224E-06	1.85188E-05	0.000376498	0.000376498	1.85188E-05	0.000105699	0.000105699
Total	0.00021	0.00292	0.00370	0.00002	0.00002	0.00129	0.00132	0.00002	0.00033	0.00035
TOTAL	0.00822	0.07526	0.07026	0.00013	0.00298	0.00343	0.00641	0.00274	0.00060	0.00334

3.3 Site Preparation (2026) - Unmitigated

	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
Onsite										
Off-Road Equipment	0.00628774	0.058327	0.057616	9.7808E-05	0.002485026		0.002485026	0.002286224		0.002286224
Dust From Material Movement						0.015332467	0.015332467		0.007879908	0.007879908
Onsite truck	1.2297E-06	4.84E-05	2.82E-05	1.72E-07	2.55E-07	0.002034711	0.002034966	2.55E-07	0.000203408	0.000203663
Total	0.00629	0.05838	0.05764	0.00010	0.00249	0.01737	0.01985	0.00229	0.00808	0.01037
Offsite										
Worker	0.00011729	0.000122	0.001654	0	0	0.00045196	0.00045196	0	0.000105852	0.000105852
Vendor	2.4462E-05	0.001271	0.000614	8.5451E-06	8.5451E-06	0.000321818	0.000321818	8.5451E-06	8.9997E-05	9.75448E-05
Hauling	0	0	0	0	0	0	0	0	0	0
Total	0.00014	0.00139	0.00227	0.00001	0.00001	0.00077	0.00078	0.00001	0.00019	0.00020
TOTAL	0.00643	0.05977	0.05991	0.00011	0.00249	0.01814	0.02063	0.00230	0.00828	0.01057

3.5 Grading (2026) - Unmitigated

	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
Onsite										
Off-Road Equipment	0.00576051	0.052395	0.06103	9.5629E-05	0.002261757		0.002261757	0.002080817		0.002080817
Dust From Material Movement						0.009667731	0.009667731		0.004674765	0.004674765
Onsite truck	2.088E-06	7.42E-05	4.55E-05	2.36E-07	3.18E-07	0.002538108	0.002538426	3.18E-07	0.000253732	0.00025405
Total	0.00576	0.05247	0.06108	0.00010	0.00226	0.01221	0.01447	0.00208	0.00493	0.00701
Offsite										
Worker	0.00017593	0.000183	0.002481	0	0	0.000677939	0.000677939	0	0.000158779	0.000158779
Vendor	3.8303E-05	0.001991	0.000962	1.338E-05	1.33799E-05	0.0005039	0.00051728	1.33799E-05	0.000139355	0.000152735
Hauling	0	0	0	0	0	0	0	0	0	0
Total	0.00021	0.00217	0.00344	0.00001	0.00001	0.00118	0.00120	0.00001	0.00030	0.00031
TOTAL	0.00598	0.05464	0.06452	0.00011	0.00228	0.01339	0.01566	0.00209	0.00523	0.00732

3.7 Building Construction (2026) - Unmitigated

	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
Onsite										
Off-Road Equipment	0.04873092	0.448357	0.58997	0.00106456	0.017228758		0.017228758	0.015850457		0.015850457
Onsite truck	0	0	0	0	0	0	0	0	0	0
Total	0.04873	0.44836	0.58997	0.00106	0.01723	0.00000	0.01723	0.01585	0.00000	0.01585
Offsite										
Worker	0.00077633	0.00081	0.010948	0	0	0.002991592	0.002991592	0	0.000700654	0.000700654
Vendor	5.8199E-05	0.003025	0.001461	2.033E-05	2.03299E-05	0.000765645	0.000765975	2.03299E-05	0.000211741	0.000232071
Hauling	0	0	0	0	0	0	0	0	0	0
Total	0.00083	0.00383	0.01241	0.00002	0.00002	0.00376	0.00378	0.00002	0.00091	0.00093
TOTAL	0.04957	0.45219	0.60238	0.00108	0.01725	0.00376	0.02101	0.01587	0.00091	0.01678

3.9 Paving (2026) - Unmitigated

	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
Onsite										
Off-Road Equipment	0.00266293	0.024914	0.034783	4.8816E-05	0.00111953		0.00111953	0.001029968		0.001029968
Paving	0	0	0	0	0	0	0	0	0	0
Onsite truck	0.00266	0.02491	0.03478	0.00005	0.00112	0.00000	0.00112	0.00103	0.00000	0.00103
Total	0.00266	0.02491	0.03478	0.00005	0.00112	0.00000	0.00112	0.00103	0.00000	0.00103
Offsite										
Worker	0.00017593	0.000183	0.002481	0	0	0.000677939	0.000677939	0	0.000158779	0.000158779
Vendor	4.5062E-06	0.000234	0.000113	1.5741E-06	1.5741E-06	5.92823E-05	6.08564E-05	1.5741E-06	1.63947E-05	1.79688E-05
Hauling	0	0	0	0	0	0	0	0	0	0
Total	0.00018	0.00042	0.00259	0.00000	0.00000	0.00074	0.00074	0.00000	0.00018	0.00018
TOTAL	0.00284	0.02533	0.03738	0.00005	0.00112	0.00074	0.00186	0.00103	0.00018	0.00121

3.11 Architectural Coating (2026) - Unmitigated

		ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
Onsite	Off-Road Equipment	0.00042108	0.002998	0.003965	6.0406E-06	8.1037E-05		8.1037E-05	7.4554E-05		7.4554E-05
	Architectural Coatings	0.06701347									
	Onsite truck	0	0	0	0	0	0	0	0	0	0
	Total	0.06743	0.00300	0.00396	0.00001	0.00008	0.00000	0.00008	0.00007	0.00000	0.00007
Offsite	Worker	1.1944E-05	1.25E-05	0.000168	0	0	4.60245E-05	4.60245E-05	0	1.07793E-05	1.07793E-05
	Vendor	0	0	0	0	0	0	0	0	0	0
	Hauling	0	0	0	0	0	0	0	0	0	0
	Total	0.00001	0.00001	0.00017	0.00000	0.00000	0.00005	0.00005	0.00000	0.00001	0.00001
TOTAL		0.06745	0.00301	0.00413	0.00001	0.00008	0.00005	0.00013	0.00007	0.00001	0.00009

1. CONSTRUCTION HEALTH RISK ASSESSMENT

1.1 INTRODUCTION

The Fullerton Joint Union School District (District or FJUHS) proposes to construct several improvements (referred to as the “proposed project”) at the Sonora High School campus. The proposed project includes two primary components: (1) modernization of the northern half of the existing Math and Science Classroom Building (building 400), and (2) track and field improvements. Each of these two components are discussed below.

Math and Science Classroom Modernization

The proposed project would demolish exterior building elements, such as pavers, a bench, and an irrigation line, and interior elements of building 400, including but not limited, to flooring, electrical elements, interior walls, casework (desk/cabinets), doors and door frames, and heating, ventilation, and air conditioning (HVAC) systems.

The proposed project would replace the doors, plumbing, fire alarm system, fume hoods, roofing, HVAC systems; construct a new roof deck, roof hatch, floor sinks, and epoxy countertops and sinks; and install new flooring, lab casework, and metal casework for flammable and acid storage. In addition, the exterior of building 400 would be repainted.

The proposed project would reconfigure the classroom spaces to include two biology classrooms and two chemistry classrooms. One biology classroom would be 1,963 square feet (sf); the other biology classroom would be 2,027 sf. One chemistry classroom would be 1,997 sf; the other chemistry classroom would be 2,197 sf. The modernization also includes a 311 sf biology storage room, a 233 sf chemical storage room, a 380 sf conference room, a custodial room, and a hallway. The proposed project would result in net decrease in classrooms from six (6) to four (4). The modernization would maintain the existing building 400 footprint.

Track and Field Improvements

To accommodate the improvements at the track and field, the proposed project would remove the existing retaining wall, storage building, concrete slabs curbs, a ramp, track and field equipment (i.e., field goal post, obstacle course, long jump areas, shot put area), storage containers, a vehicle barrier, a storm drain inlet, four trees, and bleachers, stairs, and fencing.

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The proposed project would install a synthetic track and synthetic turf field. A new triple jump/long jump area and a sand pit with a sand catcher would be constructed on the west side of the field. The proposed project would install permanent bleachers at the track and field to accommodate students. The track and field improvements would include the installation of pedestrian lighting, four (4) golf bays, a putting green, a shot-put area, discus and shot-put pads, a high jump area, two goal posts, and a new fire hydrant. The proposed project would also install a 24-foot wide digital scoreboard located on the west side of the track and field. Additionally, the proposed public address (PA) system (i.e., speakers) would be installed on the field lights at the track and field and would be placed approximately 20-feet above grade.

As part of the improvements at the track and field, a new single-story, 3,015 sf restroom building would be constructed in the southeast corner of the track and field. The proposed restroom building would include men's, women's, and unisex restrooms; storage room; custodial room; and an electrical room. As part of the proposed project, the District would also convert a 20,037 sf portion of the existing animal grazing area into an auxiliary field with new sod and irrigation. Other improvements to the space include a 6-inch concrete curb, field striping, and field lights. Construction of the proposed project is anticipated to occur in one phase and is anticipated to start in August 2026 and end by January 2027.

The nearby residences surrounding the project site and on-site students could be potentially impacted from the proposed construction activities. Therefore, the health risk impacts from construction activities were determined for all nearby sensitive receptors (within 1,000 feet). As school would continue to operate at the Sonora High School campus during construction of the proposed project, students and employees of Sonora High School would also be receptors of project construction emissions.

Guidance from the California Environmental Protection Agency (CalEPA), Office of Environmental Health Hazard Assessment (OEHHA), California Air Pollution Control Officers Association (CAPCOA), and the South Coast Air Quality Management District (South Coast AQMD) were used to complete the construction health risk assessment (HRA). The following provides the background methodology and assumptions used for the HRA.

1.2 METHODOLOGY

1.2.1 Construction HRA

For this HRA, the South Coast AQMD significance thresholds were deemed to be appropriate and the thresholds that were used for this project are shown below:

- Excess cancer risk of more than 10 in a million
- Non-cancer hazard index (chronic or acute) greater than 1.0

The methodology used in this HRA is consistent with the following OEHHA guidance documents:

- OEHHA. 2004. Guidance for School Site Risk Assessment Pursuant to Health and Safety Code Section 901(f): Guidance for Assessing Exposures and Health Risks at Existing and Proposed School Sites. February, 2004.
- OEHHA. 2015. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments. February, 2015.

Potential exposures to diesel particulate matter (DPM) from project construction were evaluated for off-site sensitive receptors in close proximity to the site and in addition to on-site receptors that would be present at the Sonora High School campus during construction activities. Pollutant concentrations were estimated using an air dispersion model, and excess lifetime cancer risks and chronic non-cancer hazard indexes were calculated. These risks were then compared to the significance thresholds adopted for this HRA.

It should be noted that these health impacts are based on conservative (i.e., health protective) assumptions. The United States Environmental Protection Agency (USEPA 2005) and the Office of Environmental Health Hazard Assessment (OEHHA 2015) note that conservative assumptions used in a risk assessment are intended to ensure that the estimated risks do not underestimate the actual risks. Therefore, the estimated risks may not necessarily represent actual risks experienced by populations at or near a site. The use of conservative assumptions tends to produce upper-bound estimates of exposure and thus risk.

For residential-based receptors, the following conservative assumptions were used:

- It was assumed that maximum-exposed off-site residential receptors (both children and adults) stood outdoors and are subject to DPM at their residence for 24 hours per day, and approximately 260 construction days per year. In reality, California residents typically will spend on average 2 hours per day outdoors at their residences (USEPA 2011). This would result in lower exposures to construction related DPM emissions and lower estimated risk values.
- The calculated risk for infants from third trimester to age 2 is multiplied by a factor of 10 and children ages 2 to 16 is multiplied by a factor of 3 to account for early life exposure and uncertainty in child versus adult exposure impacts (OEHHA 2015).

For school-based receptors, the following conservative assumptions were used:

- It was assumed that maximum exposed student receptors stood outside and are subject to DPM for 8 hours per day and approximately 180 school days per year for high school students. In reality, students are exposed to outdoor pollutant concentration levels for a portion of the day and are exposed to reduced indoor pollutant concentrations for the

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remaining hours due to building ventilation systems. This would result in lower exposures to construction related DPM emissions and lower estimated risk values.

- The calculated risk for children from age 2 to 16 is multiplied by a factor of 3 to account for early life exposure and uncertainty in child versus adult exposure impacts (OEHHA 2015).

1.3 CONSTRUCTION EMISSIONS

Construction emissions were calculated as average daily emissions (lbs/day) for the HRA using the timeframes for construction activities provided by the District and the latest version of California Emissions Estimation Model, known as CalEEMod Version 2022.1 (CAPCOA 2022). To assess more realistic average use of equipment on-site, construction was modeled for 5-day work week schedule and default CalEEMod daily hours of operation for equipment.

The average daily emission rates from on-site construction equipment were determined by dividing the annual average off-road emissions for each construction year by the number of construction days for the calendar year (i.e., 2026). The off-site hauling emission rates were adjusted to evaluate localized emissions from the 1.36-mile of haul route along South Palm Street, East Lambert Road, and East La Habra Boulevard within 1,000 feet of the project site. DPM emissions were based on the CalEEMod construction runs, using annual exhaust PM₁₀ construction emissions presented in pounds (lbs) per day. The CalEEMod construction emissions outputs and the emission rate calculations are provided in Attachment A.

1.4 DISPERSION MODELING

Air dispersion modeling was performed using the AERMOD atmospheric dispersion model (Lakes AERMOD View, version 13.0.0). The model is a steady-state Gaussian plume model and is approved by South Coast AQMD for estimating ground-level impacts from emission sources in simple and complex terrain. The proposed project was modeled in AERMOD to identify the annual average DPM concentration at the maximally exposed receptor of each receptor type (e.g., residential, worker, and student).

The model requires additional input parameters, including local meteorology and terrain. AERMOD-ready meteorological (met) data was obtained from South Coast AQMD for the nearest representative met station with the five latest available years of record (Fullerton Municipal Airport, 2018, 2020-2023) to represent local weather conditions and prevailing winds. The prevailing wind direction at the Fullerton Municipal Airport meteorological data station is from the southwest, and the wind rose is provided in Attachment B.

The modeling also considered the spatial distribution and elevation of each emitting source in relation to the sensitive receptors. Digital elevation model data for the project site and surrounding area were obtained and included in the model runs to account for complex terrain.

An emissions release height of 4.15 meters was used as representative of the stack exhaust height for off-road construction equipment and diesel truck traffic, and an initial vertical dispersion parameter of 1.93 meters was used, per CARB guidance (CARB 2000).

To determine contaminant impacts during construction hours, the model's Hour-By-Day-of-Week (HRDOW) scalar option was invoked to predict ground-level concentrations for emissions generated between the hours of 7:00 AM and 4:00 PM, with a 1-hour lunch break, Monday to Friday. In addition, a scalar factor was applied to the risk calculations to account for the number of days receptors are present and exposed to construction emissions per year, consistent with the description provided under Section 1.5.

A unit emission rate of 1 gram per second was used for the construction model. The unit emission rates were proportioned over the area sources for on-site sources and line sources for the off-site truck routes. The maximum AERMOD concentrations from the output files were then multiplied by the emission rates calculated in Section 1.3 to obtain the maximum ground-level concentrations at the maximum exposed individual resident, maximum exposed high school receptor, and maximum exposed worker receptor. The AERMOD model outputs are presented in Attachment B.

1.5 RISK CHARACTERIZATION

1.5.1 Carcinogenic Chemical Risk

Carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Therefore, any exposure will have some associated risk. The South Coast AQMD has established a maximum incremental cancer risk of 10 in a million (1×10^{-5} or 10×10^{-6}) for CEQA projects and the OEHHA also sets a typical risk management level as 10 in a million (OEHHA 2015).

Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. The cancer risk probability is determined by multiplying the chemical's annual concentration by its cancer potency factor (CPF), a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It is an upper-limit estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu\text{g}/\text{m}^3$), averaged over a lifetime of 70 years.

Recent guidance from OEHHA recommends a refinement to the standard point estimate approach with the use of age-specific breathing rates and age sensitivity factors (ASFs) to assess risk for susceptible subpopulations such as children. For the inhalation pathway, the procedure requires the incorporation of several discrete variates to effectively quantify dose for each age

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group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day (mg/kg/day)⁻¹ to derive the cancer risk estimate. Therefore, the following dose algorithm was used to accommodate the unique exposures associated with each receptor type.

$$\text{Dose}_{\text{AIR,per age group}} = (C_{\text{air}} \times \text{EF} \times [\frac{\text{BR}}{\text{BW}}] \times A \times \text{CF})$$

Where:

Dose _{AIR}	=	dose by inhalation (mg/kg-day), per age group
C _{air}	=	concentration of contaminant in air (µg/m ³)
EF	=	exposure frequency (number of days/365 days)
BR/BW	=	daily breathing rate normalized to body weight (L/kg-day)
A	=	inhalation absorption factor (default = 1)
CF	=	conversion factor (1x10 ⁻⁶ , µg to mg, L to m ³)

The inhalation absorption factor (A) is a unitless factor that is only used if the cancer potency factor included a correction for absorption across the lung. The default value of 1 was used for this assessment. For residential receptors, the exposure frequency (EF) of 0.96 is used to represent 350 days per year to allow for a two-week period away from home each year (OEHHA 2015). For high school receptors, an EF of 0.49 is used to represent the traditional school calendar of 180 days per year (OEHHA 2004). The daily breathing rates (BR/BW), exposure duration (ED), age sensitivity factors (ASF), and fraction of time at home (FAH) for the various age groups follow:

<u>Age Groups</u>	<u>24-Hour BR/BW (L/kg-day)</u>	<u>ED</u>	<u>ASF</u>	<u>FAH</u>
Third trimester	361	0.25	10	0.85
0-2 age group	1,090	1.34	10	0.85

<u>School Age Groups</u>	<u>8-Hour BR/BW (L/kg-day)</u>	<u>ED</u>	<u>ASF</u>	<u>FAH</u>
2–16 age group	520	1.59	3	N/A

For construction analysis, the exposure duration spans the length of construction. To calculate the overall cancer risk, the risk for each appropriate age group is calculated per the following equation:

$$\text{Cancer Risk}_{\text{AIR}} = \text{Dose}_{\text{AIR}} \times \text{CPF} \times \text{ASF} \times \text{FAH} \times \frac{\text{ED}}{\text{AT}}$$

Where:

Dose _{AIR}	=	dose by inhalation (mg/kg-day), per age group
CPF	=	cancer potency factor, chemical-specific (mg/kg-day) ⁻¹
ASF	=	age sensitivity factor, per age group
FAH	=	fraction of time at home, per age group (for residential receptors only)
ED	=	exposure duration (years)
AT	=	averaging time period over which exposure duration is averaged (70 years)

The final step converts the cancer risk in scientific notation to a whole number that expresses the cancer risk in “chances per million” by multiplying the cancer risk by a factor of 1x10⁶ (i.e., 1 million).

Incremental cancer risk (expressed in chances per million) was calculated for the maximum exposed receptor (MER) of each receptor type. The assessment was based on reasonable maximum exposure, defined as the “highest exposure that is reasonably expected to occur” for each receptor type, assuming all source generated emissions concurrently. The calculated results are provided in Attachment A.

1.5.2 Non-Carcinogenic Hazards

An evaluation was also conducted of the potential noncancer effects of chronic DPM exposure. Adverse health effects are evaluated by comparing the annual ground-level concentration of DPM from project construction or operation with the appropriate reference exposure limit

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(REL). Examples of noncancer adverse health effects are asthma, chronic obstructive pulmonary disease, and local effects from chemical exposure to specific organs such as the eyes, kidneys, and reproductive system.

The hazard index approach was used to quantify noncarcinogenic impacts. The hazard index assumes that chronic subthreshold exposures adversely affect a specific organ or organ system (toxicological endpoint). For DPM, the target organ determined by OEHHA is the respiratory system. To calculate the hazard index, the DPM concentration is divided by the DPM's chronic REL. A hazard index of 1 or lower means air toxics are unlikely to cause adverse noncancer health effects, such as asthma, over a lifetime of exposure.

1.6 RESULTS

1.6.1 Construction HRA

The following section summarizes the results and conclusion for this HRA report. The maximally exposed receptors for each type were identified as the following:

- Residential Receptor: Single-family residence on West Skywood Street, adjacent to the project site's northern boundary.
- High School Receptor: Sonora High School student receptors at the tennis courts near the northern edge of campus.
- Worker Receptor: Worker receptors adjacent to the project site's southern boundary.

The calculated health risk values are based on the modeled receptor concentration over the construction exposure period, averaged over a 70-year lifetime.

Tables 1, *Construction Risk Summary*, shows the unmitigated health risk results associated with construction activities.

Table 1 **Construction Risk Summary**

Receptor	Cancer Risk (per million) ¹	Chronic Hazards ¹
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Table 1 Construction Risk Summary

Off-Site Residential MER	<0.01	<0.1
Off-Site Worker MER	<0.01	<0.1
On-Site High School MER	<0.01	<0.1
South Coast AQMD Threshold	10	1.0
Exceeds Threshold?	No	No

Notes: Cancer risk calculated using 2015 OEHHA HRA guidance.

MER = Maximum Exposed Receptor

1. Includes implementation of fugitive dust control measures required by South Coast AQMD under Rule 403, including watering disturbed areas a minimum of two times per day, reducing speed limit to 25 miles per hour on unpaved surfaces, and street sweeping with Rule 1186–compliant sweepers.

In accordance with the latest OEHHA guidance, the calculated total cancer risk conservatively assumes that the risk for the maximally exposed individual receptor consists of a pregnant woman in the third trimester that subsequently gives birth to an infant during the approximately 0.41-year construction period. Therefore, calculated risk values for age groups from third trimester through 2 years of age were multiplied by a factor of 10 and age groups from 2 years of age through 16 years of age were multiplied by a factor of 3.

The results provided in Table 1 indicate that the maximum incremental cancer risk at all MERs would not exceed the South Coast AQMD threshold of 10 in one million. For non-carcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one for all sensitive receptors. Therefore, cancer risk and chronic non-carcinogenic hazards are less than significant.

2. REFERENCES

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Attachment A. CalEEMod Emission Outputs and Risk Calculations

Receptor Risk Residential MER

Receptor Information

HRA Receptor		Receptor Risk Information					
Name	Type	Start Age	Daily Breathing Rate	Fraction of Time at Home	Averaging Time	Inhalation Absorption Factor	Pollutant
Residential MER	Residential	3rd Trimester	24-Hour	Yes	70 Years	1	Diesel Particulate Matter

Note: MER = Maximally Exposed Receptor

Schedule and Duration

Activity Schedule Information							
Year	Start Date	End Date	Workday Duration	Seconds/Day	Construction Workday	Annual Workdays	Annual Duration
2026	8/3/2026	12/31/2026	8 Hours/Day	28,800	109	261	0.42
Total:							0.42

Assumptions:

Exposure Duration (ED) is derived by dividing project workdays by total annual workdays (261), assuming 5 workdays a week.

Pollutant Emission Rates and Concentrations

Year	Emission Rates		AERMOD Pollutant		Calculated Pollutant Concentration		
	On-site emission Rate (lbs/day)	Off-site emission Rate (lbs/day)	On-site Concentration	Off-site Concentration	On-site Concentration	Off-site Concentration	Total Concentration (ug/m3)
2026	6.86E-05	1.26E-03	9.11E+00	7.50E-01	9.85E-06	1.01E-06	1.09E-05
Off-site Haul Distance:		1.36	miles	Hazard Index:		0.00	
Default Haul Distance:		20	miles				

Exposure Durations

Year	Age-Dependent Exposure Duration						Total Duration
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	
2026	0.25	0.17	0.00	0.00	0.00	0.00	0.42
Total	0.25	0.17	0.00	0.00	0.00	0.00	0.42

Daily Breathing Rates

Year	DBR						Total
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	
2026	361	1090					1451

Receptor Risk Results

Year	Risk Per Individual By Age						Calculated Risk
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	Risk/Million
2026	1.26E-10	2.54E-10					0.00
TOTAL RISK:							0.00

Note: Results showing "0.00" represent values less than 0.005.

Receptor Risk Worker MER

Receptor Information

HRA Receptor		Receptor Risk Information					
Name	Type	Age Bin	Daily Breathing Rate	Fraction of Time at Home	Averaging Time	Inhalation Absorption Factor	Pollutant
Worker MER	Worker	16>30 Years	8-Hour	No	70 Years	1	Diesel Particulate Matter

Note: MER = Maximally Exposed Receptor

Schedule and Duration

Activity Schedule Information							
Year	Start Date	End Date	Workday Duration	Seconds/Day	Construction Workday	Annual Workdays	Annual Duration
2026	8/3/2026	12/31/2026	8 Hours/Day	28,800	109	261	0.42
Total:							0.42

Assumptions:

Exposure Duration (ED) is derived by dividing project workdays by total annual workdays (261), assuming 5 workdays a week.

Pollutant Emission Rates and Concentrations

Year	Emission Rates		AERMOD Pollutant		Calculated Pollutant Concentration		
	On-site Emission Rate (lbs/day)	Off-site Emission Rate (lbs/day)	On-site Concentration	Off-site Concentration	On-site Concentration	Off-site Concentration	Total Concentration (ug/m3)
2026	6.86E-05	1.26E-03	1.43E+00	2.21E+00	1.55E-06	2.97E-06	4.52E-06
Off-site Haul Distance:		1.36	miles	Hazard Index:		0.00	
Default Haul Distance:		20	miles				

Exposure Durations

Year	Age-Dependent Exposure Duration						
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	Total Duration
2026	0.00	0.00	0.00	0.00	0.42	0.00	0.42
Total	0.00	0.00	0.00	0.00	0.42	0.00	0.42

Daily Breathing Rates

Year	DBR						
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	Total
2026					240		240

Receptor Risk Results

Year	Risk Per Individual By Age						Calculated Risk
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	Risk/Million
2026					4.88E-12		0.00
TOTAL RISK:							0.00

Note: Results showing "0.00" represent values less than 0.005.

Receptor Risk Student MER

Receptor Information

HRA Receptor		Receptor Risk Information					
Name	Type	Age Bin	Daily Breathing Rate	Fraction of Time at Home	Averaging Time	Inhalation Absorption Factor	Pollutant
Student MER	High School	9>16 Years	8-Hour	No	70 Years	1	Diesel Particulate Matter

Note: MER = Maximally Exposed Receptor

Schedule and Duration

Activity Schedule Information							
Year	Start Date	End Date	Workday Duration	Seconds/Day	Construction Workday	Annual Workdays	Annual Duration
2026	8/3/2026	12/31/2026	8 Hours/Day	28,800	109	261	0.42
Total:							0.42

Assumptions:

Exposure Duration (ED) is derived by dividing project workdays by total annual workdays (261), assuming 5 workdays a week.

Pollutant Emission Rates and Concentrations

Year	Emission Rates		AERMOD Pollutant		Calculated Pollutant Concentration		
	On-site emission Rate (lbs/day)	Off-site emission Rate (lbs/day)	On-site Concentration	Off-site Concentration	On-site Concentration	Off-site Concentration	Total Concentration (ug/m3)
2026	6.86E-05	1.26E-03	8.65E+00	1.88E+00	9.36E-06	2.53E-06	1.19E-05
Off-site Haul Distance:		1.36	miles	Hazard Index:		0.00	
Default Haul Distance:		20	miles				

Exposure Durations

Year	Age-Dependent Exposure Duration						Total Duration
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	
2026	0.00	0.00	0.00	0.42	0.00	0.00	0.42
Total	0.00	0.00	0.00	0.42	0.00	0.00	0.42

Daily Breathing Rates

Year	DBR						Total
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	
2026				520			520

Receptor Risk Results

Year	Risk Per Individual By Age						Calculated Risk
	Age Bin: 3rd Trimester>0 Years	Age Bin: 0>2 Years	Age Bin: 2>9 Years	Age Bin: 9>16 Years	Age Bin: 16>30 Years	Age Bin: 30>70+ Years	Risk/Million
2026				6.00E-11			0.00
TOTAL RISK:							0.00

Note: Results showing "0.00" represent values less than 0.005.

Attachment B. Air Dispersion Model Output

Control Pathway

AERMOD

Dispersion Options

Titles Sonora High School Construction Health Risk Assessment	
Dispersion Options ☐ Regulatory Default ☒ Non-Default Options	Dispersion Coefficient Urban Population: Name (Optional): Roughness Length:
☒ Flat & Elevated Terrain ☐ No Stack-Tip Downwash (NOSTD) ☐ Run in Screening Mode ☐ Conversion of NOx to NO2 (OLM or PVMRM) ☐ No Checks for Non-Sequential Met Data ☒ Fast All Sources (FASTALL) ☐ Fast Area Sources (FASTAREA) ☐ Optimized Area Source Plume Depletion ☐ Gas Deposition BETA Options: ☐ Capped and Horizontal Stack Releases ☐ Adjusted Friction Velocity (u*) in AERMET (ADJ_U*) ☐ Low Wind Options ☐ SCIM (Sampled Chronological Input Model) ☐ Ignore Urban Night / Daytime Transition (NOURBTRAN)	Output Type ☒ Concentration ☐ Total Deposition (Dry & Wet) ☐ Dry Deposition ☐ Wet Deposition Plume Depletion ☐ Dry Removal ☐ Wet Removal Output Warnings ☐ No Output Warnings ☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type PM2.5 Averaging Time Options Hours ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24 ☐ Month ☒ Period ☐ Annual	Exponential Decay ☐ Yes ☒ No Terrain Height Options ☐ Flat ☒ Elevated SO: Meters RE: Meters TG: Meters
Flagpole Receptors ☐ Yes ☒ No Default Height = 0.00 m	

Optional Files



Re-Start File



Init File



Multi-Year Analyses



Event Input File



Error Listing File

Detailed Error Listing File

Filename: FHS-08 Sonora HS.err

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: Met Data\KFUL_V11_trimmed.sfc

Format Type: Default AERMET format

Profile Met Data

Filename: Met Data\KFUL_V11_trimmed.PFL

Format Type: Default AERMET format

Wind Speed



Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 26.22 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2018			
Upper Air		2018			

Data Period

Data Period to Process

Start Date: 1/1/2018

Start Hour: 1

End Date: 12/31/2023

End Hour: 24

Wind Speed Categories

Stability Category	Wind Speed [m/s]	Stability Category	Wind Speed [m/s]
A	1.54	D	8.23
B	3.09	E	10.8
C	5.14	F	No Upper Bound

Source Pathway - Source Inputs

AERMOD

Polygon Area Sources

Source Type: AREA POLY

Source: SITE (On-site Construction)

Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Initial Vertical Dim. [m]	Number of Vertices (or sides)	X Coordinate for Vertices [m]	Y Coordinate for Vertices [m]
111.80	4.15	0.00001	1.93	13	414164.90	3754764.40
		0.00001			414394.78	3754762.93
		0.00001			414394.78	3754750.19
		0.00001			414383.01	3754741.37
		0.00001			414383.01	3754689.90
		0.00001			414366.84	3754672.26
		0.00001			414365.86	3754658.53
		0.00001			414351.16	3754657.06
		0.00001			414346.74	3754402.68
		0.00001			414213.92	3754403.17
		0.00001			414213.43	3754377.19
		0.00001			414184.02	3754377.19
		0.00001			414160.49	3754373.76

Source Pathway - Source Inputs

AERMOD

Line Volume Sources

Source Type: LINE VOLUME

Source: ROUTE1 (Off-site hauling route 1)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
18.00	0.45314		414396.44	3754757.22	113.69	4.15
			414565.38	3754755.94	113.88	4.15
			414568.36	3754988.37	116.26	4.15
			413980.92	3754992.78	114.04	4.15

Source Type: LINE VOLUME

Source: ROUTE2 (Off-site hauling route 2)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
13.00	0.54686		414215.11	3754383.86	108.93	4.15
			414361.78	3754381.45	109.86	4.15
			414373.53	3754387.17	109.93	4.15
			414525.32	3754386.87	110.81	4.15
			414538.87	3754403.13	110.87	4.15
			414560.25	3754402.83	110.91	4.15
			414560.91	3754182.71	108.68	4.15
			413941.90	3754188.59	110.18	4.15

Source Pathway - Source Inputs

AERMOD

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m]	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimension [m]	Initial Vertical Dimension [m]
ROUTE1	L0000148	414405.44	3754757.15	113.51	4.15	0.00824	18.00		8.37	3.86
	L0000149	414423.44	3754757.01	113.69	4.15	0.00824	18.00		8.37	3.86
	L0000150	414441.44	3754756.87	113.75	4.15	0.00824	18.00		8.37	3.86
	L0000151	414459.44	3754756.74	113.75	4.15	0.00824	18.00		8.37	3.86
	L0000152	414477.44	3754756.60	113.75	4.15	0.00824	18.00		8.37	3.86
	L0000153	414495.44	3754756.47	113.75	4.15	0.00824	18.00		8.37	3.86
	L0000154	414513.44	3754756.33	113.75	4.15	0.00824	18.00		8.37	3.86
	L0000155	414531.44	3754756.19	113.75	4.15	0.00824	18.00		8.37	3.86
	L0000156	414549.44	3754756.06	113.75	4.15	0.00824	18.00		8.37	3.86
	L0000157	414565.40	3754758.00	113.77	4.15	0.00824	18.00		8.37	3.86
	L0000158	414565.63	3754775.99	113.96	4.15	0.00824	18.00		8.37	3.86
	L0000159	414565.86	3754793.99	114.16	4.15	0.00824	18.00		8.37	3.86
	L0000160	414566.10	3754811.99	114.35	4.15	0.00824	18.00		8.37	3.86
	L0000161	414566.33	3754829.99	114.55	4.15	0.00824	18.00		8.37	3.86
	L0000162	414566.56	3754847.99	114.74	4.15	0.00824	18.00		8.37	3.86
	L0000163	414566.79	3754865.99	114.94	4.15	0.00824	18.00		8.37	3.86
	L0000164	414567.02	3754883.99	115.13	4.15	0.00824	18.00		8.37	3.86
	L0000165	414567.25	3754901.98	115.33	4.15	0.00824	18.00		8.37	3.86
	L0000166	414567.48	3754919.98	115.52	4.15	0.00824	18.00		8.37	3.86
	L0000167	414567.71	3754937.98	115.72	4.15	0.00824	18.00		8.37	3.86
	L0000168	414567.94	3754955.98	115.91	4.15	0.00824	18.00		8.37	3.86
	L0000169	414568.17	3754973.98	116.11	4.15	0.00824	18.00		8.37	3.86
	L0000170	414564.75	3754988.40	116.26	4.15	0.00824	18.00		8.37	3.86
	L0000171	414546.75	3754988.53	116.26	4.15	0.00824	18.00		8.37	3.86

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m]	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimension [m]	Initial Vertical Dimension [m]
ROUTE1	L0000172	414528.75	3754988.67	116.26	4.15	0.00824	18.00		8.37	3.86
	L0000173	414510.75	3754988.80	116.26	4.15	0.00824	18.00		8.37	3.86
	L0000174	414492.75	3754988.94	116.26	4.15	0.00824	18.00		8.37	3.86
	L0000175	414474.75	3754989.07	116.26	4.15	0.00824	18.00		8.37	3.86
	L0000176	414456.75	3754989.21	116.26	4.15	0.00824	18.00		8.37	3.86
	L0000177	414438.75	3754989.34	116.26	4.15	0.00824	18.00		8.37	3.86
	L0000178	414420.75	3754989.48	116.12	4.15	0.00824	18.00		8.37	3.86
	L0000179	414402.75	3754989.61	115.88	4.15	0.00824	18.00		8.37	3.86
	L0000180	414384.75	3754989.75	115.65	4.15	0.00824	18.00		8.37	3.86
	L0000181	414366.75	3754989.88	115.42	4.15	0.00824	18.00		8.37	3.86
	L0000182	414348.75	3754990.02	115.26	4.15	0.00824	18.00		8.37	3.86
	L0000183	414330.76	3754990.15	115.26	4.15	0.00824	18.00		8.37	3.86
	L0000184	414312.76	3754990.29	115.26	4.15	0.00824	18.00		8.37	3.86
	L0000185	414294.76	3754990.42	115.26	4.15	0.00824	18.00		8.37	3.86
	L0000186	414276.76	3754990.56	115.25	4.15	0.00824	18.00		8.37	3.86
	L0000187	414258.76	3754990.69	115.01	4.15	0.00824	18.00		8.37	3.86
	L0000188	414240.76	3754990.83	114.78	4.15	0.00824	18.00		8.37	3.86
	L0000189	414222.76	3754990.96	114.54	4.15	0.00824	18.00		8.37	3.86
	L0000190	414204.76	3754991.10	114.31	4.15	0.00824	18.00		8.37	3.86
	L0000191	414186.76	3754991.24	114.08	4.15	0.00824	18.00		8.37	3.86
	L0000192	414168.76	3754991.37	113.84	4.15	0.00824	18.00		8.37	3.86
	L0000193	414150.76	3754991.51	113.61	4.15	0.00824	18.00		8.37	3.86
	L0000194	414132.76	3754991.64	113.37	4.15	0.00824	18.00		8.37	3.86
	L0000195	414114.76	3754991.78	113.26	4.15	0.00824	18.00		8.37	3.86
	L0000196	414096.76	3754991.91	113.26	4.15	0.00824	18.00		8.37	3.86

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m]	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimension [m]	Initial Vertical Dimension [m]
ROUTE1	L0000197	414078.76	3754992.05	113.26	4.15	0.00824	18.00		8.37	3.86
	L0000198	414060.76	3754992.18	113.25	4.15	0.00824	18.00		8.37	3.86
	L0000199	414042.76	3754992.32	113.29	4.15	0.00824	18.00		8.37	3.86
	L0000200	414024.76	3754992.45	113.47	4.15	0.00824	18.00		8.37	3.86
	L0000201	414006.76	3754992.59	113.64	4.15	0.00824	18.00		8.37	3.86
	L0000202	413988.76	3754992.72	113.81	4.15	0.00824	18.00		8.37	3.86

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m]	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimension [m]	Initial Vertical Dimension [m]
ROUTE2	L0000203	414221.61	3754383.75	108.69	4.15	0.00594	13.00		6.05	3.86
	L0000204	414234.61	3754383.54	108.69	4.15	0.00594	13.00		6.05	3.86
	L0000205	414247.61	3754383.32	108.68	4.15	0.00594	13.00		6.05	3.86
	L0000206	414260.61	3754383.11	108.68	4.15	0.00594	13.00		6.05	3.86
	L0000207	414273.60	3754382.90	108.70	4.15	0.00594	13.00		6.05	3.86
	L0000208	414286.60	3754382.68	108.87	4.15	0.00594	13.00		6.05	3.86
	L0000209	414299.60	3754382.47	109.04	4.15	0.00594	13.00		6.05	3.86
	L0000210	414312.60	3754382.25	109.20	4.15	0.00594	13.00		6.05	3.86
	L0000211	414325.60	3754382.04	109.37	4.15	0.00594	13.00		6.05	3.86
	L0000212	414338.60	3754381.83	109.54	4.15	0.00594	13.00		6.05	3.86
	L0000213	414351.59	3754381.61	109.69	4.15	0.00594	13.00		6.05	3.86
	L0000214	414364.31	3754382.68	109.75	4.15	0.00594	13.00		6.05	3.86
	L0000215	414376.27	3754387.16	109.83	4.15	0.00594	13.00		6.05	3.86
	L0000216	414389.27	3754387.14	109.87	4.15	0.00594	13.00		6.05	3.86
	L0000217	414402.27	3754387.11	109.92	4.15	0.00594	13.00		6.05	3.86
	L0000218	414415.27	3754387.09	109.96	4.15	0.00594	13.00		6.05	3.86
	L0000219	414428.27	3754387.06	110.02	4.15	0.00594	13.00		6.05	3.86

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m]	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROUTE2	L0000220	414441.27	3754387.03	110.14	4.15	0.00594	13.00		6.05	3.86
	L0000221	414454.27	3754387.01	110.27	4.15	0.00594	13.00		6.05	3.86
	L0000222	414467.27	3754386.98	110.40	4.15	0.00594	13.00		6.05	3.86
	L0000223	414480.27	3754386.96	110.52	4.15	0.00594	13.00		6.05	3.86
	L0000224	414493.27	3754386.93	110.65	4.15	0.00594	13.00		6.05	3.86
	L0000225	414506.27	3754386.91	110.75	4.15	0.00594	13.00		6.05	3.86
	L0000226	414519.27	3754386.88	110.75	4.15	0.00594	13.00		6.05	3.86
	L0000227	414529.77	3754392.21	110.81	4.15	0.00594	13.00		6.05	3.86
	L0000228	414538.09	3754402.20	110.92	4.15	0.00594	13.00		6.05	3.86
	L0000229	414550.65	3754402.97	110.93	4.15	0.00594	13.00		6.05	3.86
	L0000230	414560.26	3754399.43	110.89	4.15	0.00594	13.00		6.05	3.86
	L0000231	414560.30	3754386.43	110.75	4.15	0.00594	13.00		6.05	3.86
	L0000232	414560.34	3754373.43	110.61	4.15	0.00594	13.00		6.05	3.86
	L0000233	414560.38	3754360.43	110.47	4.15	0.00594	13.00		6.05	3.86
	L0000234	414560.42	3754347.43	110.33	4.15	0.00594	13.00		6.05	3.86
	L0000235	414560.46	3754334.43	110.19	4.15	0.00594	13.00		6.05	3.86
	L0000236	414560.50	3754321.43	110.05	4.15	0.00594	13.00		6.05	3.86
	L0000237	414560.53	3754308.43	109.90	4.15	0.00594	13.00		6.05	3.86
	L0000238	414560.57	3754295.43	109.76	4.15	0.00594	13.00		6.05	3.86
	L0000239	414560.61	3754282.43	109.62	4.15	0.00594	13.00		6.05	3.86
	L0000240	414560.65	3754269.43	109.48	4.15	0.00594	13.00		6.05	3.86
	L0000241	414560.69	3754256.43	109.34	4.15	0.00594	13.00		6.05	3.86
	L0000242	414560.73	3754243.43	109.20	4.15	0.00594	13.00		6.05	3.86
	L0000243	414560.77	3754230.43	109.06	4.15	0.00594	13.00		6.05	3.86
	L0000244	414560.80	3754217.43	108.92	4.15	0.00594	13.00		6.05	3.86

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m]	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROUTE2	L0000245	414560.84	3754204.43	108.78	4.15	0.00594	13.00		6.05	3.86
	L0000246	414560.88	3754191.43	108.64	4.15	0.00594	13.00		6.05	3.86
	L0000247	414556.63	3754182.75	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000248	414543.63	3754182.88	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000249	414530.63	3754183.00	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000250	414517.63	3754183.12	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000251	414504.63	3754183.25	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000252	414491.63	3754183.37	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000253	414478.63	3754183.49	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000254	414465.63	3754183.62	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000255	414452.63	3754183.74	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000256	414439.63	3754183.86	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000257	414426.63	3754183.99	108.54	4.15	0.00594	13.00		6.05	3.86
	L0000258	414413.64	3754184.11	108.40	4.15	0.00594	13.00		6.05	3.86
	L0000259	414400.64	3754184.23	108.24	4.15	0.00594	13.00		6.05	3.86
	L0000260	414387.64	3754184.36	108.07	4.15	0.00594	13.00		6.05	3.86
	L0000261	414374.64	3754184.48	107.90	4.15	0.00594	13.00		6.05	3.86
	L0000262	414361.64	3754184.60	107.73	4.15	0.00594	13.00		6.05	3.86
	L0000263	414348.64	3754184.73	107.56	4.15	0.00594	13.00		6.05	3.86
	L0000264	414335.64	3754184.85	107.55	4.15	0.00594	13.00		6.05	3.86
	L0000265	414322.64	3754184.97	107.55	4.15	0.00594	13.00		6.05	3.86
	L0000266	414309.64	3754185.10	107.55	4.15	0.00594	13.00		6.05	3.86
	L0000267	414296.64	3754185.22	107.55	4.15	0.00594	13.00		6.05	3.86
	L0000268	414283.64	3754185.34	107.55	4.15	0.00594	13.00		6.05	3.86
	L0000269	414270.64	3754185.47	107.55	4.15	0.00594	13.00		6.05	3.86

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m]	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
ROUTE2	L0000270	414257.64	3754185.59	107.62	4.15	0.00594	13.00		6.05	3.86
	L0000271	414244.64	3754185.71	107.70	4.15	0.00594	13.00		6.05	3.86
	L0000272	414231.64	3754185.84	107.77	4.15	0.00594	13.00		6.05	3.86
	L0000273	414218.64	3754185.96	107.85	4.15	0.00594	13.00		6.05	3.86
	L0000274	414205.64	3754186.08	107.93	4.15	0.00594	13.00		6.05	3.86
	L0000275	414192.65	3754186.21	108.01	4.15	0.00594	13.00		6.05	3.86
	L0000276	414179.65	3754186.33	108.10	4.15	0.00594	13.00		6.05	3.86
	L0000277	414166.65	3754186.45	108.19	4.15	0.00594	13.00		6.05	3.86
	L0000278	414153.65	3754186.58	108.28	4.15	0.00594	13.00		6.05	3.86
	L0000279	414140.65	3754186.70	108.37	4.15	0.00594	13.00		6.05	3.86
	L0000280	414127.65	3754186.82	108.47	4.15	0.00594	13.00		6.05	3.86
	L0000281	414114.65	3754186.95	108.57	4.15	0.00594	13.00		6.05	3.86
	L0000282	414101.65	3754187.07	108.74	4.15	0.00594	13.00		6.05	3.86
	L0000283	414088.65	3754187.19	108.91	4.15	0.00594	13.00		6.05	3.86
	L0000284	414075.65	3754187.32	109.07	4.15	0.00594	13.00		6.05	3.86
	L0000285	414062.65	3754187.44	109.24	4.15	0.00594	13.00		6.05	3.86
	L0000286	414049.65	3754187.56	109.41	4.15	0.00594	13.00		6.05	3.86
	L0000287	414036.65	3754187.69	109.56	4.15	0.00594	13.00		6.05	3.86
	L0000288	414023.65	3754187.81	109.64	4.15	0.00594	13.00		6.05	3.86
	L0000289	414010.65	3754187.94	109.72	4.15	0.00594	13.00		6.05	3.86
	L0000290	413997.65	3754188.06	109.79	4.15	0.00594	13.00		6.05	3.86
	L0000291	413984.65	3754188.18	109.87	4.15	0.00594	13.00		6.05	3.86
	L0000292	413971.66	3754188.31	109.94	4.15	0.00594	13.00		6.05	3.86
	L0000293	413958.66	3754188.43	110.05	4.15	0.00594	13.00		6.05	3.86
	L0000294	413945.66	3754188.55	110.22	4.15	0.00594	13.00		6.05	3.86

Source Pathway - Source Inputs

AERMOD

Receptor Pathway

AERMOD

Receptor Networks

Note: Terrain Elevations and Flagpole Heights for Network Grids are in Page RE2 - 1 (If applicable)
Generated Discrete Receptors for Multi-Tier (Risk) Grid and Receptor Locations for Fenceline Grid are in Page RE3 - 1 (If applicable)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	414085.57	3755034.20	R	113.71	
2	414110.57	3755034.20	R	113.71	
3	414135.57	3755034.20	R	113.87	
4	414160.57	3755034.20	R	114.19	
5	414160.57	3755059.20	R	114.46	
6	414185.57	3755034.20	R	114.52	
7	414185.57	3755059.20	R	114.79	
8	414210.57	3755034.20	R	114.85	
9	414210.57	3755059.20	R	115.12	
10	414235.57	3755034.20	R	115.18	
11	414235.57	3755059.20	R	115.44	
12	414260.57	3755034.20	R	115.50	
13	414260.57	3755059.20	R	115.77	
14	414285.57	3755034.20	R	115.73	
15	414285.57	3755059.20	R	116.00	
16	414310.57	3755034.20	R	115.73	
17	414310.57	3755059.20	R	116.00	
18	414335.57	3755034.20	R	115.74	
19	414335.57	3755059.20	R	116.01	
20	414360.57	3755034.20	R	115.81	
21	414360.57	3755059.20	R	116.08	
22	414385.57	3755034.20	R	116.14	
23	414385.57	3755059.20	R	116.40	
24	414410.57	3755034.20	R	116.46	
25	414410.57	3755059.20	R	116.72	
26	414435.57	3755034.20	R	116.75	
27	414460.57	3755034.20	R	116.75	
28	413881.56	3754478.28	R	112.76	
29	413881.56	3754503.28	R	113.03	
30	413881.56	3754528.28	R	113.09	

Receptor Pathway

AERMOD

31	413881.56	3754553.28	R	113.09
32	413881.56	3754578.28	R	113.09
33	413881.56	3754603.28	R	113.10
34	413881.56	3754628.28	R	113.10
35	413881.56	3754653.28	R	113.10
36	413881.56	3754678.28	R	113.11
37	413881.56	3754703.28	R	113.22
38	413881.56	3754728.28	R	113.49
39	413881.56	3754753.28	R	113.77
40	413881.56	3754778.28	R	114.04
41	413881.56	3754803.28	R	114.12
42	413906.56	3754478.28	R	112.44
43	413906.56	3754503.28	R	112.71
44	413906.56	3754528.28	R	112.76
45	413906.56	3754553.28	R	112.77
46	413906.56	3754578.28	R	112.77
47	413906.56	3754603.28	R	112.78
48	413906.56	3754628.28	R	112.84
49	413906.56	3754653.28	R	112.91
50	413906.56	3754678.28	R	112.97
51	413906.56	3754703.28	R	113.09
52	413906.56	3754728.28	R	113.30
53	413906.56	3754753.28	R	113.52
54	413906.56	3754778.28	R	113.73
55	413906.56	3754803.28	R	113.80
56	413906.56	3754828.28	R	113.80
57	413906.56	3754853.28	R	113.80
58	413931.56	3754478.28	R	112.11
59	413931.56	3754503.28	R	112.39
60	413931.56	3754528.28	R	112.44
61	413931.56	3754553.28	R	112.44
62	413931.56	3754578.28	R	112.44
63	413931.56	3754603.28	R	112.47
64	413931.56	3754628.28	R	112.62
65	413931.56	3754653.28	R	112.77
66	413931.56	3754678.28	R	112.92
67	413931.56	3754703.28	R	113.05
68	413931.56	3754728.28	R	113.18

Receptor Pathway

AERMOD

69	413931.56	3754753.28	R	113.31
70	413931.56	3754778.28	R	113.43
71	413931.56	3754803.28	R	113.47
72	413931.56	3754828.28	R	113.47
73	413931.56	3754853.28	R	113.48
74	413931.56	3754878.28	R	113.49
75	413931.56	3754903.28	R	113.76
76	413931.56	3754928.28	R	114.04
77	413956.56	3754453.28	R	111.52
78	413956.56	3754478.28	R	111.79
79	413956.56	3754503.28	R	112.07
80	413956.56	3754528.28	R	112.11
81	413956.56	3754553.28	R	112.12
82	413956.56	3754578.28	R	112.12
83	413956.56	3754603.28	R	112.15
84	413956.56	3754628.28	R	112.39
85	413956.56	3754653.28	R	112.63
86	413956.56	3754678.28	R	112.87
87	413956.56	3754703.28	R	113.02
88	413956.56	3754728.28	R	113.05
89	413956.56	3754753.28	R	113.09
90	413956.56	3754778.28	R	113.13
91	413956.56	3754803.28	R	113.15
92	413956.56	3754828.28	R	113.15
93	413956.56	3754853.28	R	113.15
94	413956.56	3754878.28	R	113.17
95	413956.56	3754903.28	R	113.44
96	413956.56	3754928.28	R	113.71
97	413981.56	3754453.28	R	111.32
98	413981.56	3754478.28	R	111.54
99	413981.56	3754503.28	R	111.75
100	413981.56	3754528.28	R	111.84
101	413981.56	3754553.28	R	111.90
102	413981.56	3754578.28	R	111.95
103	413981.56	3754603.28	R	112.03
104	413981.56	3754628.28	R	112.25
105	413981.56	3754653.28	R	112.47
106	413981.56	3754678.28	R	112.69

Receptor Pathway

AERMOD

107	413981.56	3754703.28	R	112.81
108	413981.56	3754728.28	R	112.81
109	413981.56	3754753.28	R	112.82
110	413981.56	3754778.28	R	112.82
111	413981.56	3754803.28	R	112.86
112	413981.56	3754828.28	R	112.91
113	413981.56	3754853.28	R	112.96
114	413981.56	3754878.28	R	113.01
115	413981.56	3754903.28	R	113.24
116	413981.56	3754928.28	R	113.46
117	414006.56	3754428.28	R	111.07
118	414006.56	3754453.28	R	111.19
119	414006.56	3754478.28	R	111.32
120	414006.56	3754503.28	R	111.44
121	414006.56	3754528.28	R	111.59
122	414006.56	3754553.28	R	111.73
123	414006.56	3754578.28	R	111.88
124	414006.56	3754603.28	R	112.02
125	414006.56	3754628.28	R	112.15
126	414006.56	3754653.28	R	112.28
127	414006.56	3754678.28	R	112.41
128	414006.56	3754703.28	R	112.49
129	414006.56	3754728.28	R	112.49
130	414006.56	3754753.28	R	112.49
131	414006.56	3754778.28	R	112.49
132	414006.56	3754803.28	R	112.60
133	414006.56	3754828.28	R	112.74
134	414006.56	3754853.28	R	112.87
135	414006.56	3754878.28	R	113.01
136	414006.56	3754903.28	R	113.15
137	414006.56	3754928.28	R	113.29
138	414031.56	3754428.28	R	111.02
139	414031.56	3754453.28	R	111.06
140	414031.56	3754478.28	R	111.09
141	414031.56	3754503.28	R	111.13
142	414031.56	3754528.28	R	111.34
143	414031.56	3754553.28	R	111.57
144	414031.56	3754578.28	R	111.81

Receptor Pathway

AERMOD

145	414031.56	3754603.28	R	112.01
146	414031.56	3754628.28	R	112.05
147	414031.56	3754653.28	R	112.09
148	414031.56	3754678.28	R	112.14
149	414031.56	3754703.28	R	112.16
150	414031.56	3754728.28	R	112.16
151	414031.56	3754753.28	R	112.17
152	414031.56	3754778.28	R	112.17
153	414031.56	3754803.28	R	112.34
154	414031.56	3754828.28	R	112.57
155	414031.56	3754853.28	R	112.79
156	414031.56	3754878.28	R	113.00
157	414031.56	3754903.28	R	113.05
158	414031.56	3754928.28	R	113.11
159	414056.56	3754403.28	R	110.68
160	414056.56	3754428.28	R	110.80
161	414056.56	3754453.28	R	110.81
162	414056.56	3754478.28	R	110.81
163	414056.56	3754503.28	R	110.81
164	414056.56	3754528.28	R	111.05
165	414056.56	3754553.28	R	111.32
166	414056.56	3754578.28	R	111.60
167	414056.56	3754603.28	R	111.82
168	414056.56	3754628.28	R	111.83
169	414056.56	3754653.28	R	111.83
170	414056.56	3754678.28	R	111.83
171	414056.56	3754703.28	R	111.86
172	414056.56	3754728.28	R	111.90
173	414056.56	3754753.28	R	111.95
174	414056.56	3754778.28	R	111.99
175	414056.56	3754803.28	R	112.21
176	414056.56	3754828.28	R	112.48
177	414056.56	3754853.28	R	112.75
178	414056.56	3754878.28	R	113.00
179	414056.56	3754903.28	R	113.00
180	414056.56	3754928.28	R	113.00
181	414081.56	3754403.28	R	110.36
182	414081.56	3754428.28	R	110.48

Receptor Pathway

AERMOD

183	414081.56	3754453.28	R	110.48
184	414081.56	3754478.28	R	110.49
185	414081.56	3754503.28	R	110.49
186	414081.56	3754528.28	R	110.73
187	414081.56	3754553.28	R	111.00
188	414081.56	3754578.28	R	111.28
189	414081.56	3754603.28	R	111.50
190	414081.56	3754628.28	R	111.50
191	414081.56	3754653.28	R	111.51
192	414081.56	3754678.28	R	111.51
193	414081.56	3754703.28	R	111.58
194	414081.56	3754728.28	R	111.71
195	414081.56	3754753.28	R	111.84
196	414081.56	3754778.28	R	111.97
197	414081.56	3754803.28	R	112.21
198	414081.56	3754828.28	R	112.48
199	414081.56	3754853.28	R	112.75
200	414081.56	3754878.28	R	113.00
201	414081.56	3754903.28	R	113.00
202	414081.56	3754928.28	R	113.00
203	414106.56	3754378.28	R	109.77
204	414106.56	3754403.28	R	110.04
205	414106.56	3754428.28	R	110.16
206	414106.56	3754453.28	R	110.16
207	414106.56	3754478.28	R	110.16
208	414106.56	3754503.28	R	110.16
209	414106.56	3754528.28	R	110.41
210	414106.56	3754553.28	R	110.68
211	414106.56	3754578.28	R	110.95
212	414106.56	3754603.28	R	111.18
213	414106.56	3754628.28	R	111.18
214	414106.56	3754653.28	R	111.18
215	414106.56	3754678.28	R	111.18
216	414106.56	3754703.28	R	111.30
217	414106.56	3754728.28	R	111.52
218	414106.56	3754753.28	R	111.74
219	414106.56	3754778.28	R	111.96
220	414106.56	3754803.28	R	112.22

Receptor Pathway

AERMOD

221	414106.56	3754828.28	R	112.49
222	414106.56	3754853.28	R	112.76
223	414106.56	3754878.28	R	113.00
224	414106.56	3754903.28	R	113.00
225	414106.56	3754928.28	R	113.00
226	414131.56	3754378.28	R	109.44
227	414131.56	3754403.28	R	109.72
228	414131.56	3754428.28	R	109.86
229	414131.56	3754453.28	R	109.91
230	414131.56	3754478.28	R	109.95
231	414131.56	3754503.28	R	110.00
232	414131.56	3754528.28	R	110.20
233	414131.56	3754553.28	R	110.43
234	414131.56	3754578.28	R	110.66
235	414131.56	3754603.28	R	110.86
236	414131.56	3754628.28	R	110.90
237	414131.56	3754653.28	R	110.94
238	414131.56	3754678.28	R	110.98
239	414131.56	3754703.28	R	111.14
240	414131.56	3754728.28	R	111.41
241	414131.56	3754753.28	R	111.68
242	414131.56	3754778.28	R	111.95
243	414131.56	3754803.28	R	112.22
244	414131.56	3754828.28	R	112.49
245	414131.56	3754853.28	R	112.76
246	414131.56	3754878.28	R	113.00
247	414131.56	3754903.28	R	113.03
248	414131.56	3754928.28	R	113.06
249	414131.56	3754953.28	R	113.09
250	414156.56	3754378.28	R	109.12
251	414156.56	3754403.28	R	109.39
252	414156.56	3754428.28	R	109.59
253	414156.56	3754453.28	R	109.72
254	414156.56	3754478.28	R	109.86
255	414156.56	3754503.28	R	109.99
256	414156.56	3754528.28	R	110.13
257	414156.56	3754553.28	R	110.27
258	414156.56	3754578.28	R	110.41

Receptor Pathway

AERMOD

259	414156.56	3754603.28	R	110.55
260	414156.56	3754628.28	R	110.68
261	414156.56	3754653.28	R	110.81
262	414156.56	3754678.28	R	110.94
263	414156.56	3754703.28	R	111.14
264	414156.56	3754728.28	R	111.41
265	414156.56	3754753.28	R	111.68
266	414156.56	3754778.28	R	111.95
267	414156.56	3754803.28	R	112.22
268	414156.56	3754828.28	R	112.49
269	414156.56	3754853.28	R	112.76
270	414156.56	3754878.28	R	113.01
271	414156.56	3754903.28	R	113.13
272	414156.56	3754928.28	R	113.25
273	414156.56	3754953.28	R	113.36
274	414181.56	3754778.28	R	111.95
275	414181.56	3754803.28	R	112.22
276	414181.56	3754828.28	R	112.49
277	414181.56	3754853.28	R	112.76
278	414181.56	3754878.28	R	113.03
279	414181.56	3754903.28	R	113.23
280	414181.56	3754928.28	R	113.44
281	414181.56	3754953.28	R	113.64
282	414206.56	3754778.28	R	112.06
283	414206.56	3754803.28	R	112.32
284	414206.56	3754828.28	R	112.59
285	414206.56	3754853.28	R	112.86
286	414206.56	3754878.28	R	113.13
287	414206.56	3754903.28	R	113.39
288	414206.56	3754928.28	R	113.66
289	414206.56	3754953.28	R	113.93
290	414231.56	3754778.28	R	112.38
291	414231.56	3754803.28	R	112.65
292	414231.56	3754828.28	R	112.92
293	414231.56	3754853.28	R	113.19
294	414231.56	3754878.28	R	113.45
295	414231.56	3754903.28	R	113.72
296	414231.56	3754928.28	R	113.99

Receptor Pathway

AERMOD

297	414231.56	3754953.28	R	114.26
298	414256.56	3754778.28	R	112.71
299	414256.56	3754803.28	R	112.98
300	414256.56	3754828.28	R	113.25
301	414256.56	3754853.28	R	113.51
302	414256.56	3754878.28	R	113.78
303	414256.56	3754903.28	R	114.05
304	414256.56	3754928.28	R	114.32
305	414256.56	3754953.28	R	114.58
306	414281.56	3754778.28	R	112.96
307	414281.56	3754803.28	R	113.23
308	414281.56	3754828.28	R	113.50
309	414281.56	3754853.28	R	113.77
310	414281.56	3754878.28	R	114.04
311	414281.56	3754903.28	R	114.31
312	414281.56	3754928.28	R	114.58
313	414281.56	3754953.28	R	114.86
314	414306.56	3754778.28	R	112.98
315	414306.56	3754803.28	R	113.23
316	414306.56	3754828.28	R	113.51
317	414306.56	3754853.28	R	113.78
318	414306.56	3754878.28	R	114.05
319	414306.56	3754903.28	R	114.32
320	414306.56	3754928.28	R	114.59
321	414306.56	3754953.28	R	114.86
322	414331.56	3754778.28	R	112.99
323	414331.56	3754803.28	R	113.24
324	414331.56	3754828.28	R	113.51
325	414331.56	3754853.28	R	113.78
326	414331.56	3754878.28	R	114.05
327	414331.56	3754903.28	R	114.32
328	414331.56	3754928.28	R	114.59
329	414331.56	3754953.28	R	114.86
330	414356.56	3754778.28	R	113.05
331	414356.56	3754803.28	R	113.29
332	414356.56	3754828.28	R	113.55
333	414356.56	3754853.28	R	113.82
334	414356.56	3754878.28	R	114.09

Receptor Pathway

AERMOD

335	414356.56	3754903.28	R	114.36
336	414356.56	3754928.28	R	114.62
337	414356.56	3754953.28	R	114.89
338	414381.56	3754778.28	R	113.36
339	414381.56	3754803.28	R	113.61
340	414381.56	3754828.28	R	113.88
341	414381.56	3754853.28	R	114.15
342	414381.56	3754878.28	R	114.42
343	414381.56	3754903.28	R	114.68
344	414381.56	3754928.28	R	114.95
345	414381.56	3754953.28	R	115.22
346	414406.56	3754778.28	R	113.68
347	414406.56	3754803.28	R	113.94
348	414406.56	3754828.28	R	114.21
349	414406.56	3754853.28	R	114.48
350	414406.56	3754878.28	R	114.74
351	414406.56	3754903.28	R	115.01
352	414406.56	3754928.28	R	115.28
353	414406.56	3754953.28	R	115.55
354	414431.56	3754778.28	R	113.98
355	414431.56	3754803.28	R	114.25
356	414431.56	3754828.28	R	114.52
357	414431.56	3754853.28	R	114.79
358	414431.56	3754878.28	R	115.06
359	414431.56	3754903.28	R	115.33
360	414431.56	3754928.28	R	115.60
361	414431.56	3754953.28	R	115.87
362	414456.56	3754778.28	R	113.98
363	414456.56	3754803.28	R	114.25
364	414456.56	3754828.28	R	114.52
365	414456.56	3754853.28	R	114.79
366	414456.56	3754878.28	R	115.06
367	414456.56	3754903.28	R	115.33
368	414456.56	3754928.28	R	115.60
369	414456.56	3754953.28	R	115.87
370	414481.56	3754778.28	R	113.98
371	414481.56	3754803.28	R	114.25
372	414481.56	3754828.28	R	114.52

Receptor Pathway

AERMOD

373	414481.56	3754853.28	R	114.79
374	414481.56	3754878.28	R	115.06
375	414481.56	3754903.28	R	115.33
376	414481.56	3754928.28	R	115.60
377	414481.56	3754953.28	R	115.87
378	414506.56	3754778.28	R	113.98
379	414506.56	3754803.28	R	114.25
380	414506.56	3754828.28	R	114.52
381	414506.56	3754853.28	R	114.80
382	414506.56	3754878.28	R	115.07
383	414506.56	3754903.28	R	115.34
384	414506.56	3754928.28	R	115.61
385	414506.56	3754953.28	R	115.88
386	414531.56	3754778.28	R	113.99
387	414531.56	3754803.28	R	114.26
388	414531.56	3754828.28	R	114.53
389	414531.56	3754853.28	R	114.80
390	414531.56	3754878.28	R	115.07
391	414531.56	3754903.28	R	115.34
392	414531.56	3754928.28	R	115.61
393	414531.56	3754953.28	R	115.88
394	414571.80	3754431.75	R	111.21
395	414596.80	3754456.75	R	111.31
396	414596.80	3754481.75	R	111.58
397	414596.80	3754506.75	R	111.81
398	414596.80	3754531.75	R	111.87
399	414596.80	3754556.75	R	111.92
400	414596.80	3754581.75	R	111.97
401	414596.80	3754606.75	R	112.14
402	414596.80	3754631.75	R	112.41
403	414596.80	3754656.75	R	112.68
404	414596.80	3754681.75	R	112.95
405	414596.80	3754706.75	R	113.22
406	414596.80	3754731.75	R	113.49
407	414596.80	3754756.75	R	113.76
408	414596.80	3754781.75	R	114.03
409	414596.80	3754806.75	R	114.30
410	414596.80	3754831.75	R	114.57

Receptor Pathway

AERMOD

411	414596.80	3754856.75	R	114.84
412	414596.80	3754881.75	R	115.11
413	414596.80	3754906.75	R	115.38
414	414596.80	3754931.75	R	115.65
415	414596.80	3754956.75	R	115.92
416	414621.80	3754456.75	R	110.99
417	414621.80	3754481.75	R	111.26
418	414621.80	3754506.75	R	111.51
419	414621.80	3754531.75	R	111.65
420	414621.80	3754556.75	R	111.79
421	414621.80	3754581.75	R	111.93
422	414621.80	3754606.75	R	112.14
423	414621.80	3754631.75	R	112.41
424	414621.80	3754656.75	R	112.68
425	414621.80	3754681.75	R	112.95
426	414621.80	3754706.75	R	113.22
427	414621.80	3754731.75	R	113.49
428	414621.80	3754756.75	R	113.76
429	414621.80	3754781.75	R	114.03
430	414621.80	3754806.75	R	114.30
431	414621.80	3754831.75	R	114.57
432	414621.80	3754856.75	R	114.84
433	414621.80	3754881.75	R	115.11
434	414621.80	3754906.75	R	115.39
435	414621.80	3754931.75	R	115.66
436	414646.80	3754456.75	R	110.66
437	414646.80	3754481.75	R	110.94
438	414646.80	3754506.75	R	111.20
439	414646.80	3754531.75	R	111.43
440	414646.80	3754556.75	R	111.66
441	414646.80	3754581.75	R	111.89
442	414646.80	3754606.75	R	112.14
443	414646.80	3754631.75	R	112.41
444	414646.80	3754656.75	R	112.68
445	414646.80	3754681.75	R	112.95
446	414646.80	3754706.75	R	113.22
447	414646.80	3754731.75	R	113.49
448	414646.80	3754756.75	R	113.76

Receptor Pathway

AERMOD

449	414646.80	3754781.75	R	114.03
450	414646.80	3754806.75	R	114.31
451	414646.80	3754831.75	R	114.58
452	414646.80	3754856.75	R	114.85
453	414646.80	3754881.75	R	115.12
454	414671.80	3754556.75	R	111.60
455	414671.80	3754581.75	R	111.87
456	414671.80	3754606.75	R	112.14
457	414671.80	3754631.75	R	112.41
458	414671.80	3754656.75	R	112.68
459	414671.80	3754681.75	R	112.96
460	414671.80	3754706.75	R	113.19
461	414671.80	3754731.75	R	113.42
462	414671.80	3754756.75	R	113.66
463	414671.80	3754781.75	R	113.90
464	414671.80	3754806.75	R	114.17
465	414671.80	3754831.75	R	114.44
466	414696.80	3754681.75	R	112.96
467	414696.80	3754706.75	R	113.12
468	414696.80	3754731.75	R	113.26
469	414696.80	3754756.75	R	113.41
470	414365.35	3754414.82	S	110.04
471	414365.35	3754439.82	S	110.31
472	414365.35	3754464.82	S	110.58
473	414365.35	3754489.82	S	110.85
474	414365.35	3754514.82	S	111.12
475	414365.35	3754539.82	S	111.39
476	414365.35	3754564.82	S	111.66
477	414365.35	3754589.82	S	111.93
478	414365.35	3754614.82	S	112.20
479	414365.35	3754639.82	S	112.47
480	414390.35	3754414.82	S	110.04
481	414390.35	3754439.82	S	110.31
482	414390.35	3754464.82	S	110.58
483	414390.35	3754489.82	S	110.85
484	414390.35	3754514.82	S	111.12
485	414390.35	3754539.82	S	111.39
486	414390.35	3754564.82	S	111.66

Receptor Pathway

AERMOD

487	414390.35	3754589.82	S	111.93
488	414390.35	3754614.82	S	112.20
489	414390.35	3754639.82	S	112.47
490	414390.35	3754664.82	S	112.74
491	414390.35	3754689.82	S	113.01
492	414390.35	3754714.82	S	113.14
493	414390.35	3754739.82	S	113.27
494	414415.35	3754414.82	S	110.04
495	414415.35	3754439.82	S	110.31
496	414415.35	3754464.82	S	110.58
497	414415.35	3754489.82	S	110.85
498	414415.35	3754514.82	S	111.12
499	414415.35	3754539.82	S	111.39
500	414415.35	3754564.82	S	111.66
501	414415.35	3754589.82	S	111.94
502	414415.35	3754614.82	S	112.21
503	414415.35	3754639.82	S	112.48
504	414415.35	3754664.82	S	112.75
505	414415.35	3754689.82	S	113.01
506	414415.35	3754714.82	S	113.24
507	414415.35	3754739.82	S	113.46
508	414440.35	3754414.82	S	110.22
509	414440.35	3754439.82	S	110.44
510	414440.35	3754464.82	S	110.66
511	414440.35	3754489.82	S	110.88
512	414440.35	3754514.82	S	111.13
513	414440.35	3754539.82	S	111.40
514	414440.35	3754564.82	S	111.67
515	414440.35	3754589.82	S	111.94
516	414440.35	3754614.82	S	112.21
517	414440.35	3754639.82	S	112.48
518	414440.35	3754664.82	S	112.75
519	414440.35	3754689.82	S	113.02
520	414440.35	3754714.82	S	113.29
521	414440.35	3754739.82	S	113.56
522	414465.35	3754414.82	S	110.53
523	414465.35	3754439.82	S	110.66
524	414465.35	3754464.82	S	110.79

Receptor Pathway

AERMOD

525	414465.35	3754489.82	S	110.93
526	414465.35	3754514.82	S	111.13
527	414465.35	3754539.82	S	111.40
528	414465.35	3754564.82	S	111.67
529	414465.35	3754589.82	S	111.94
530	414465.35	3754614.82	S	112.21
531	414465.35	3754639.82	S	112.48
532	414465.35	3754664.82	S	112.75
533	414465.35	3754689.82	S	113.02
534	414490.35	3754414.82	S	110.84
535	414490.35	3754439.82	S	110.88
536	414490.35	3754464.82	S	110.93
537	414490.35	3754489.82	S	110.97
538	414490.35	3754514.82	S	111.13
539	414490.35	3754539.82	S	111.40
540	414490.35	3754564.82	S	111.67
541	414490.35	3754589.82	S	111.94
542	414515.35	3754414.82	S	111.01
543	414515.35	3754439.82	S	111.05
544	414515.35	3754464.82	S	111.09
545	414515.35	3754489.82	S	111.12
546	414515.35	3754514.82	S	111.26
547	414515.35	3754539.82	S	111.49
548	414515.35	3754564.82	S	111.72
549	414227.51	3754399.07	S	108.85
550	414257.09	3754397.03	S	108.83
551	414290.13	3754397.82	S	109.08
552	414332.14	3754395.77	S	109.60
553	414357.63	3754398.45	S	109.87
554	414375.88	3754398.29	S	109.91
555	414384.37	3754397.97	S	109.92
556	414013.18	3754959.39	W	113.38
557	414091.17	3754953.02	W	113.00
558	413902.11	3754372.51	W	111.80
559	413901.75	3754342.38	W	111.80
560	414017.65	3754321.83	W	110.30
561	414048.48	3754289.22	W	109.89
562	414066.20	3754252.72	W	109.66

Receptor Pathway

AERMOD

563	413989.29	3754254.49	W	110.17
564	413991.78	3754223.65	W	109.97
565	414170.88	3754279.42	W	108.30
566	414171.23	3754246.81	W	108.29
567	414219.43	3754257.80	W	108.00
568	414219.79	3754234.76	W	108.00
569	414269.41	3754238.66	W	108.00
570	414294.22	3754234.40	W	108.02
571	414321.16	3754218.46	W	107.91
572	414201.53	3754352.55	W	108.35
573	414226.54	3754358.81	W	108.42
574	414254.90	3754359.64	W	108.43
575	414290.34	3754358.81	W	108.66
576	414337.05	3754358.81	W	109.27
577	414299.93	3754303.77	W	108.31
578	414337.46	3754305.02	W	108.72
579	414389.17	3754303.77	W	109.37
580	414432.95	3754301.27	W	109.81
581	414395.01	3754357.98	W	109.77
582	414434.20	3754357.14	W	110.04
583	414485.49	3754359.23	W	110.35
584	414522.61	3754360.06	W	110.46
585	414491.75	3754301.68	W	109.82
586	414525.52	3754300.43	W	109.81
587	414393.76	3754278.75	W	109.16
588	414433.37	3754278.33	W	109.57
589	414343.72	3754280.83	W	108.55
590	414489.25	3754277.91	W	109.57
591	414526.78	3754278.75	W	109.58
592	414489.66	3754239.97	W	109.16
593	414515.10	3754220.79	W	108.95
594	414531.78	3754211.20	W	108.85
595	414499.25	3754209.95	W	108.83
596	414587.56	3754276.59	W	109.50
597	414599.34	3754302.20	W	109.63
598	414589.87	3754365.97	W	110.40
599	414592.69	3754400.03	W	110.74
600	414624.44	3754390.04	W	110.22

Receptor Pathway

AERMOD

601	414060.03	3754145.75	W	108.82
602	414223.51	3754098.38	W	107.20

Plant Boundary Receptors

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	FENCEGRD	Receptors generated from Fenceline Grid
3	R	
4	S	
5	W	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		3.14305	ug/m^3	R_001	414085.57	3755034.20	113.71	0.00	113.71	
PERIOD		3.21458	ug/m^3	R_002	414110.57	3755034.20	113.71	0.00	113.71	
PERIOD		3.25794	ug/m^3	R_003	414135.57	3755034.20	113.87	0.00	113.87	
PERIOD		3.27917	ug/m^3	R_004	414160.57	3755034.20	114.19	0.00	114.19	
PERIOD		2.13121	ug/m^3	R_005	414160.57	3755059.20	114.46	0.00	114.46	
PERIOD		3.28702	ug/m^3	R_006	414185.57	3755034.20	114.52	0.00	114.52	
PERIOD		2.14688	ug/m^3	R_007	414185.57	3755059.20	114.79	0.00	114.79	
PERIOD		3.28874	ug/m^3	R_008	414210.57	3755034.20	114.85	0.00	114.85	
PERIOD		2.15669	ug/m^3	R_009	414210.57	3755059.20	115.12	0.00	115.12	
PERIOD		3.29020	ug/m^3	R_010	414235.57	3755034.20	115.18	0.00	115.18	
PERIOD		2.16347	ug/m^3	R_011	414235.57	3755059.20	115.44	0.00	115.44	
PERIOD		3.28963	ug/m^3	R_012	414260.57	3755034.20	115.50	0.00	115.50	
PERIOD		2.16729	ug/m^3	R_013	414260.57	3755059.20	115.77	0.00	115.77	
PERIOD		3.28587	ug/m^3	R_014	414285.57	3755034.20	115.73	0.00	115.73	
PERIOD		2.15926	ug/m^3	R_015	414285.57	3755059.20	116.00	0.00	116.00	
PERIOD		3.28780	ug/m^3	R_016	414310.57	3755034.20	115.73	0.00	115.73	
PERIOD		2.16848	ug/m^3	R_017	414310.57	3755059.20	116.00	0.00	116.00	
PERIOD		3.29217	ug/m^3	R_018	414335.57	3755034.20	115.74	0.00	115.74	
PERIOD		2.18087	ug/m^3	R_019	414335.57	3755059.20	116.01	0.00	116.01	
PERIOD		3.29604	ug/m^3	R_020	414360.57	3755034.20	115.81	0.00	115.81	

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AERMOD View by Lakes Environmental Software

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2/10/2026

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.19029	ug/m^3	R_021	414360.57	3755059.20	116.08	0.00	116.08	
PERIOD		3.29715	ug/m^3	R_022	414385.57	3755034.20	116.14	0.00	116.14	
PERIOD		2.19285	ug/m^3	R_023	414385.57	3755059.20	116.40	0.00	116.40	
PERIOD		3.29032	ug/m^3	R_024	414410.57	3755034.20	116.46	0.00	116.46	
PERIOD		2.19325	ug/m^3	R_025	414410.57	3755059.20	116.72	0.00	116.72	
PERIOD		3.28366	ug/m^3	R_026	414435.57	3755034.20	116.75	0.00	116.75	
PERIOD		3.28575	ug/m^3	R_027	414460.57	3755034.20	116.75	0.00	116.75	
PERIOD		0.19883	ug/m^3	R_028	413881.56	3754478.28	112.76	0.00	112.76	
PERIOD		0.18549	ug/m^3	R_029	413881.56	3754503.28	113.03	0.00	113.03	
PERIOD		0.17557	ug/m^3	R_030	413881.56	3754528.28	113.09	0.00	113.09	
PERIOD		0.16839	ug/m^3	R_031	413881.56	3754553.28	113.09	0.00	113.09	
PERIOD		0.16354	ug/m^3	R_032	413881.56	3754578.28	113.09	0.00	113.09	
PERIOD		0.16080	ug/m^3	R_033	413881.56	3754603.28	113.10	0.00	113.10	
PERIOD		0.15997	ug/m^3	R_034	413881.56	3754628.28	113.10	0.00	113.10	
PERIOD		0.16085	ug/m^3	R_035	413881.56	3754653.28	113.10	0.00	113.10	
PERIOD		0.16326	ug/m^3	R_036	413881.56	3754678.28	113.11	0.00	113.11	
PERIOD		0.16719	ug/m^3	R_037	413881.56	3754703.28	113.22	0.00	113.22	
PERIOD		0.17265	ug/m^3	R_038	413881.56	3754728.28	113.49	0.00	113.49	
PERIOD		0.17972	ug/m^3	R_039	413881.56	3754753.28	113.77	0.00	113.77	
PERIOD		0.18959	ug/m^3	R_040	413881.56	3754778.28	114.04	0.00	114.04	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.20307	ug/m^3	R_041	413881.56	3754803.28	114.12	0.00	114.12	
PERIOD		0.21790	ug/m^3	R_042	413906.56	3754478.28	112.44	0.00	112.44	
PERIOD		0.20112	ug/m^3	R_043	413906.56	3754503.28	112.71	0.00	112.71	
PERIOD		0.18899	ug/m^3	R_044	413906.56	3754528.28	112.76	0.00	112.76	
PERIOD		0.18013	ug/m^3	R_045	413906.56	3754553.28	112.77	0.00	112.77	
PERIOD		0.17408	ug/m^3	R_046	413906.56	3754578.28	112.77	0.00	112.77	
PERIOD		0.17048	ug/m^3	R_047	413906.56	3754603.28	112.78	0.00	112.78	
PERIOD		0.16908	ug/m^3	R_048	413906.56	3754628.28	112.84	0.00	112.84	
PERIOD		0.16962	ug/m^3	R_049	413906.56	3754653.28	112.91	0.00	112.91	
PERIOD		0.17196	ug/m^3	R_050	413906.56	3754678.28	112.97	0.00	112.97	
PERIOD		0.17598	ug/m^3	R_051	413906.56	3754703.28	113.09	0.00	113.09	
PERIOD		0.18172	ug/m^3	R_052	413906.56	3754728.28	113.30	0.00	113.30	
PERIOD		0.18958	ug/m^3	R_053	413906.56	3754753.28	113.52	0.00	113.52	
PERIOD		0.19992	ug/m^3	R_054	413906.56	3754778.28	113.73	0.00	113.73	
PERIOD		0.21445	ug/m^3	R_055	413906.56	3754803.28	113.80	0.00	113.80	
PERIOD		0.23459	ug/m^3	R_056	413906.56	3754828.28	113.80	0.00	113.80	
PERIOD		0.26301	ug/m^3	R_057	413906.56	3754853.28	113.80	0.00	113.80	
PERIOD		0.23931	ug/m^3	R_058	413931.56	3754478.28	112.11	0.00	112.11	
PERIOD		0.21947	ug/m^3	R_059	413931.56	3754503.28	112.39	0.00	112.39	
PERIOD		0.20457	ug/m^3	R_060	413931.56	3754528.28	112.44	0.00	112.44	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.19364	ug/m^3	R_061	413931.56	3754553.28	112.44	0.00	112.44	
PERIOD		0.18609	ug/m^3	R_062	413931.56	3754578.28	112.44	0.00	112.44	
PERIOD		0.18150	ug/m^3	R_063	413931.56	3754603.28	112.47	0.00	112.47	
PERIOD		0.17923	ug/m^3	R_064	413931.56	3754628.28	112.62	0.00	112.62	
PERIOD		0.17942	ug/m^3	R_065	413931.56	3754653.28	112.77	0.00	112.77	
PERIOD		0.18166	ug/m^3	R_066	413931.56	3754678.28	112.92	0.00	112.92	
PERIOD		0.18583	ug/m^3	R_067	413931.56	3754703.28	113.05	0.00	113.05	
PERIOD		0.19192	ug/m^3	R_068	413931.56	3754728.28	113.18	0.00	113.18	
PERIOD		0.20025	ug/m^3	R_069	413931.56	3754753.28	113.31	0.00	113.31	
PERIOD		0.21157	ug/m^3	R_070	413931.56	3754778.28	113.43	0.00	113.43	
PERIOD		0.22721	ug/m^3	R_071	413931.56	3754803.28	113.47	0.00	113.47	
PERIOD		0.24914	ug/m^3	R_072	413931.56	3754828.28	113.47	0.00	113.47	
PERIOD		0.28063	ug/m^3	R_073	413931.56	3754853.28	113.48	0.00	113.48	
PERIOD		0.32728	ug/m^3	R_074	413931.56	3754878.28	113.49	0.00	113.49	
PERIOD		0.39895	ug/m^3	R_075	413931.56	3754903.28	113.76	0.00	113.76	
PERIOD		0.51446	ug/m^3	R_076	413931.56	3754928.28	114.04	0.00	114.04	
PERIOD		0.29445	ug/m^3	R_077	413956.56	3754453.28	111.52	0.00	111.52	
PERIOD		0.26399	ug/m^3	R_078	413956.56	3754478.28	111.79	0.00	111.79	
PERIOD		0.23971	ug/m^3	R_079	413956.56	3754503.28	112.07	0.00	112.07	
PERIOD		0.22161	ug/m^3	R_080	413956.56	3754528.28	112.11	0.00	112.11	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.20831	ug/m^3	R_081	413956.56	3754553.28	112.12	0.00	112.12	
PERIOD		0.19913	ug/m^3	R_082	413956.56	3754578.28	112.12	0.00	112.12	
PERIOD		0.19347	ug/m^3	R_083	413956.56	3754603.28	112.15	0.00	112.15	
PERIOD		0.19063	ug/m^3	R_084	413956.56	3754628.28	112.39	0.00	112.39	
PERIOD		0.19037	ug/m^3	R_085	413956.56	3754653.28	112.63	0.00	112.63	
PERIOD		0.19256	ug/m^3	R_086	413956.56	3754678.28	112.87	0.00	112.87	
PERIOD		0.19690	ug/m^3	R_087	413956.56	3754703.28	113.02	0.00	113.02	
PERIOD		0.20342	ug/m^3	R_088	413956.56	3754728.28	113.05	0.00	113.05	
PERIOD		0.21231	ug/m^3	R_089	413956.56	3754753.28	113.09	0.00	113.09	
PERIOD		0.22443	ug/m^3	R_090	413956.56	3754778.28	113.13	0.00	113.13	
PERIOD		0.24132	ug/m^3	R_091	413956.56	3754803.28	113.15	0.00	113.15	
PERIOD		0.26536	ug/m^3	R_092	413956.56	3754828.28	113.15	0.00	113.15	
PERIOD		0.30058	ug/m^3	R_093	413956.56	3754853.28	113.15	0.00	113.15	
PERIOD		0.35387	ug/m^3	R_094	413956.56	3754878.28	113.17	0.00	113.17	
PERIOD		0.43854	ug/m^3	R_095	413956.56	3754903.28	113.44	0.00	113.44	
PERIOD		0.58359	ug/m^3	R_096	413956.56	3754928.28	113.71	0.00	113.71	
PERIOD		0.32844	ug/m^3	R_097	413981.56	3754453.28	111.32	0.00	111.32	
PERIOD		0.29148	ug/m^3	R_098	413981.56	3754478.28	111.54	0.00	111.54	
PERIOD		0.26233	ug/m^3	R_099	413981.56	3754503.28	111.75	0.00	111.75	
PERIOD		0.24037	ug/m^3	R_100	413981.56	3754528.28	111.84	0.00	111.84	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.22429	ug/m^3	R_101	413981.56	3754553.28	111.90	0.00	111.90	
PERIOD		0.21321	ug/m^3	R_102	413981.56	3754578.28	111.95	0.00	111.95	
PERIOD		0.20636	ug/m^3	R_103	413981.56	3754603.28	112.03	0.00	112.03	
PERIOD		0.20295	ug/m^3	R_104	413981.56	3754628.28	112.25	0.00	112.25	
PERIOD		0.20268	ug/m^3	R_105	413981.56	3754653.28	112.47	0.00	112.47	
PERIOD		0.20487	ug/m^3	R_106	413981.56	3754678.28	112.69	0.00	112.69	
PERIOD		0.20949	ug/m^3	R_107	413981.56	3754703.28	112.81	0.00	112.81	
PERIOD		0.21640	ug/m^3	R_108	413981.56	3754728.28	112.81	0.00	112.81	
PERIOD		0.22585	ug/m^3	R_109	413981.56	3754753.28	112.82	0.00	112.82	
PERIOD		0.23883	ug/m^3	R_110	413981.56	3754778.28	112.82	0.00	112.82	
PERIOD		0.25707	ug/m^3	R_111	413981.56	3754803.28	112.86	0.00	112.86	
PERIOD		0.28355	ug/m^3	R_112	413981.56	3754828.28	112.91	0.00	112.91	
PERIOD		0.32318	ug/m^3	R_113	413981.56	3754853.28	112.96	0.00	112.96	
PERIOD		0.38475	ug/m^3	R_114	413981.56	3754878.28	113.01	0.00	113.01	
PERIOD		0.48565	ug/m^3	R_115	413981.56	3754903.28	113.24	0.00	113.24	
PERIOD		0.66604	ug/m^3	R_116	413981.56	3754928.28	113.46	0.00	113.46	
PERIOD		0.41927	ug/m^3	R_117	414006.56	3754428.28	111.07	0.00	111.07	
PERIOD		0.36542	ug/m^3	R_118	414006.56	3754453.28	111.19	0.00	111.19	
PERIOD		0.32149	ug/m^3	R_119	414006.56	3754478.28	111.32	0.00	111.32	
PERIOD		0.28705	ug/m^3	R_120	414006.56	3754503.28	111.44	0.00	111.44	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.26072	ug/m^3	R_121	414006.56	3754528.28	111.59	0.00	111.59	
PERIOD		0.24150	ug/m^3	R_122	414006.56	3754553.28	111.73	0.00	111.73	
PERIOD		0.22830	ug/m^3	R_123	414006.56	3754578.28	111.88	0.00	111.88	
PERIOD		0.22024	ug/m^3	R_124	414006.56	3754603.28	112.02	0.00	112.02	
PERIOD		0.21645	ug/m^3	R_125	414006.56	3754628.28	112.15	0.00	112.15	
PERIOD		0.21616	ug/m^3	R_126	414006.56	3754653.28	112.28	0.00	112.28	
PERIOD		0.21871	ug/m^3	R_127	414006.56	3754678.28	112.41	0.00	112.41	
PERIOD		0.22369	ug/m^3	R_128	414006.56	3754703.28	112.49	0.00	112.49	
PERIOD		0.23100	ug/m^3	R_129	414006.56	3754728.28	112.49	0.00	112.49	
PERIOD		0.24100	ug/m^3	R_130	414006.56	3754753.28	112.49	0.00	112.49	
PERIOD		0.25478	ug/m^3	R_131	414006.56	3754778.28	112.49	0.00	112.49	
PERIOD		0.27433	ug/m^3	R_132	414006.56	3754803.28	112.60	0.00	112.60	
PERIOD		0.30331	ug/m^3	R_133	414006.56	3754828.28	112.74	0.00	112.74	
PERIOD		0.34771	ug/m^3	R_134	414006.56	3754853.28	112.87	0.00	112.87	
PERIOD		0.41843	ug/m^3	R_135	414006.56	3754878.28	113.01	0.00	113.01	
PERIOD		0.53798	ug/m^3	R_136	414006.56	3754903.28	113.15	0.00	113.15	
PERIOD		0.76056	ug/m^3	R_137	414006.56	3754928.28	113.29	0.00	113.29	
PERIOD		0.46894	ug/m^3	R_138	414031.56	3754428.28	111.02	0.00	111.02	
PERIOD		0.40534	ug/m^3	R_139	414031.56	3754453.28	111.06	0.00	111.06	
PERIOD		0.35383	ug/m^3	R_140	414031.56	3754478.28	111.09	0.00	111.09	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.31359	ug/m^3	R_141	414031.56	3754503.28	111.13	0.00	111.13	
PERIOD		0.28252	ug/m^3	R_142	414031.56	3754528.28	111.34	0.00	111.34	
PERIOD		0.25992	ug/m^3	R_143	414031.56	3754553.28	111.57	0.00	111.57	
PERIOD		0.24455	ug/m^3	R_144	414031.56	3754578.28	111.81	0.00	111.81	
PERIOD		0.23532	ug/m^3	R_145	414031.56	3754603.28	112.01	0.00	112.01	
PERIOD		0.23124	ug/m^3	R_146	414031.56	3754628.28	112.05	0.00	112.05	
PERIOD		0.23103	ug/m^3	R_147	414031.56	3754653.28	112.09	0.00	112.09	
PERIOD		0.23392	ug/m^3	R_148	414031.56	3754678.28	112.14	0.00	112.14	
PERIOD		0.23935	ug/m^3	R_149	414031.56	3754703.28	112.16	0.00	112.16	
PERIOD		0.24713	ug/m^3	R_150	414031.56	3754728.28	112.16	0.00	112.16	
PERIOD		0.25767	ug/m^3	R_151	414031.56	3754753.28	112.17	0.00	112.17	
PERIOD		0.27224	ug/m^3	R_152	414031.56	3754778.28	112.17	0.00	112.17	
PERIOD		0.29318	ug/m^3	R_153	414031.56	3754803.28	112.34	0.00	112.34	
PERIOD		0.32465	ug/m^3	R_154	414031.56	3754828.28	112.57	0.00	112.57	
PERIOD		0.37398	ug/m^3	R_155	414031.56	3754853.28	112.79	0.00	112.79	
PERIOD		0.45436	ug/m^3	R_156	414031.56	3754878.28	113.00	0.00	113.00	
PERIOD		0.59261	ug/m^3	R_157	414031.56	3754903.28	113.05	0.00	113.05	
PERIOD		0.85439	ug/m^3	R_158	414031.56	3754928.28	113.11	0.00	113.11	
PERIOD		0.61256	ug/m^3	R_159	414056.56	3754403.28	110.68	0.00	110.68	
PERIOD		0.52423	ug/m^3	R_160	414056.56	3754428.28	110.80	0.00	110.80	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.44910	ug/m^3	R_161	414056.56	3754453.28	110.81	0.00	110.81	
PERIOD		0.38866	ug/m^3	R_162	414056.56	3754478.28	110.81	0.00	110.81	
PERIOD		0.34187	ug/m^3	R_163	414056.56	3754503.28	110.81	0.00	110.81	
PERIOD		0.30584	ug/m^3	R_164	414056.56	3754528.28	111.05	0.00	111.05	
PERIOD		0.27992	ug/m^3	R_165	414056.56	3754553.28	111.32	0.00	111.32	
PERIOD		0.26245	ug/m^3	R_166	414056.56	3754578.28	111.60	0.00	111.60	
PERIOD		0.25206	ug/m^3	R_167	414056.56	3754603.28	111.82	0.00	111.82	
PERIOD		0.24762	ug/m^3	R_168	414056.56	3754628.28	111.83	0.00	111.83	
PERIOD		0.24752	ug/m^3	R_169	414056.56	3754653.28	111.83	0.00	111.83	
PERIOD		0.25085	ug/m^3	R_170	414056.56	3754678.28	111.83	0.00	111.83	
PERIOD		0.25681	ug/m^3	R_171	414056.56	3754703.28	111.86	0.00	111.86	
PERIOD		0.26509	ug/m^3	R_172	414056.56	3754728.28	111.90	0.00	111.90	
PERIOD		0.27616	ug/m^3	R_173	414056.56	3754753.28	111.95	0.00	111.95	
PERIOD		0.29138	ug/m^3	R_174	414056.56	3754778.28	111.99	0.00	111.99	
PERIOD		0.31352	ug/m^3	R_175	414056.56	3754803.28	112.21	0.00	112.21	
PERIOD		0.34742	ug/m^3	R_176	414056.56	3754828.28	112.48	0.00	112.48	
PERIOD		0.40113	ug/m^3	R_177	414056.56	3754853.28	112.75	0.00	112.75	
PERIOD		0.48955	ug/m^3	R_178	414056.56	3754878.28	113.00	0.00	113.00	
PERIOD		0.64225	ug/m^3	R_179	414056.56	3754903.28	113.00	0.00	113.00	
PERIOD		0.92974	ug/m^3	R_180	414056.56	3754928.28	113.00	0.00	113.00	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.69147	ug/m^3	R_181	414081.56	3754403.28	110.36	0.00	110.36	
PERIOD		0.58688	ug/m^3	R_182	414081.56	3754428.28	110.48	0.00	110.48	
PERIOD		0.49753	ug/m^3	R_183	414081.56	3754453.28	110.48	0.00	110.48	
PERIOD		0.42639	ug/m^3	R_184	414081.56	3754478.28	110.49	0.00	110.49	
PERIOD		0.37216	ug/m^3	R_185	414081.56	3754503.28	110.49	0.00	110.49	
PERIOD		0.33110	ug/m^3	R_186	414081.56	3754528.28	110.73	0.00	110.73	
PERIOD		0.30193	ug/m^3	R_187	414081.56	3754553.28	111.00	0.00	111.00	
PERIOD		0.28236	ug/m^3	R_188	414081.56	3754578.28	111.28	0.00	111.28	
PERIOD		0.27072	ug/m^3	R_189	414081.56	3754603.28	111.50	0.00	111.50	
PERIOD		0.26587	ug/m^3	R_190	414081.56	3754628.28	111.50	0.00	111.50	
PERIOD		0.26589	ug/m^3	R_191	414081.56	3754653.28	111.51	0.00	111.51	
PERIOD		0.26974	ug/m^3	R_192	414081.56	3754678.28	111.51	0.00	111.51	
PERIOD		0.27634	ug/m^3	R_193	414081.56	3754703.28	111.58	0.00	111.58	
PERIOD		0.28515	ug/m^3	R_194	414081.56	3754728.28	111.71	0.00	111.71	
PERIOD		0.29671	ug/m^3	R_195	414081.56	3754753.28	111.84	0.00	111.84	
PERIOD		0.31242	ug/m^3	R_196	414081.56	3754778.28	111.97	0.00	111.97	
PERIOD		0.33538	ug/m^3	R_197	414081.56	3754803.28	112.21	0.00	112.21	
PERIOD		0.37087	ug/m^3	R_198	414081.56	3754828.28	112.48	0.00	112.48	
PERIOD		0.42764	ug/m^3	R_199	414081.56	3754853.28	112.75	0.00	112.75	
PERIOD		0.52173	ug/m^3	R_200	414081.56	3754878.28	113.00	0.00	113.00	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.68445	ug/m^3	R_201	414081.56	3754903.28	113.00	0.00	113.00	
PERIOD		0.98822	ug/m^3	R_202	414081.56	3754928.28	113.00	0.00	113.00	
PERIOD		0.91150	ug/m^3	R_203	414106.56	3754378.28	109.77	0.00	109.77	
PERIOD		0.78785	ug/m^3	R_204	414106.56	3754403.28	110.04	0.00	110.04	
PERIOD		0.66020	ug/m^3	R_205	414106.56	3754428.28	110.16	0.00	110.16	
PERIOD		0.55211	ug/m^3	R_206	414106.56	3754453.28	110.16	0.00	110.16	
PERIOD		0.46821	ug/m^3	R_207	414106.56	3754478.28	110.16	0.00	110.16	
PERIOD		0.40592	ug/m^3	R_208	414106.56	3754503.28	110.16	0.00	110.16	
PERIOD		0.35954	ug/m^3	R_209	414106.56	3754528.28	110.41	0.00	110.41	
PERIOD		0.32673	ug/m^3	R_210	414106.56	3754553.28	110.68	0.00	110.68	
PERIOD		0.30469	ug/m^3	R_211	414106.56	3754578.28	110.95	0.00	110.95	
PERIOD		0.29152	ug/m^3	R_212	414106.56	3754603.28	111.18	0.00	111.18	
PERIOD		0.28615	ug/m^3	R_213	414106.56	3754628.28	111.18	0.00	111.18	
PERIOD		0.28640	ug/m^3	R_214	414106.56	3754653.28	111.18	0.00	111.18	
PERIOD		0.29097	ug/m^3	R_215	414106.56	3754678.28	111.18	0.00	111.18	
PERIOD		0.29838	ug/m^3	R_216	414106.56	3754703.28	111.30	0.00	111.30	
PERIOD		0.30783	ug/m^3	R_217	414106.56	3754728.28	111.52	0.00	111.52	
PERIOD		0.31972	ug/m^3	R_218	414106.56	3754753.28	111.74	0.00	111.74	
PERIOD		0.33552	ug/m^3	R_219	414106.56	3754778.28	111.96	0.00	111.96	
PERIOD		0.35860	ug/m^3	R_220	414106.56	3754803.28	112.22	0.00	112.22	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.39473	ug/m^3	R_221	414106.56	3754828.28	112.49	0.00	112.49	
PERIOD		0.45328	ug/m^3	R_222	414106.56	3754853.28	112.76	0.00	112.76	
PERIOD		0.55113	ug/m^3	R_223	414106.56	3754878.28	113.00	0.00	113.00	
PERIOD		0.72011	ug/m^3	R_224	414106.56	3754903.28	113.00	0.00	113.00	
PERIOD		1.03437	ug/m^3	R_225	414106.56	3754928.28	113.00	0.00	113.00	
PERIOD		1.06281	ug/m^3	R_226	414131.56	3754378.28	109.44	0.00	109.44	
PERIOD		0.91722	ug/m^3	R_227	414131.56	3754403.28	109.72	0.00	109.72	
PERIOD		0.75166	ug/m^3	R_228	414131.56	3754428.28	109.86	0.00	109.86	
PERIOD		0.61650	ug/m^3	R_229	414131.56	3754453.28	109.91	0.00	109.91	
PERIOD		0.51706	ug/m^3	R_230	414131.56	3754478.28	109.95	0.00	109.95	
PERIOD		0.44562	ug/m^3	R_231	414131.56	3754503.28	110.00	0.00	110.00	
PERIOD		0.39312	ug/m^3	R_232	414131.56	3754528.28	110.20	0.00	110.20	
PERIOD		0.35571	ug/m^3	R_233	414131.56	3754553.28	110.43	0.00	110.43	
PERIOD		0.33042	ug/m^3	R_234	414131.56	3754578.28	110.66	0.00	110.66	
PERIOD		0.31524	ug/m^3	R_235	414131.56	3754603.28	110.86	0.00	110.86	
PERIOD		0.30890	ug/m^3	R_236	414131.56	3754628.28	110.90	0.00	110.90	
PERIOD		0.30924	ug/m^3	R_237	414131.56	3754653.28	110.94	0.00	110.94	
PERIOD		0.31466	ug/m^3	R_238	414131.56	3754678.28	110.98	0.00	110.98	
PERIOD		0.32319	ug/m^3	R_239	414131.56	3754703.28	111.14	0.00	111.14	
PERIOD		0.33344	ug/m^3	R_240	414131.56	3754728.28	111.41	0.00	111.41	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.34558	ug/m^3	R_241	414131.56	3754753.28	111.68	0.00	111.68	
PERIOD		0.36100	ug/m^3	R_242	414131.56	3754778.28	111.95	0.00	111.95	
PERIOD		0.38348	ug/m^3	R_243	414131.56	3754803.28	112.22	0.00	112.22	
PERIOD		0.41926	ug/m^3	R_244	414131.56	3754828.28	112.49	0.00	112.49	
PERIOD		0.47833	ug/m^3	R_245	414131.56	3754853.28	112.76	0.00	112.76	
PERIOD		0.57799	ug/m^3	R_246	414131.56	3754878.28	113.00	0.00	113.00	
PERIOD		0.75068	ug/m^3	R_247	414131.56	3754903.28	113.03	0.00	113.03	
PERIOD		1.07033	ug/m^3	R_248	414131.56	3754928.28	113.06	0.00	113.06	
PERIOD		1.74958	ug/m^3	R_249	414131.56	3754953.28	113.09	0.00	113.09	
PERIOD		1.29940	ug/m^3	R_250	414156.56	3754378.28	109.12	0.00	109.12	
PERIOD		1.11211	ug/m^3	R_251	414156.56	3754403.28	109.39	0.00	109.39	
PERIOD		0.87642	ug/m^3	R_252	414156.56	3754428.28	109.59	0.00	109.59	
PERIOD		0.70296	ug/m^3	R_253	414156.56	3754453.28	109.72	0.00	109.72	
PERIOD		0.58302	ug/m^3	R_254	414156.56	3754478.28	109.86	0.00	109.86	
PERIOD		0.49730	ug/m^3	R_255	414156.56	3754503.28	109.99	0.00	109.99	
PERIOD		0.43522	ug/m^3	R_256	414156.56	3754528.28	110.13	0.00	110.13	
PERIOD		0.39105	ug/m^3	R_257	414156.56	3754553.28	110.27	0.00	110.27	
PERIOD		0.36104	ug/m^3	R_258	414156.56	3754578.28	110.41	0.00	110.41	
PERIOD		0.34277	ug/m^3	R_259	414156.56	3754603.28	110.55	0.00	110.55	
PERIOD		0.33455	ug/m^3	R_260	414156.56	3754628.28	110.68	0.00	110.68	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.33465	ug/m^3	R_261	414156.56	3754653.28	110.81	0.00	110.81	
PERIOD		0.34106	ug/m^3	R_262	414156.56	3754678.28	110.94	0.00	110.94	
PERIOD		0.35116	ug/m^3	R_263	414156.56	3754703.28	111.14	0.00	111.14	
PERIOD		0.36263	ug/m^3	R_264	414156.56	3754728.28	111.41	0.00	111.41	
PERIOD		0.37501	ug/m^3	R_265	414156.56	3754753.28	111.68	0.00	111.68	
PERIOD		0.38960	ug/m^3	R_266	414156.56	3754778.28	111.95	0.00	111.95	
PERIOD		0.41059	ug/m^3	R_267	414156.56	3754803.28	112.22	0.00	112.22	
PERIOD		0.44497	ug/m^3	R_268	414156.56	3754828.28	112.49	0.00	112.49	
PERIOD		0.50341	ug/m^3	R_269	414156.56	3754853.28	112.76	0.00	112.76	
PERIOD		0.60343	ug/m^3	R_270	414156.56	3754878.28	113.01	0.00	113.01	
PERIOD		0.77772	ug/m^3	R_271	414156.56	3754903.28	113.13	0.00	113.13	
PERIOD		1.10122	ug/m^3	R_272	414156.56	3754928.28	113.25	0.00	113.25	
PERIOD		1.78692	ug/m^3	R_273	414156.56	3754953.28	113.36	0.00	113.36	
PERIOD		0.42238	ug/m^3	R_274	414181.56	3754778.28	111.95	0.00	111.95	
PERIOD		0.44088	ug/m^3	R_275	414181.56	3754803.28	112.22	0.00	112.22	
PERIOD		0.47267	ug/m^3	R_276	414181.56	3754828.28	112.49	0.00	112.49	
PERIOD		0.52914	ug/m^3	R_277	414181.56	3754853.28	112.76	0.00	112.76	
PERIOD		0.62811	ug/m^3	R_278	414181.56	3754878.28	113.03	0.00	113.03	
PERIOD		0.80237	ug/m^3	R_279	414181.56	3754903.28	113.23	0.00	113.23	
PERIOD		1.12748	ug/m^3	R_280	414181.56	3754928.28	113.44	0.00	113.44	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.81851	ug/m^3	R_281	414181.56	3754953.28	113.64	0.00	113.64	
PERIOD		0.46087	ug/m^3	R_282	414206.56	3754778.28	112.06	0.00	112.06	
PERIOD		0.47548	ug/m^3	R_283	414206.56	3754803.28	112.32	0.00	112.32	
PERIOD		0.50307	ug/m^3	R_284	414206.56	3754828.28	112.59	0.00	112.59	
PERIOD		0.55635	ug/m^3	R_285	414206.56	3754853.28	112.86	0.00	112.86	
PERIOD		0.65297	ug/m^3	R_286	414206.56	3754878.28	113.13	0.00	113.13	
PERIOD		0.82604	ug/m^3	R_287	414206.56	3754903.28	113.39	0.00	113.39	
PERIOD		1.15063	ug/m^3	R_288	414206.56	3754928.28	113.66	0.00	113.66	
PERIOD		1.84363	ug/m^3	R_289	414206.56	3754953.28	113.93	0.00	113.93	
PERIOD		0.50742	ug/m^3	R_290	414231.56	3754778.28	112.38	0.00	112.38	
PERIOD		0.51589	ug/m^3	R_291	414231.56	3754803.28	112.65	0.00	112.65	
PERIOD		0.53755	ug/m^3	R_292	414231.56	3754828.28	112.92	0.00	112.92	
PERIOD		0.58624	ug/m^3	R_293	414231.56	3754853.28	113.19	0.00	113.19	
PERIOD		0.67962	ug/m^3	R_294	414231.56	3754878.28	113.45	0.00	113.45	
PERIOD		0.85029	ug/m^3	R_295	414231.56	3754903.28	113.72	0.00	113.72	
PERIOD		1.17346	ug/m^3	R_296	414231.56	3754928.28	113.99	0.00	113.99	
PERIOD		1.86595	ug/m^3	R_297	414231.56	3754953.28	114.26	0.00	114.26	
PERIOD		0.56581	ug/m^3	R_298	414256.56	3754778.28	112.71	0.00	112.71	
PERIOD		0.56491	ug/m^3	R_299	414256.56	3754803.28	112.98	0.00	112.98	
PERIOD		0.57789	ug/m^3	R_300	414256.56	3754828.28	113.25	0.00	113.25	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.62007	ug/m^3	R_301	414256.56	3754853.28	113.51	0.00	113.51	
PERIOD		0.70840	ug/m^3	R_302	414256.56	3754878.28	113.78	0.00	113.78	
PERIOD		0.87502	ug/m^3	R_303	414256.56	3754903.28	114.05	0.00	114.05	
PERIOD		1.19567	ug/m^3	R_304	414256.56	3754928.28	114.32	0.00	114.32	
PERIOD		1.89285	ug/m^3	R_305	414256.56	3754953.28	114.58	0.00	114.58	
PERIOD		0.64282	ug/m^3	R_306	414281.56	3754778.28	112.96	0.00	112.96	
PERIOD		0.62659	ug/m^3	R_307	414281.56	3754803.28	113.23	0.00	113.23	
PERIOD		0.62675	ug/m^3	R_308	414281.56	3754828.28	113.50	0.00	113.50	
PERIOD		0.65976	ug/m^3	R_309	414281.56	3754853.28	113.77	0.00	113.77	
PERIOD		0.74155	ug/m^3	R_310	414281.56	3754878.28	114.04	0.00	114.04	
PERIOD		0.90320	ug/m^3	R_311	414281.56	3754903.28	114.31	0.00	114.31	
PERIOD		1.22087	ug/m^3	R_312	414281.56	3754928.28	114.58	0.00	114.58	
PERIOD		1.92064	ug/m^3	R_313	414281.56	3754953.28	114.86	0.00	114.86	
PERIOD		0.75039	ug/m^3	R_314	414306.56	3754778.28	112.98	0.00	112.98	
PERIOD		0.70792	ug/m^3	R_315	414306.56	3754803.28	113.23	0.00	113.23	
PERIOD		0.68879	ug/m^3	R_316	414306.56	3754828.28	113.51	0.00	113.51	
PERIOD		0.71027	ug/m^3	R_317	414306.56	3754853.28	113.78	0.00	113.78	
PERIOD		0.78451	ug/m^3	R_318	414306.56	3754878.28	114.05	0.00	114.05	
PERIOD		0.93953	ug/m^3	R_319	414306.56	3754903.28	114.32	0.00	114.32	
PERIOD		1.25225	ug/m^3	R_320	414306.56	3754928.28	114.59	0.00	114.59	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.95017	ug/m^3	R_321	414306.56	3754953.28	114.86	0.00	114.86	
PERIOD		0.91242	ug/m^3	R_322	414331.56	3754778.28	112.99	0.00	112.99	
PERIOD		0.82188	ug/m^3	R_323	414331.56	3754803.28	113.24	0.00	113.24	
PERIOD		0.77526	ug/m^3	R_324	414331.56	3754828.28	113.51	0.00	113.51	
PERIOD		0.78175	ug/m^3	R_325	414331.56	3754853.28	113.78	0.00	113.78	
PERIOD		0.84374	ug/m^3	R_326	414331.56	3754878.28	114.05	0.00	114.05	
PERIOD		0.98771	ug/m^3	R_327	414331.56	3754903.28	114.32	0.00	114.32	
PERIOD		1.29005	ug/m^3	R_328	414331.56	3754928.28	114.59	0.00	114.59	
PERIOD		1.98395	ug/m^3	R_329	414331.56	3754953.28	114.86	0.00	114.86	
PERIOD		1.18624	ug/m^3	R_330	414356.56	3754778.28	113.05	0.00	113.05	
PERIOD		1.00773	ug/m^3	R_331	414356.56	3754803.28	113.29	0.00	113.29	
PERIOD		0.91869	ug/m^3	R_332	414356.56	3754828.28	113.55	0.00	113.55	
PERIOD		0.89162	ug/m^3	R_333	414356.56	3754853.28	113.82	0.00	113.82	
PERIOD		0.92852	ug/m^3	R_334	414356.56	3754878.28	114.09	0.00	114.09	
PERIOD		1.05252	ug/m^3	R_335	414356.56	3754903.28	114.36	0.00	114.36	
PERIOD		1.34007	ug/m^3	R_336	414356.56	3754928.28	114.62	0.00	114.62	
PERIOD		2.02010	ug/m^3	R_337	414356.56	3754953.28	114.89	0.00	114.89	
PERIOD		1.80753	ug/m^3	R_338	414381.56	3754778.28	113.36	0.00	113.36	
PERIOD		1.40133	ug/m^3	R_339	414381.56	3754803.28	113.61	0.00	113.61	
PERIOD		1.15996	ug/m^3	R_340	414381.56	3754828.28	113.88	0.00	113.88	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.05270	ug/m^3	R_341	414381.56	3754853.28	114.15	0.00	114.15	
PERIOD		1.04076	ug/m^3	R_342	414381.56	3754878.28	114.42	0.00	114.42	
PERIOD		1.13584	ug/m^3	R_343	414381.56	3754903.28	114.68	0.00	114.68	
PERIOD		1.40366	ug/m^3	R_344	414381.56	3754928.28	114.95	0.00	114.95	
PERIOD		2.07441	ug/m^3	R_345	414381.56	3754953.28	115.22	0.00	115.22	
PERIOD		3.35828	ug/m^3	R_346	414406.56	3754778.28	113.68	0.00	113.68	
PERIOD		2.01961	ug/m^3	R_347	414406.56	3754803.28	113.94	0.00	113.94	
PERIOD		1.49141	ug/m^3	R_348	414406.56	3754828.28	114.21	0.00	114.21	
PERIOD		1.25628	ug/m^3	R_349	414406.56	3754853.28	114.48	0.00	114.48	
PERIOD		1.18496	ug/m^3	R_350	414406.56	3754878.28	114.74	0.00	114.74	
PERIOD		1.24407	ug/m^3	R_351	414406.56	3754903.28	115.01	0.00	115.01	
PERIOD		1.48456	ug/m^3	R_352	414406.56	3754928.28	115.28	0.00	115.28	
PERIOD		2.13623	ug/m^3	R_353	414406.56	3754953.28	115.55	0.00	115.55	
PERIOD		4.47946	ug/m^3	R_354	414431.56	3754778.28	113.98	0.00	113.98	
PERIOD		2.61126	ug/m^3	R_355	414431.56	3754803.28	114.25	0.00	114.25	
PERIOD		1.83153	ug/m^3	R_356	414431.56	3754828.28	114.52	0.00	114.52	
PERIOD		1.48910	ug/m^3	R_357	414431.56	3754853.28	114.79	0.00	114.79	
PERIOD		1.36021	ug/m^3	R_358	414431.56	3754878.28	115.06	0.00	115.06	
PERIOD		1.38057	ug/m^3	R_359	414431.56	3754903.28	115.33	0.00	115.33	
PERIOD		1.58988	ug/m^3	R_360	414431.56	3754928.28	115.60	0.00	115.60	

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Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.21217	ug/m^3	R_361	414431.56	3754953.28	115.87	0.00	115.87	
PERIOD		4.93126	ug/m^3	R_362	414456.56	3754778.28	113.98	0.00	113.98	
PERIOD		3.01972	ug/m^3	R_363	414456.56	3754803.28	114.25	0.00	114.25	
PERIOD		2.15135	ug/m^3	R_364	414456.56	3754828.28	114.52	0.00	114.52	
PERIOD		1.74675	ug/m^3	R_365	414456.56	3754853.28	114.79	0.00	114.79	
PERIOD		1.57433	ug/m^3	R_366	414456.56	3754878.28	115.06	0.00	115.06	
PERIOD		1.56050	ug/m^3	R_367	414456.56	3754903.28	115.33	0.00	115.33	
PERIOD		1.73292	ug/m^3	R_368	414456.56	3754928.28	115.60	0.00	115.60	
PERIOD		2.31604	ug/m^3	R_369	414456.56	3754953.28	115.87	0.00	115.87	
PERIOD		5.20814	ug/m^3	R_370	414481.56	3754778.28	113.98	0.00	113.98	
PERIOD		3.32416	ug/m^3	R_371	414481.56	3754803.28	114.25	0.00	114.25	
PERIOD		2.45842	ug/m^3	R_372	414481.56	3754828.28	114.52	0.00	114.52	
PERIOD		2.03806	ug/m^3	R_373	414481.56	3754853.28	114.79	0.00	114.79	
PERIOD		1.84741	ug/m^3	R_374	414481.56	3754878.28	115.06	0.00	115.06	
PERIOD		1.81159	ug/m^3	R_375	414481.56	3754903.28	115.33	0.00	115.33	
PERIOD		1.95063	ug/m^3	R_376	414481.56	3754928.28	115.60	0.00	115.60	
PERIOD		2.47600	ug/m^3	R_377	414481.56	3754953.28	115.87	0.00	115.87	
PERIOD		5.37954	ug/m^3	R_378	414506.56	3754778.28	113.98	0.00	113.98	
PERIOD		3.64672	ug/m^3	R_379	414506.56	3754803.28	114.25	0.00	114.25	
PERIOD		2.84639	ug/m^3	R_380	414506.56	3754828.28	114.52	0.00	114.52	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.45463	ug/m^3	R_381	414506.56	3754853.28	114.80	0.00	114.80	
PERIOD		2.27198	ug/m^3	R_382	414506.56	3754878.28	115.07	0.00	115.07	
PERIOD		2.22868	ug/m^3	R_383	414506.56	3754903.28	115.34	0.00	115.34	
PERIOD		2.33919	ug/m^3	R_384	414506.56	3754928.28	115.61	0.00	115.61	
PERIOD		2.78601	ug/m^3	R_385	414506.56	3754953.28	115.88	0.00	115.88	
PERIOD		5.62831	ug/m^3	R_386	414531.56	3754778.28	113.99	0.00	113.99	
PERIOD		4.20597	ug/m^3	R_387	414531.56	3754803.28	114.26	0.00	114.26	
PERIOD		3.58017	ug/m^3	R_388	414531.56	3754828.28	114.53	0.00	114.53	
PERIOD		3.27580	ug/m^3	R_389	414531.56	3754853.28	114.80	0.00	114.80	
PERIOD		3.12477	ug/m^3	R_390	414531.56	3754878.28	115.07	0.00	115.07	
PERIOD		3.08502	ug/m^3	R_391	414531.56	3754903.28	115.34	0.00	115.34	
PERIOD		3.16537	ug/m^3	R_392	414531.56	3754928.28	115.61	0.00	115.61	
PERIOD		3.50645	ug/m^3	R_393	414531.56	3754953.28	115.88	0.00	115.88	
PERIOD		4.01680	ug/m^3	R_394	414571.80	3754431.75	111.21	0.00	111.21	
PERIOD		2.10691	ug/m^3	R_395	414596.80	3754456.75	111.31	0.00	111.31	
PERIOD		1.61845	ug/m^3	R_396	414596.80	3754481.75	111.58	0.00	111.58	
PERIOD		1.29228	ug/m^3	R_397	414596.80	3754506.75	111.81	0.00	111.81	
PERIOD		1.07320	ug/m^3	R_398	414596.80	3754531.75	111.87	0.00	111.87	
PERIOD		0.92408	ug/m^3	R_399	414596.80	3754556.75	111.92	0.00	111.92	
PERIOD		0.82492	ug/m^3	R_400	414596.80	3754581.75	111.97	0.00	111.97	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.76534	ug/m^3	R_401	414596.80	3754606.75	112.14	0.00	112.14	
PERIOD		0.74380	ug/m^3	R_402	414596.80	3754631.75	112.41	0.00	112.41	
PERIOD		0.76707	ug/m^3	R_403	414596.80	3754656.75	112.68	0.00	112.68	
PERIOD		0.85452	ug/m^3	R_404	414596.80	3754681.75	112.95	0.00	112.95	
PERIOD		1.05310	ug/m^3	R_405	414596.80	3754706.75	113.22	0.00	113.22	
PERIOD		1.47724	ug/m^3	R_406	414596.80	3754731.75	113.49	0.00	113.49	
PERIOD		2.42494	ug/m^3	R_407	414596.80	3754756.75	113.76	0.00	113.76	
PERIOD		3.33678	ug/m^3	R_408	414596.80	3754781.75	114.03	0.00	114.03	
PERIOD		3.72980	ug/m^3	R_409	414596.80	3754806.75	114.30	0.00	114.30	
PERIOD		3.88226	ug/m^3	R_410	414596.80	3754831.75	114.57	0.00	114.57	
PERIOD		3.95726	ug/m^3	R_411	414596.80	3754856.75	114.84	0.00	114.84	
PERIOD		4.01797	ug/m^3	R_412	414596.80	3754881.75	115.11	0.00	115.11	
PERIOD		4.06064	ug/m^3	R_413	414596.80	3754906.75	115.38	0.00	115.38	
PERIOD		4.12404	ug/m^3	R_414	414596.80	3754931.75	115.65	0.00	115.65	
PERIOD		4.18136	ug/m^3	R_415	414596.80	3754956.75	115.92	0.00	115.92	
PERIOD		1.62616	ug/m^3	R_416	414621.80	3754456.75	110.99	0.00	110.99	
PERIOD		1.34728	ug/m^3	R_417	414621.80	3754481.75	111.26	0.00	111.26	
PERIOD		1.13016	ug/m^3	R_418	414621.80	3754506.75	111.51	0.00	111.51	
PERIOD		0.96973	ug/m^3	R_419	414621.80	3754531.75	111.65	0.00	111.65	
PERIOD		0.85364	ug/m^3	R_420	414621.80	3754556.75	111.79	0.00	111.79	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.77321	ug/m^3	R_421	414621.80	3754581.75	111.93	0.00	111.93	
PERIOD		0.72358	ug/m^3	R_422	414621.80	3754606.75	112.14	0.00	112.14	
PERIOD		0.70448	ug/m^3	R_423	414621.80	3754631.75	112.41	0.00	112.41	
PERIOD		0.72025	ug/m^3	R_424	414621.80	3754656.75	112.68	0.00	112.68	
PERIOD		0.78117	ug/m^3	R_425	414621.80	3754681.75	112.95	0.00	112.95	
PERIOD		0.90755	ug/m^3	R_426	414621.80	3754706.75	113.22	0.00	113.22	
PERIOD		1.13889	ug/m^3	R_427	414621.80	3754731.75	113.49	0.00	113.49	
PERIOD		1.51207	ug/m^3	R_428	414621.80	3754756.75	113.76	0.00	113.76	
PERIOD		1.91628	ug/m^3	R_429	414621.80	3754781.75	114.03	0.00	114.03	
PERIOD		2.19861	ug/m^3	R_430	414621.80	3754806.75	114.30	0.00	114.30	
PERIOD		2.35833	ug/m^3	R_431	414621.80	3754831.75	114.57	0.00	114.57	
PERIOD		2.45109	ug/m^3	R_432	414621.80	3754856.75	114.84	0.00	114.84	
PERIOD		2.51183	ug/m^3	R_433	414621.80	3754881.75	115.11	0.00	115.11	
PERIOD		2.55301	ug/m^3	R_434	414621.80	3754906.75	115.39	0.00	115.39	
PERIOD		2.57931	ug/m^3	R_435	414621.80	3754931.75	115.66	0.00	115.66	
PERIOD		1.25108	ug/m^3	R_436	414646.80	3754456.75	110.66	0.00	110.66	
PERIOD		1.09973	ug/m^3	R_437	414646.80	3754481.75	110.94	0.00	110.94	
PERIOD		0.96514	ug/m^3	R_438	414646.80	3754506.75	111.20	0.00	111.20	
PERIOD		0.85563	ug/m^3	R_439	414646.80	3754531.75	111.43	0.00	111.43	
PERIOD		0.77119	ug/m^3	R_440	414646.80	3754556.75	111.66	0.00	111.66	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.71024	ug/m^3	R_441	414646.80	3754581.75	111.89	0.00	111.89	
PERIOD		0.67140	ug/m^3	R_442	414646.80	3754606.75	112.14	0.00	112.14	
PERIOD		0.65501	ug/m^3	R_443	414646.80	3754631.75	112.41	0.00	112.41	
PERIOD		0.66348	ug/m^3	R_444	414646.80	3754656.75	112.68	0.00	112.68	
PERIOD		0.70190	ug/m^3	R_445	414646.80	3754681.75	112.95	0.00	112.95	
PERIOD		0.77836	ug/m^3	R_446	414646.80	3754706.75	113.22	0.00	113.22	
PERIOD		0.90397	ug/m^3	R_447	414646.80	3754731.75	113.49	0.00	113.49	
PERIOD		1.07901	ug/m^3	R_448	414646.80	3754756.75	113.76	0.00	113.76	
PERIOD		1.27516	ug/m^3	R_449	414646.80	3754781.75	114.03	0.00	114.03	
PERIOD		1.44400	ug/m^3	R_450	414646.80	3754806.75	114.31	0.00	114.31	
PERIOD		1.56359	ug/m^3	R_451	414646.80	3754831.75	114.58	0.00	114.58	
PERIOD		1.64511	ug/m^3	R_452	414646.80	3754856.75	114.85	0.00	114.85	
PERIOD		1.69951	ug/m^3	R_453	414646.80	3754881.75	115.12	0.00	115.12	
PERIOD		0.68560	ug/m^3	R_454	414671.80	3754556.75	111.60	0.00	111.60	
PERIOD		0.64198	ug/m^3	R_455	414671.80	3754581.75	111.87	0.00	111.87	
PERIOD		0.61317	ug/m^3	R_456	414671.80	3754606.75	112.14	0.00	112.14	
PERIOD		0.59999	ug/m^3	R_457	414671.80	3754631.75	112.41	0.00	112.41	
PERIOD		0.60388	ug/m^3	R_458	414671.80	3754656.75	112.68	0.00	112.68	
PERIOD		0.62714	ug/m^3	R_459	414671.80	3754681.75	112.96	0.00	112.96	
PERIOD		0.67265	ug/m^3	R_460	414671.80	3754706.75	113.19	0.00	113.19	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.74185	ug/m^3	R_461	414671.80	3754731.75	113.42	0.00	113.42	
PERIOD		0.83328	ug/m^3	R_462	414671.80	3754756.75	113.66	0.00	113.66	
PERIOD		0.93718	ug/m^3	R_463	414671.80	3754781.75	113.90	0.00	113.90	
PERIOD		1.03709	ug/m^3	R_464	414671.80	3754806.75	114.17	0.00	114.17	
PERIOD		1.11814	ug/m^3	R_465	414671.80	3754831.75	114.44	0.00	114.44	
PERIOD		0.55918	ug/m^3	R_466	414696.80	3754681.75	112.96	0.00	112.96	
PERIOD		0.58613	ug/m^3	R_467	414696.80	3754706.75	113.12	0.00	113.12	
PERIOD		0.62571	ug/m^3	R_468	414696.80	3754731.75	113.26	0.00	113.26	
PERIOD		0.67696	ug/m^3	R_469	414696.80	3754756.75	113.41	0.00	113.41	
PERIOD		4.51023	ug/m^3	S_001	414365.35	3754414.82	110.04	0.00	110.04	
PERIOD		2.85902	ug/m^3	S_002	414365.35	3754439.82	110.31	0.00	110.31	
PERIOD		1.97700	ug/m^3	S_003	414365.35	3754464.82	110.58	0.00	110.58	
PERIOD		1.45833	ug/m^3	S_004	414365.35	3754489.82	110.85	0.00	110.85	
PERIOD		1.13341	ug/m^3	S_005	414365.35	3754514.82	111.12	0.00	111.12	
PERIOD		0.91989	ug/m^3	S_006	414365.35	3754539.82	111.39	0.00	111.39	
PERIOD		0.77650	ug/m^3	S_007	414365.35	3754564.82	111.66	0.00	111.66	
PERIOD		0.68196	ug/m^3	S_008	414365.35	3754589.82	111.93	0.00	111.93	
PERIOD		0.62599	ug/m^3	S_009	414365.35	3754614.82	112.20	0.00	112.20	
PERIOD		0.60717	ug/m^3	S_010	414365.35	3754639.82	112.47	0.00	112.47	
PERIOD		4.74982	ug/m^3	S_011	414390.35	3754414.82	110.04	0.00	110.04	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.96354	ug/m^3	S_012	414390.35	3754439.82	110.31	0.00	110.31	
PERIOD		2.04723	ug/m^3	S_013	414390.35	3754464.82	110.58	0.00	110.58	
PERIOD		1.51387	ug/m^3	S_014	414390.35	3754489.82	110.85	0.00	110.85	
PERIOD		1.18044	ug/m^3	S_015	414390.35	3754514.82	111.12	0.00	111.12	
PERIOD		0.96142	ug/m^3	S_016	414390.35	3754539.82	111.39	0.00	111.39	
PERIOD		0.81418	ug/m^3	S_017	414390.35	3754564.82	111.66	0.00	111.66	
PERIOD		0.71706	ug/m^3	S_018	414390.35	3754589.82	111.93	0.00	111.93	
PERIOD		0.65985	ug/m^3	S_019	414390.35	3754614.82	112.20	0.00	112.20	
PERIOD		0.64228	ug/m^3	S_020	414390.35	3754639.82	112.47	0.00	112.47	
PERIOD		0.67615	ug/m^3	S_021	414390.35	3754664.82	112.74	0.00	112.74	
PERIOD		0.79574	ug/m^3	S_022	414390.35	3754689.82	113.01	0.00	113.01	
PERIOD		1.09360	ug/m^3	S_023	414390.35	3754714.82	113.14	0.00	113.14	
PERIOD		1.88151	ug/m^3	S_024	414390.35	3754739.82	113.27	0.00	113.27	
PERIOD		4.82624	ug/m^3	S_025	414415.35	3754414.82	110.04	0.00	110.04	
PERIOD		3.03040	ug/m^3	S_026	414415.35	3754439.82	110.31	0.00	110.31	
PERIOD		2.09946	ug/m^3	S_027	414415.35	3754464.82	110.58	0.00	110.58	
PERIOD		1.55926	ug/m^3	S_028	414415.35	3754489.82	110.85	0.00	110.85	
PERIOD		1.22098	ug/m^3	S_029	414415.35	3754514.82	111.12	0.00	111.12	
PERIOD		0.99833	ug/m^3	S_030	414415.35	3754539.82	111.39	0.00	111.39	
PERIOD		0.84826	ug/m^3	S_031	414415.35	3754564.82	111.66	0.00	111.66	

Sensitive Receptor Summary

Sonora High School
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PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.74929	ug/m^3	S_032	414415.35	3754589.82	111.94	0.00	111.94	
PERIOD		0.69189	ug/m^3	S_033	414415.35	3754614.82	112.21	0.00	112.21	
PERIOD		0.67683	ug/m^3	S_034	414415.35	3754639.82	112.48	0.00	112.48	
PERIOD		0.71984	ug/m^3	S_035	414415.35	3754664.82	112.75	0.00	112.75	
PERIOD		0.86811	ug/m^3	S_036	414415.35	3754689.82	113.01	0.00	113.01	
PERIOD		1.26262	ug/m^3	S_037	414415.35	3754714.82	113.24	0.00	113.24	
PERIOD		2.52735	ug/m^3	S_038	414415.35	3754739.82	113.46	0.00	113.46	
PERIOD		4.85567	ug/m^3	S_039	414440.35	3754414.82	110.22	0.00	110.22	
PERIOD		3.07106	ug/m^3	S_040	414440.35	3754439.82	110.44	0.00	110.44	
PERIOD		2.13734	ug/m^3	S_041	414440.35	3754464.82	110.66	0.00	110.66	
PERIOD		1.59652	ug/m^3	S_042	414440.35	3754489.82	110.88	0.00	110.88	
PERIOD		1.25732	ug/m^3	S_043	414440.35	3754514.82	111.13	0.00	111.13	
PERIOD		1.03211	ug/m^3	S_044	414440.35	3754539.82	111.40	0.00	111.40	
PERIOD		0.87933	ug/m^3	S_045	414440.35	3754564.82	111.67	0.00	111.67	
PERIOD		0.77914	ug/m^3	S_046	414440.35	3754589.82	111.94	0.00	111.94	
PERIOD		0.72220	ug/m^3	S_047	414440.35	3754614.82	112.21	0.00	112.21	
PERIOD		0.71028	ug/m^3	S_048	414440.35	3754639.82	112.48	0.00	112.48	
PERIOD		0.76263	ug/m^3	S_049	414440.35	3754664.82	112.75	0.00	112.75	
PERIOD		0.93821	ug/m^3	S_050	414440.35	3754689.82	113.02	0.00	113.02	
PERIOD		1.41718	ug/m^3	S_051	414440.35	3754714.82	113.29	0.00	113.29	

Sensitive Receptor Summary

Sonora High School
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PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.45941	ug/m^3	S_052	414440.35	3754739.82	113.56	0.00	113.56	
PERIOD		4.91086	ug/m^3	S_053	414465.35	3754414.82	110.53	0.00	110.53	
PERIOD		3.11522	ug/m^3	S_054	414465.35	3754439.82	110.66	0.00	110.66	
PERIOD		2.17639	ug/m^3	S_055	414465.35	3754464.82	110.79	0.00	110.79	
PERIOD		1.63585	ug/m^3	S_056	414465.35	3754489.82	110.93	0.00	110.93	
PERIOD		1.29449	ug/m^3	S_057	414465.35	3754514.82	111.13	0.00	111.13	
PERIOD		1.06455	ug/m^3	S_058	414465.35	3754539.82	111.40	0.00	111.40	
PERIOD		0.90807	ug/m^3	S_059	414465.35	3754564.82	111.67	0.00	111.67	
PERIOD		0.80644	ug/m^3	S_060	414465.35	3754589.82	111.94	0.00	111.94	
PERIOD		0.75012	ug/m^3	S_061	414465.35	3754614.82	112.21	0.00	112.21	
PERIOD		0.74118	ug/m^3	S_062	414465.35	3754639.82	112.48	0.00	112.48	
PERIOD		0.79935	ug/m^3	S_063	414465.35	3754664.82	112.75	0.00	112.75	
PERIOD		0.98762	ug/m^3	S_064	414465.35	3754689.82	113.02	0.00	113.02	
PERIOD		5.05198	ug/m^3	S_065	414490.35	3754414.82	110.84	0.00	110.84	
PERIOD		3.20045	ug/m^3	S_066	414490.35	3754439.82	110.88	0.00	110.88	
PERIOD		2.24797	ug/m^3	S_067	414490.35	3754464.82	110.93	0.00	110.93	
PERIOD		1.69163	ug/m^3	S_068	414490.35	3754489.82	110.97	0.00	110.97	
PERIOD		1.33443	ug/m^3	S_069	414490.35	3754514.82	111.13	0.00	111.13	
PERIOD		1.09484	ug/m^3	S_070	414490.35	3754539.82	111.40	0.00	111.40	
PERIOD		0.93317	ug/m^3	S_071	414490.35	3754564.82	111.67	0.00	111.67	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: OFFSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.82952	ug/m^3	S_072	414490.35	3754589.82	111.94	0.00	111.94	
PERIOD		5.51557	ug/m^3	S_073	414515.35	3754414.82	111.01	0.00	111.01	
PERIOD		3.45603	ug/m^3	S_074	414515.35	3754439.82	111.05	0.00	111.05	
PERIOD		2.38187	ug/m^3	S_075	414515.35	3754464.82	111.09	0.00	111.09	
PERIOD		1.75496	ug/m^3	S_076	414515.35	3754489.82	111.12	0.00	111.12	
PERIOD		1.36804	ug/m^3	S_077	414515.35	3754514.82	111.26	0.00	111.26	
PERIOD		1.11622	ug/m^3	S_078	414515.35	3754539.82	111.49	0.00	111.49	
PERIOD		0.95057	ug/m^3	S_079	414515.35	3754564.82	111.72	0.00	111.72	
PERIOD		4.28022	ug/m^3	S_080	414227.51	3754399.07	108.85	0.00	108.85	
PERIOD		5.82878	ug/m^3	S_081	414257.09	3754397.03	108.83	0.00	108.83	
PERIOD		6.09778	ug/m^3	S_082	414290.13	3754397.82	109.08	0.00	109.08	
PERIOD		6.58982	ug/m^3	S_083	414332.14	3754395.77	109.60	0.00	109.60	
PERIOD		6.36405	ug/m^3	S_084	414357.63	3754398.44	109.87	0.00	109.87	
PERIOD		5.38261	ug/m^3	S_085	414375.88	3754398.29	109.91	0.00	109.91	
PERIOD		4.36872	ug/m^3	S_086	414384.37	3754397.97	109.92	0.00	109.92	
PERIOD		1.53962	ug/m^3	W_001	414013.18	3754959.39	113.38	0.00	113.38	
PERIOD		1.65839	ug/m^3	W_002	414091.17	3754953.02	113.00	0.00	113.00	
PERIOD		0.31416	ug/m^3	W_003	413902.11	3754372.51	111.80	0.00	111.80	
PERIOD		0.35309	ug/m^3	W_004	413901.75	3754342.38	111.80	0.00	111.80	
PERIOD		0.86345	ug/m^3	W_005	414017.65	3754321.83	110.30	0.00	110.30	

Sensitive Receptor Summary

Sonora High School
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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.31077	ug/m^3	W_006	414048.48	3754289.22	109.89	0.00	109.89	
PERIOD		2.16725	ug/m^3	W_007	414066.20	3754252.71	109.66	0.00	109.66	
PERIOD		1.69329	ug/m^3	W_008	413989.29	3754254.49	110.17	0.00	110.17	
PERIOD		3.19534	ug/m^3	W_009	413991.78	3754223.65	109.97	0.00	109.97	
PERIOD		1.73926	ug/m^3	W_010	414170.88	3754279.42	108.30	0.00	108.30	
PERIOD		2.55521	ug/m^3	W_011	414171.23	3754246.81	108.29	0.00	108.29	
PERIOD		2.24881	ug/m^3	W_012	414219.43	3754257.80	108.00	0.00	108.00	
PERIOD		3.10486	ug/m^3	W_013	414219.79	3754234.76	108.00	0.00	108.00	
PERIOD		2.94021	ug/m^3	W_014	414269.41	3754238.66	108.00	0.00	108.00	
PERIOD		3.14510	ug/m^3	W_015	414294.22	3754234.40	108.02	0.00	108.02	
PERIOD		4.13396	ug/m^3	W_016	414321.16	3754218.46	107.91	0.00	107.91	
PERIOD		1.70041	ug/m^3	W_017	414201.53	3754352.55	108.35	0.00	108.35	
PERIOD		2.20772	ug/m^3	W_018	414226.54	3754358.81	108.42	0.00	108.42	
PERIOD		2.66620	ug/m^3	W_019	414254.90	3754359.64	108.43	0.00	108.43	
PERIOD		2.90131	ug/m^3	W_020	414290.34	3754358.81	108.66	0.00	108.66	
PERIOD		3.03424	ug/m^3	W_021	414337.05	3754358.81	109.27	0.00	109.27	
PERIOD		1.74792	ug/m^3	W_022	414299.93	3754303.77	108.31	0.00	108.31	
PERIOD		1.80280	ug/m^3	W_023	414337.46	3754305.02	108.72	0.00	108.72	
PERIOD		1.85928	ug/m^3	W_024	414389.17	3754303.77	109.37	0.00	109.37	
PERIOD		1.94086	ug/m^3	W_025	414432.95	3754301.27	109.81	0.00	109.81	

Sensitive Receptor Summary

Sonora High School
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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.88185	ug/m^3	W_026	414395.01	3754357.98	109.77	0.00	109.77	
PERIOD		2.83746	ug/m^3	W_027	414434.20	3754357.14	110.04	0.00	110.04	
PERIOD		3.10331	ug/m^3	W_028	414485.49	3754359.23	110.35	0.00	110.35	
PERIOD		3.77181	ug/m^3	W_029	414522.61	3754360.06	110.46	0.00	110.46	
PERIOD		2.35727	ug/m^3	W_030	414491.75	3754301.68	109.82	0.00	109.82	
PERIOD		3.26369	ug/m^3	W_031	414525.52	3754300.43	109.81	0.00	109.81	
PERIOD		2.02704	ug/m^3	W_032	414393.76	3754278.75	109.16	0.00	109.16	
PERIOD		2.09954	ug/m^3	W_033	414433.37	3754278.33	109.57	0.00	109.57	
PERIOD		1.95155	ug/m^3	W_034	414343.72	3754280.83	108.55	0.00	108.55	
PERIOD		2.46642	ug/m^3	W_035	414489.25	3754277.91	109.57	0.00	109.57	
PERIOD		3.39975	ug/m^3	W_036	414526.78	3754278.75	109.58	0.00	109.58	
PERIOD		3.22980	ug/m^3	W_037	414489.66	3754239.97	109.16	0.00	109.16	
PERIOD		4.36299	ug/m^3	W_038	414515.10	3754220.79	108.95	0.00	108.95	
PERIOD		5.24450	ug/m^3	W_039	414531.78	3754211.20	108.85	0.00	108.85	
PERIOD		4.94825	ug/m^3	W_040	414499.25	3754209.94	108.83	0.00	108.83	
PERIOD		4.21708	ug/m^3	W_041	414587.56	3754276.59	109.50	0.00	109.50	
PERIOD		3.33480	ug/m^3	W_042	414599.34	3754302.20	109.63	0.00	109.63	
PERIOD		4.22086	ug/m^3	W_043	414589.87	3754365.96	110.40	0.00	110.40	
PERIOD		3.92103	ug/m^3	W_044	414592.69	3754400.03	110.74	0.00	110.74	
PERIOD		2.16838	ug/m^3	W_045	414624.44	3754390.04	110.22	0.00	110.22	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.53003	ug/m^3	W_046	414060.03	3754145.75	108.82	0.00	108.82	
PERIOD		0.72277	ug/m^3	W_047	414223.51	3754098.38	107.20	0.00	107.20	

Sensitive Receptor Summary

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PM2.5 - Concentration - Source Group: ONSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.21580	ug/m^3	R_001	414085.57	3755034.20	113.71	0.00	113.71	
PERIOD		0.24665	ug/m^3	R_002	414110.57	3755034.20	113.71	0.00	113.71	
PERIOD		0.28418	ug/m^3	R_003	414135.57	3755034.20	113.87	0.00	113.87	
PERIOD		0.32870	ug/m^3	R_004	414160.57	3755034.20	114.19	0.00	114.19	
PERIOD		0.29221	ug/m^3	R_005	414160.57	3755059.20	114.46	0.00	114.46	
PERIOD		0.38091	ug/m^3	R_006	414185.57	3755034.20	114.52	0.00	114.52	
PERIOD		0.33595	ug/m^3	R_007	414185.57	3755059.20	114.79	0.00	114.79	
PERIOD		0.44004	ug/m^3	R_008	414210.57	3755034.20	114.85	0.00	114.85	
PERIOD		0.38520	ug/m^3	R_009	414210.57	3755059.20	115.12	0.00	115.12	
PERIOD		0.50460	ug/m^3	R_010	414235.57	3755034.20	115.18	0.00	115.18	
PERIOD		0.43890	ug/m^3	R_011	414235.57	3755059.20	115.44	0.00	115.44	
PERIOD		0.57149	ug/m^3	R_012	414260.57	3755034.20	115.50	0.00	115.50	
PERIOD		0.49473	ug/m^3	R_013	414260.57	3755059.20	115.77	0.00	115.77	
PERIOD		0.63700	ug/m^3	R_014	414285.57	3755034.20	115.73	0.00	115.73	
PERIOD		0.55014	ug/m^3	R_015	414285.57	3755059.20	116.00	0.00	116.00	
PERIOD		0.69713	ug/m^3	R_016	414310.57	3755034.20	115.73	0.00	115.73	
PERIOD		0.60207	ug/m^3	R_017	414310.57	3755059.20	116.00	0.00	116.00	
PERIOD		0.74624	ug/m^3	R_018	414335.57	3755034.20	115.74	0.00	115.74	
PERIOD		0.64600	ug/m^3	R_019	414335.57	3755059.20	116.01	0.00	116.01	
PERIOD		0.78051	ug/m^3	R_020	414360.57	3755034.20	115.81	0.00	115.81	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.67872	ug/m^3	R_021	414360.57	3755059.20	116.08	0.00	116.08	
PERIOD		0.79700	ug/m^3	R_022	414385.57	3755034.20	116.14	0.00	116.14	
PERIOD		0.69747	ug/m^3	R_023	414385.57	3755059.20	116.40	0.00	116.40	
PERIOD		0.79650	ug/m^3	R_024	414410.57	3755034.20	116.46	0.00	116.46	
PERIOD		0.70248	ug/m^3	R_025	414410.57	3755059.20	116.72	0.00	116.72	
PERIOD		0.77949	ug/m^3	R_026	414435.57	3755034.20	116.75	0.00	116.75	
PERIOD		0.74903	ug/m^3	R_027	414460.57	3755034.20	116.75	0.00	116.75	
PERIOD		0.61929	ug/m^3	R_028	413881.56	3754478.28	112.76	0.00	112.76	
PERIOD		0.64705	ug/m^3	R_029	413881.56	3754503.28	113.03	0.00	113.03	
PERIOD		0.66633	ug/m^3	R_030	413881.56	3754528.28	113.09	0.00	113.09	
PERIOD		0.67604	ug/m^3	R_031	413881.56	3754553.28	113.09	0.00	113.09	
PERIOD		0.67552	ug/m^3	R_032	413881.56	3754578.28	113.09	0.00	113.09	
PERIOD		0.66452	ug/m^3	R_033	413881.56	3754603.28	113.10	0.00	113.10	
PERIOD		0.64332	ug/m^3	R_034	413881.56	3754628.28	113.10	0.00	113.10	
PERIOD		0.61227	ug/m^3	R_035	413881.56	3754653.28	113.10	0.00	113.10	
PERIOD		0.57220	ug/m^3	R_036	413881.56	3754678.28	113.11	0.00	113.11	
PERIOD		0.52405	ug/m^3	R_037	413881.56	3754703.28	113.22	0.00	113.22	
PERIOD		0.46963	ug/m^3	R_038	413881.56	3754728.28	113.49	0.00	113.49	
PERIOD		0.41257	ug/m^3	R_039	413881.56	3754753.28	113.77	0.00	113.77	
PERIOD		0.35647	ug/m^3	R_040	413881.56	3754778.28	114.04	0.00	114.04	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.30516	ug/m^3	R_041	413881.56	3754803.28	114.12	0.00	114.12	
PERIOD		0.68117	ug/m^3	R_042	413906.56	3754478.28	112.44	0.00	112.44	
PERIOD		0.71300	ug/m^3	R_043	413906.56	3754503.28	112.71	0.00	112.71	
PERIOD		0.73558	ug/m^3	R_044	413906.56	3754528.28	112.76	0.00	112.76	
PERIOD		0.74769	ug/m^3	R_045	413906.56	3754553.28	112.77	0.00	112.77	
PERIOD		0.74874	ug/m^3	R_046	413906.56	3754578.28	112.77	0.00	112.77	
PERIOD		0.73827	ug/m^3	R_047	413906.56	3754603.28	112.78	0.00	112.78	
PERIOD		0.71572	ug/m^3	R_048	413906.56	3754628.28	112.84	0.00	112.84	
PERIOD		0.68164	ug/m^3	R_049	413906.56	3754653.28	112.91	0.00	112.91	
PERIOD		0.63686	ug/m^3	R_050	413906.56	3754678.28	112.97	0.00	112.97	
PERIOD		0.58248	ug/m^3	R_051	413906.56	3754703.28	113.09	0.00	113.09	
PERIOD		0.52061	ug/m^3	R_052	413906.56	3754728.28	113.30	0.00	113.30	
PERIOD		0.45526	ug/m^3	R_053	413906.56	3754753.28	113.52	0.00	113.52	
PERIOD		0.39095	ug/m^3	R_054	413906.56	3754778.28	113.73	0.00	113.73	
PERIOD		0.33225	ug/m^3	R_055	413906.56	3754803.28	113.80	0.00	113.80	
PERIOD		0.28157	ug/m^3	R_056	413906.56	3754828.28	113.80	0.00	113.80	
PERIOD		0.23943	ug/m^3	R_057	413906.56	3754853.28	113.80	0.00	113.80	
PERIOD		0.75390	ug/m^3	R_058	413931.56	3754478.28	112.11	0.00	112.11	
PERIOD		0.79121	ug/m^3	R_059	413931.56	3754503.28	112.39	0.00	112.39	
PERIOD		0.81728	ug/m^3	R_060	413931.56	3754528.28	112.44	0.00	112.44	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.83219	ug/m^3	R_061	413931.56	3754553.28	112.44	0.00	112.44	
PERIOD		0.83535	ug/m^3	R_062	413931.56	3754578.28	112.44	0.00	112.44	
PERIOD		0.82586	ug/m^3	R_063	413931.56	3754603.28	112.47	0.00	112.47	
PERIOD		0.80225	ug/m^3	R_064	413931.56	3754628.28	112.62	0.00	112.62	
PERIOD		0.76523	ug/m^3	R_065	413931.56	3754653.28	112.77	0.00	112.77	
PERIOD		0.71517	ug/m^3	R_066	413931.56	3754678.28	112.92	0.00	112.92	
PERIOD		0.65355	ug/m^3	R_067	413931.56	3754703.28	113.05	0.00	113.05	
PERIOD		0.58288	ug/m^3	R_068	413931.56	3754728.28	113.18	0.00	113.18	
PERIOD		0.50746	ug/m^3	R_069	413931.56	3754753.28	113.31	0.00	113.31	
PERIOD		0.43306	ug/m^3	R_070	413931.56	3754778.28	113.43	0.00	113.43	
PERIOD		0.36531	ug/m^3	R_071	413931.56	3754803.28	113.47	0.00	113.47	
PERIOD		0.30742	ug/m^3	R_072	413931.56	3754828.28	113.47	0.00	113.47	
PERIOD		0.25989	ug/m^3	R_073	413931.56	3754853.28	113.48	0.00	113.48	
PERIOD		0.22197	ug/m^3	R_074	413931.56	3754878.28	113.49	0.00	113.49	
PERIOD		0.19166	ug/m^3	R_075	413931.56	3754903.28	113.76	0.00	113.76	
PERIOD		0.16802	ug/m^3	R_076	413931.56	3754928.28	114.04	0.00	114.04	
PERIOD		0.78455	ug/m^3	R_077	413956.56	3754453.28	111.52	0.00	111.52	
PERIOD		0.84093	ug/m^3	R_078	413956.56	3754478.28	111.79	0.00	111.79	
PERIOD		0.88369	ug/m^3	R_079	413956.56	3754503.28	112.07	0.00	112.07	
PERIOD		0.91366	ug/m^3	R_080	413956.56	3754528.28	112.11	0.00	112.11	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.93153	ug/m^3	R_081	413956.56	3754553.28	112.12	0.00	112.12	
PERIOD		0.93724	ug/m^3	R_082	413956.56	3754578.28	112.12	0.00	112.12	
PERIOD		0.93006	ug/m^3	R_083	413956.56	3754603.28	112.15	0.00	112.15	
PERIOD		0.90756	ug/m^3	R_084	413956.56	3754628.28	112.39	0.00	112.39	
PERIOD		0.86791	ug/m^3	R_085	413956.56	3754653.28	112.63	0.00	112.63	
PERIOD		0.81217	ug/m^3	R_086	413956.56	3754678.28	112.87	0.00	112.87	
PERIOD		0.74206	ug/m^3	R_087	413956.56	3754703.28	113.02	0.00	113.02	
PERIOD		0.66073	ug/m^3	R_088	413956.56	3754728.28	113.05	0.00	113.05	
PERIOD		0.57275	ug/m^3	R_089	413956.56	3754753.28	113.09	0.00	113.09	
PERIOD		0.48557	ug/m^3	R_090	413956.56	3754778.28	113.13	0.00	113.13	
PERIOD		0.40638	ug/m^3	R_091	413956.56	3754803.28	113.15	0.00	113.15	
PERIOD		0.33935	ug/m^3	R_092	413956.56	3754828.28	113.15	0.00	113.15	
PERIOD		0.28524	ug/m^3	R_093	413956.56	3754853.28	113.15	0.00	113.15	
PERIOD		0.24294	ug/m^3	R_094	413956.56	3754878.28	113.17	0.00	113.17	
PERIOD		0.20945	ug/m^3	R_095	413956.56	3754903.28	113.44	0.00	113.44	
PERIOD		0.18353	ug/m^3	R_096	413956.56	3754928.28	113.71	0.00	113.71	
PERIOD		0.88439	ug/m^3	R_097	413981.56	3754453.28	111.32	0.00	111.32	
PERIOD		0.94821	ug/m^3	R_098	413981.56	3754478.28	111.54	0.00	111.54	
PERIOD		0.99621	ug/m^3	R_099	413981.56	3754503.28	111.75	0.00	111.75	
PERIOD		1.02964	ug/m^3	R_100	413981.56	3754528.28	111.84	0.00	111.84	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.05048	ug/m^3	R_101	413981.56	3754553.28	111.90	0.00	111.90	
PERIOD		1.05942	ug/m^3	R_102	413981.56	3754578.28	111.95	0.00	111.95	
PERIOD		1.05531	ug/m^3	R_103	413981.56	3754603.28	112.03	0.00	112.03	
PERIOD		1.03612	ug/m^3	R_104	413981.56	3754628.28	112.25	0.00	112.25	
PERIOD		0.99645	ug/m^3	R_105	413981.56	3754653.28	112.47	0.00	112.47	
PERIOD		0.93576	ug/m^3	R_106	413981.56	3754678.28	112.69	0.00	112.69	
PERIOD		0.85624	ug/m^3	R_107	413981.56	3754703.28	112.81	0.00	112.81	
PERIOD		0.76110	ug/m^3	R_108	413981.56	3754728.28	112.81	0.00	112.81	
PERIOD		0.65651	ug/m^3	R_109	413981.56	3754753.28	112.82	0.00	112.82	
PERIOD		0.55207	ug/m^3	R_110	413981.56	3754778.28	112.82	0.00	112.82	
PERIOD		0.45766	ug/m^3	R_111	413981.56	3754803.28	112.86	0.00	112.86	
PERIOD		0.37929	ug/m^3	R_112	413981.56	3754828.28	112.91	0.00	112.91	
PERIOD		0.31697	ug/m^3	R_113	413981.56	3754853.28	112.96	0.00	112.96	
PERIOD		0.26928	ug/m^3	R_114	413981.56	3754878.28	113.01	0.00	113.01	
PERIOD		0.23189	ug/m^3	R_115	413981.56	3754903.28	113.24	0.00	113.24	
PERIOD		0.20317	ug/m^3	R_116	413981.56	3754928.28	113.46	0.00	113.46	
PERIOD		0.91890	ug/m^3	R_117	414006.56	3754428.28	111.07	0.00	111.07	
PERIOD		1.01246	ug/m^3	R_118	414006.56	3754453.28	111.19	0.00	111.19	
PERIOD		1.08454	ug/m^3	R_119	414006.56	3754478.28	111.32	0.00	111.32	
PERIOD		1.13717	ug/m^3	R_120	414006.56	3754503.28	111.44	0.00	111.44	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.17413	ug/m^3	R_121	414006.56	3754528.28	111.59	0.00	111.59	
PERIOD		1.19843	ug/m^3	R_122	414006.56	3754553.28	111.73	0.00	111.73	
PERIOD		1.21119	ug/m^3	R_123	414006.56	3754578.28	111.88	0.00	111.88	
PERIOD		1.21146	ug/m^3	R_124	414006.56	3754603.28	112.02	0.00	112.02	
PERIOD		1.19596	ug/m^3	R_125	414006.56	3754628.28	112.15	0.00	112.15	
PERIOD		1.15982	ug/m^3	R_126	414006.56	3754653.28	112.28	0.00	112.28	
PERIOD		1.09585	ug/m^3	R_127	414006.56	3754678.28	112.41	0.00	112.41	
PERIOD		1.00536	ug/m^3	R_128	414006.56	3754703.28	112.49	0.00	112.49	
PERIOD		0.89211	ug/m^3	R_129	414006.56	3754728.28	112.49	0.00	112.49	
PERIOD		0.76499	ug/m^3	R_130	414006.56	3754753.28	112.49	0.00	112.49	
PERIOD		0.63635	ug/m^3	R_131	414006.56	3754778.28	112.49	0.00	112.49	
PERIOD		0.52134	ug/m^3	R_132	414006.56	3754803.28	112.60	0.00	112.60	
PERIOD		0.42847	ug/m^3	R_133	414006.56	3754828.28	112.74	0.00	112.74	
PERIOD		0.35703	ug/m^3	R_134	414006.56	3754853.28	112.87	0.00	112.87	
PERIOD		0.30252	ug/m^3	R_135	414006.56	3754878.28	113.01	0.00	113.01	
PERIOD		0.26092	ug/m^3	R_136	414006.56	3754903.28	113.15	0.00	113.15	
PERIOD		0.22852	ug/m^3	R_137	414006.56	3754928.28	113.29	0.00	113.29	
PERIOD		1.07082	ug/m^3	R_138	414031.56	3754428.28	111.02	0.00	111.02	
PERIOD		1.18165	ug/m^3	R_139	414031.56	3754453.28	111.06	0.00	111.06	
PERIOD		1.26305	ug/m^3	R_140	414031.56	3754478.28	111.09	0.00	111.09	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.32023	ug/m^3	R_141	414031.56	3754503.28	111.13	0.00	111.13	
PERIOD		1.36066	ug/m^3	R_142	414031.56	3754528.28	111.34	0.00	111.34	
PERIOD		1.38880	ug/m^3	R_143	414031.56	3754553.28	111.57	0.00	111.57	
PERIOD		1.40610	ug/m^3	R_144	414031.56	3754578.28	111.81	0.00	111.81	
PERIOD		1.41106	ug/m^3	R_145	414031.56	3754603.28	112.01	0.00	112.01	
PERIOD		1.40037	ug/m^3	R_146	414031.56	3754628.28	112.05	0.00	112.05	
PERIOD		1.36683	ug/m^3	R_147	414031.56	3754653.28	112.09	0.00	112.09	
PERIOD		1.30157	ug/m^3	R_148	414031.56	3754678.28	112.14	0.00	112.14	
PERIOD		1.19878	ug/m^3	R_149	414031.56	3754703.28	112.16	0.00	112.16	
PERIOD		1.06133	ug/m^3	R_150	414031.56	3754728.28	112.16	0.00	112.16	
PERIOD		0.90268	ug/m^3	R_151	414031.56	3754753.28	112.17	0.00	112.17	
PERIOD		0.74159	ug/m^3	R_152	414031.56	3754778.28	112.17	0.00	112.17	
PERIOD		0.60058	ug/m^3	R_153	414031.56	3754803.28	112.34	0.00	112.34	
PERIOD		0.48953	ug/m^3	R_154	414031.56	3754828.28	112.57	0.00	112.57	
PERIOD		0.40919	ug/m^3	R_155	414031.56	3754853.28	112.79	0.00	112.79	
PERIOD		0.34700	ug/m^3	R_156	414031.56	3754878.28	113.00	0.00	113.00	
PERIOD		0.29928	ug/m^3	R_157	414031.56	3754903.28	113.05	0.00	113.05	
PERIOD		0.26144	ug/m^3	R_158	414031.56	3754928.28	113.11	0.00	113.11	
PERIOD		1.10909	ug/m^3	R_159	414056.56	3754403.28	110.68	0.00	110.68	
PERIOD		1.28435	ug/m^3	R_160	414056.56	3754428.28	110.80	0.00	110.80	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.41553	ug/m^3	R_161	414056.56	3754453.28	110.81	0.00	110.81	
PERIOD		1.50601	ug/m^3	R_162	414056.56	3754478.28	110.81	0.00	110.81	
PERIOD		1.56823	ug/m^3	R_163	414056.56	3754503.28	110.81	0.00	110.81	
PERIOD		1.61243	ug/m^3	R_164	414056.56	3754528.28	111.05	0.00	111.05	
PERIOD		1.64445	ug/m^3	R_165	414056.56	3754553.28	111.32	0.00	111.32	
PERIOD		1.66556	ug/m^3	R_166	414056.56	3754578.28	111.60	0.00	111.60	
PERIOD		1.67480	ug/m^3	R_167	414056.56	3754603.28	111.82	0.00	111.82	
PERIOD		1.66763	ug/m^3	R_168	414056.56	3754628.28	111.83	0.00	111.83	
PERIOD		1.63798	ug/m^3	R_169	414056.56	3754653.28	111.83	0.00	111.83	
PERIOD		1.57351	ug/m^3	R_170	414056.56	3754678.28	111.83	0.00	111.83	
PERIOD		1.45906	ug/m^3	R_171	414056.56	3754703.28	111.86	0.00	111.86	
PERIOD		1.29062	ug/m^3	R_172	414056.56	3754728.28	111.90	0.00	111.90	
PERIOD		1.08626	ug/m^3	R_173	414056.56	3754753.28	111.95	0.00	111.95	
PERIOD		0.87544	ug/m^3	R_174	414056.56	3754778.28	111.99	0.00	111.99	
PERIOD		0.69533	ug/m^3	R_175	414056.56	3754803.28	112.21	0.00	112.21	
PERIOD		0.56303	ug/m^3	R_176	414056.56	3754828.28	112.48	0.00	112.48	
PERIOD		0.47274	ug/m^3	R_177	414056.56	3754853.28	112.75	0.00	112.75	
PERIOD		0.40626	ug/m^3	R_178	414056.56	3754878.28	113.00	0.00	113.00	
PERIOD		0.34930	ug/m^3	R_179	414056.56	3754903.28	113.00	0.00	113.00	
PERIOD		0.30290	ug/m^3	R_180	414056.56	3754928.28	113.00	0.00	113.00	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.36245	ug/m^3	R_181	414081.56	37544403.28	110.36	0.00	110.36	
PERIOD		1.59747	ug/m^3	R_182	414081.56	3754428.28	110.48	0.00	110.48	
PERIOD		1.75805	ug/m^3	R_183	414081.56	3754453.28	110.48	0.00	110.48	
PERIOD		1.86098	ug/m^3	R_184	414081.56	3754478.28	110.49	0.00	110.49	
PERIOD		1.92677	ug/m^3	R_185	414081.56	3754503.28	110.49	0.00	110.49	
PERIOD		1.97377	ug/m^3	R_186	414081.56	3754528.28	110.73	0.00	110.73	
PERIOD		2.00629	ug/m^3	R_187	414081.56	3754553.28	111.00	0.00	111.00	
PERIOD		2.03141	ug/m^3	R_188	414081.56	3754578.28	111.28	0.00	111.28	
PERIOD		2.04595	ug/m^3	R_189	414081.56	3754603.28	111.50	0.00	111.50	
PERIOD		2.04619	ug/m^3	R_190	414081.56	3754628.28	111.50	0.00	111.50	
PERIOD		2.02306	ug/m^3	R_191	414081.56	3754653.28	111.51	0.00	111.51	
PERIOD		1.96074	ug/m^3	R_192	414081.56	3754678.28	111.51	0.00	111.51	
PERIOD		1.83649	ug/m^3	R_193	414081.56	3754703.28	111.58	0.00	111.58	
PERIOD		1.62407	ug/m^3	R_194	414081.56	3754728.28	111.71	0.00	111.71	
PERIOD		1.34949	ug/m^3	R_195	414081.56	3754753.28	111.84	0.00	111.84	
PERIOD		1.06256	ug/m^3	R_196	414081.56	3754778.28	111.97	0.00	111.97	
PERIOD		0.82480	ug/m^3	R_197	414081.56	3754803.28	112.21	0.00	112.21	
PERIOD		0.66200	ug/m^3	R_198	414081.56	3754828.28	112.48	0.00	112.48	
PERIOD		0.56094	ug/m^3	R_199	414081.56	3754853.28	112.75	0.00	112.75	
PERIOD		0.48635	ug/m^3	R_200	414081.56	3754878.28	113.00	0.00	113.00	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.41171	ug/m^3	R_201	414081.56	3754903.28	113.00	0.00	113.00	
PERIOD		0.35244	ug/m^3	R_202	414081.56	3754928.28	113.00	0.00	113.00	
PERIOD		1.30452	ug/m^3	R_203	414106.56	3754378.28	109.77	0.00	109.77	
PERIOD		1.75608	ug/m^3	R_204	414106.56	3754403.28	110.04	0.00	110.04	
PERIOD		2.07733	ug/m^3	R_205	414106.56	3754428.28	110.16	0.00	110.16	
PERIOD		2.27926	ug/m^3	R_206	414106.56	3754453.28	110.16	0.00	110.16	
PERIOD		2.40733	ug/m^3	R_207	414106.56	3754478.28	110.16	0.00	110.16	
PERIOD		2.49519	ug/m^3	R_208	414106.56	3754503.28	110.16	0.00	110.16	
PERIOD		2.56684	ug/m^3	R_209	414106.56	3754528.28	110.41	0.00	110.41	
PERIOD		2.62292	ug/m^3	R_210	414106.56	3754553.28	110.68	0.00	110.68	
PERIOD		2.66476	ug/m^3	R_211	414106.56	3754578.28	110.95	0.00	110.95	
PERIOD		2.68985	ug/m^3	R_212	414106.56	3754603.28	111.18	0.00	111.18	
PERIOD		2.69166	ug/m^3	R_213	414106.56	3754628.28	111.18	0.00	111.18	
PERIOD		2.66888	ug/m^3	R_214	414106.56	3754653.28	111.18	0.00	111.18	
PERIOD		2.60695	ug/m^3	R_215	414106.56	3754678.28	111.18	0.00	111.18	
PERIOD		2.47876	ug/m^3	R_216	414106.56	3754703.28	111.30	0.00	111.30	
PERIOD		2.22340	ug/m^3	R_217	414106.56	3754728.28	111.52	0.00	111.52	
PERIOD		1.80981	ug/m^3	R_218	414106.56	3754753.28	111.74	0.00	111.74	
PERIOD		1.37254	ug/m^3	R_219	414106.56	3754778.28	111.96	0.00	111.96	
PERIOD		1.02456	ug/m^3	R_220	414106.56	3754803.28	112.22	0.00	112.22	

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PERIOD		0.79416	ug/m^3	R_221	414106.56	3754828.28	112.49	0.00	112.49	
PERIOD		0.68363	ug/m^3	R_222	414106.56	3754853.28	112.76	0.00	112.76	
PERIOD		0.58886	ug/m^3	R_223	414106.56	3754878.28	113.00	0.00	113.00	
PERIOD		0.48389	ug/m^3	R_224	414106.56	3754903.28	113.00	0.00	113.00	
PERIOD		0.40992	ug/m^3	R_225	414106.56	3754928.28	113.00	0.00	113.00	
PERIOD		1.71220	ug/m^3	R_226	414131.56	3754378.28	109.44	0.00	109.44	
PERIOD		2.46260	ug/m^3	R_227	414131.56	3754403.28	109.72	0.00	109.72	
PERIOD		2.92267	ug/m^3	R_228	414131.56	3754428.28	109.86	0.00	109.86	
PERIOD		3.21457	ug/m^3	R_229	414131.56	3754453.28	109.91	0.00	109.91	
PERIOD		3.40909	ug/m^3	R_230	414131.56	3754478.28	109.95	0.00	109.95	
PERIOD		3.54621	ug/m^3	R_231	414131.56	3754503.28	110.00	0.00	110.00	
PERIOD		3.65694	ug/m^3	R_232	414131.56	3754528.28	110.20	0.00	110.20	
PERIOD		3.73730	ug/m^3	R_233	414131.56	3754553.28	110.43	0.00	110.43	
PERIOD		3.78847	ug/m^3	R_234	414131.56	3754578.28	110.66	0.00	110.66	
PERIOD		3.82210	ug/m^3	R_235	414131.56	3754603.28	110.86	0.00	110.86	
PERIOD		3.82785	ug/m^3	R_236	414131.56	3754628.28	110.90	0.00	110.90	
PERIOD		3.80846	ug/m^3	R_237	414131.56	3754653.28	110.94	0.00	110.94	
PERIOD		3.73893	ug/m^3	R_238	414131.56	3754678.28	110.98	0.00	110.98	
PERIOD		3.60658	ug/m^3	R_239	414131.56	3754703.28	111.14	0.00	111.14	
PERIOD		3.32627	ug/m^3	R_240	414131.56	3754728.28	111.41	0.00	111.41	

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PERIOD		2.73793	ug/m^3	R_241	414131.56	3754753.28	111.68	0.00	111.68	
PERIOD		1.84959	ug/m^3	R_242	414131.56	3754778.28	111.95	0.00	111.95	
PERIOD		1.28674	ug/m^3	R_243	414131.56	3754803.28	112.22	0.00	112.22	
PERIOD		0.96753	ug/m^3	R_244	414131.56	3754828.28	112.49	0.00	112.49	
PERIOD		0.82605	ug/m^3	R_245	414131.56	3754853.28	112.76	0.00	112.76	
PERIOD		0.69525	ug/m^3	R_246	414131.56	3754878.28	113.00	0.00	113.00	
PERIOD		0.57003	ug/m^3	R_247	414131.56	3754903.28	113.03	0.00	113.03	
PERIOD		0.48285	ug/m^3	R_248	414131.56	3754928.28	113.06	0.00	113.06	
PERIOD		0.41681	ug/m^3	R_249	414131.56	3754953.28	113.09	0.00	113.09	
PERIOD		2.31709	ug/m^3	R_250	414156.56	3754378.28	109.12	0.00	109.12	
PERIOD		3.77218	ug/m^3	R_251	414156.56	3754403.28	109.39	0.00	109.39	
PERIOD		4.66461	ug/m^3	R_252	414156.56	3754428.28	109.59	0.00	109.59	
PERIOD		5.17365	ug/m^3	R_253	414156.56	3754453.28	109.72	0.00	109.72	
PERIOD		5.47403	ug/m^3	R_254	414156.56	3754478.28	109.86	0.00	109.86	
PERIOD		5.67191	ug/m^3	R_255	414156.56	3754503.28	109.99	0.00	109.99	
PERIOD		5.81408	ug/m^3	R_256	414156.56	3754528.28	110.13	0.00	110.13	
PERIOD		5.91139	ug/m^3	R_257	414156.56	3754553.28	110.27	0.00	110.27	
PERIOD		5.97333	ug/m^3	R_258	414156.56	3754578.28	110.41	0.00	110.41	
PERIOD		6.01135	ug/m^3	R_259	414156.56	3754603.28	110.55	0.00	110.55	
PERIOD		6.03796	ug/m^3	R_260	414156.56	3754628.28	110.68	0.00	110.68	

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PERIOD		6.03214	ug/m^3	R_261	414156.56	3754653.28	110.81	0.00	110.81	
PERIOD		5.96246	ug/m^3	R_262	414156.56	3754678.28	110.94	0.00	110.94	
PERIOD		5.81043	ug/m^3	R_263	414156.56	3754703.28	111.14	0.00	111.14	
PERIOD		5.48251	ug/m^3	R_264	414156.56	3754728.28	111.41	0.00	111.41	
PERIOD		4.66249	ug/m^3	R_265	414156.56	3754753.28	111.68	0.00	111.68	
PERIOD		2.94174	ug/m^3	R_266	414156.56	3754778.28	111.95	0.00	111.95	
PERIOD		1.86798	ug/m^3	R_267	414156.56	3754803.28	112.22	0.00	112.22	
PERIOD		1.32515	ug/m^3	R_268	414156.56	3754828.28	112.49	0.00	112.49	
PERIOD		1.14837	ug/m^3	R_269	414156.56	3754853.28	112.76	0.00	112.76	
PERIOD		0.84958	ug/m^3	R_270	414156.56	3754878.28	113.01	0.00	113.01	
PERIOD		0.69388	ug/m^3	R_271	414156.56	3754903.28	113.13	0.00	113.13	
PERIOD		0.58150	ug/m^3	R_272	414156.56	3754928.28	113.25	0.00	113.25	
PERIOD		0.49639	ug/m^3	R_273	414156.56	3754953.28	113.36	0.00	113.36	
PERIOD		5.50018	ug/m^3	R_274	414181.56	3754778.28	111.95	0.00	111.95	
PERIOD		2.95263	ug/m^3	R_275	414181.56	3754803.28	112.22	0.00	112.22	
PERIOD		1.92370	ug/m^3	R_276	414181.56	3754828.28	112.49	0.00	112.49	
PERIOD		1.42352	ug/m^3	R_277	414181.56	3754853.28	112.76	0.00	112.76	
PERIOD		1.05802	ug/m^3	R_278	414181.56	3754878.28	113.03	0.00	113.03	
PERIOD		0.85356	ug/m^3	R_279	414181.56	3754903.28	113.23	0.00	113.23	
PERIOD		0.70532	ug/m^3	R_280	414181.56	3754928.28	113.44	0.00	113.44	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.59415	ug/m^3	R_281	414181.56	3754953.28	113.64	0.00	113.64	
PERIOD		7.29449	ug/m^3	R_282	414206.56	3754778.28	112.06	0.00	112.06	
PERIOD		3.96950	ug/m^3	R_283	414206.56	3754803.28	112.32	0.00	112.32	
PERIOD		2.51445	ug/m^3	R_284	414206.56	3754828.28	112.59	0.00	112.59	
PERIOD		1.76972	ug/m^3	R_285	414206.56	3754853.28	112.86	0.00	112.86	
PERIOD		1.31195	ug/m^3	R_286	414206.56	3754878.28	113.13	0.00	113.13	
PERIOD		1.04477	ug/m^3	R_287	414206.56	3754903.28	113.39	0.00	113.39	
PERIOD		0.85203	ug/m^3	R_288	414206.56	3754928.28	113.66	0.00	113.66	
PERIOD		0.70875	ug/m^3	R_289	414206.56	3754953.28	113.93	0.00	113.93	
PERIOD		8.28946	ug/m^3	R_290	414231.56	3754778.28	112.38	0.00	112.38	
PERIOD		4.58832	ug/m^3	R_291	414231.56	3754803.28	112.65	0.00	112.65	
PERIOD		3.00070	ug/m^3	R_292	414231.56	3754828.28	112.92	0.00	112.92	
PERIOD		2.13951	ug/m^3	R_293	414231.56	3754853.28	113.19	0.00	113.19	
PERIOD		1.58856	ug/m^3	R_294	414231.56	3754878.28	113.45	0.00	113.45	
PERIOD		1.25361	ug/m^3	R_295	414231.56	3754903.28	113.72	0.00	113.72	
PERIOD		1.01329	ug/m^3	R_296	414231.56	3754928.28	113.99	0.00	113.99	
PERIOD		0.83524	ug/m^3	R_297	414231.56	3754953.28	114.26	0.00	114.26	
PERIOD		8.78360	ug/m^3	R_298	414256.56	3754778.28	112.71	0.00	112.71	
PERIOD		5.00469	ug/m^3	R_299	414256.56	3754803.28	112.98	0.00	112.98	
PERIOD		3.40183	ug/m^3	R_300	414256.56	3754828.28	113.25	0.00	113.25	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.47832	ug/m^3	R_301	414256.56	3754853.28	113.51	0.00	113.51	
PERIOD		1.85508	ug/m^3	R_302	414256.56	3754878.28	113.78	0.00	113.78	
PERIOD		1.46003	ug/m^3	R_303	414256.56	3754903.28	114.05	0.00	114.05	
PERIOD		1.17587	ug/m^3	R_304	414256.56	3754928.28	114.32	0.00	114.32	
PERIOD		0.96464	ug/m^3	R_305	414256.56	3754953.28	114.58	0.00	114.58	
PERIOD		9.02702	ug/m^3	R_306	414281.56	3754778.28	112.96	0.00	112.96	
PERIOD		5.30863	ug/m^3	R_307	414281.56	3754803.28	113.23	0.00	113.23	
PERIOD		3.67398	ug/m^3	R_308	414281.56	3754828.28	113.50	0.00	113.50	
PERIOD		2.73352	ug/m^3	R_309	414281.56	3754853.28	113.77	0.00	113.77	
PERIOD		2.07524	ug/m^3	R_310	414281.56	3754878.28	114.04	0.00	114.04	
PERIOD		1.63892	ug/m^3	R_311	414281.56	3754903.28	114.31	0.00	114.31	
PERIOD		1.32226	ug/m^3	R_312	414281.56	3754928.28	114.58	0.00	114.58	
PERIOD		1.08460	ug/m^3	R_313	414281.56	3754953.28	114.86	0.00	114.86	
PERIOD		9.11414	ug/m^3	R_314	414306.56	3754778.28	112.98	0.00	112.98	
PERIOD		5.51687	ug/m^3	R_315	414306.56	3754803.28	113.23	0.00	113.23	
PERIOD		3.83130	ug/m^3	R_316	414306.56	3754828.28	113.51	0.00	113.51	
PERIOD		2.89150	ug/m^3	R_317	414306.56	3754853.28	113.78	0.00	113.78	
PERIOD		2.22598	ug/m^3	R_318	414306.56	3754878.28	114.05	0.00	114.05	
PERIOD		1.77276	ug/m^3	R_319	414306.56	3754903.28	114.32	0.00	114.32	
PERIOD		1.43953	ug/m^3	R_320	414306.56	3754928.28	114.59	0.00	114.59	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.18588	ug/m^3	R_321	414306.56	3754953.28	114.86	0.00	114.86	
PERIOD		8.96092	ug/m^3	R_322	414331.56	3754778.28	112.99	0.00	112.99	
PERIOD		5.57452	ug/m^3	R_323	414331.56	3754803.28	113.24	0.00	113.24	
PERIOD		3.86819	ug/m^3	R_324	414331.56	3754828.28	113.51	0.00	113.51	
PERIOD		2.94140	ug/m^3	R_325	414331.56	3754853.28	113.78	0.00	113.78	
PERIOD		2.29905	ug/m^3	R_326	414331.56	3754878.28	114.05	0.00	114.05	
PERIOD		1.84814	ug/m^3	R_327	414331.56	3754903.28	114.32	0.00	114.32	
PERIOD		1.51414	ug/m^3	R_328	414331.56	3754928.28	114.59	0.00	114.59	
PERIOD		1.25653	ug/m^3	R_329	414331.56	3754953.28	114.86	0.00	114.86	
PERIOD		8.50073	ug/m^3	R_330	414356.56	3754778.28	113.05	0.00	113.05	
PERIOD		5.42302	ug/m^3	R_331	414356.56	3754803.28	113.29	0.00	113.29	
PERIOD		3.80617	ug/m^3	R_332	414356.56	3754828.28	113.55	0.00	113.55	
PERIOD		2.90561	ug/m^3	R_333	414356.56	3754853.28	113.82	0.00	113.82	
PERIOD		2.29713	ug/m^3	R_334	414356.56	3754878.28	114.09	0.00	114.09	
PERIOD		1.86241	ug/m^3	R_335	414356.56	3754903.28	114.36	0.00	114.36	
PERIOD		1.54119	ug/m^3	R_336	414356.56	3754928.28	114.62	0.00	114.62	
PERIOD		1.29112	ug/m^3	R_337	414356.56	3754953.28	114.89	0.00	114.89	
PERIOD		7.40920	ug/m^3	R_338	414381.56	3754778.28	113.36	0.00	113.36	
PERIOD		5.00791	ug/m^3	R_339	414381.56	3754803.28	113.61	0.00	113.61	
PERIOD		3.61571	ug/m^3	R_340	414381.56	3754828.28	113.88	0.00	113.88	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.77544	ug/m^3	R_341	414381.56	3754853.28	114.15	0.00	114.15	
PERIOD		2.21772	ug/m^3	R_342	414381.56	3754878.28	114.42	0.00	114.42	
PERIOD		1.81820	ug/m^3	R_343	414381.56	3754903.28	114.68	0.00	114.68	
PERIOD		1.52052	ug/m^3	R_344	414381.56	3754928.28	114.95	0.00	114.95	
PERIOD		1.28726	ug/m^3	R_345	414381.56	3754953.28	115.22	0.00	115.22	
PERIOD		5.07947	ug/m^3	R_346	414406.56	3754778.28	113.68	0.00	113.68	
PERIOD		4.02812	ug/m^3	R_347	414406.56	3754803.28	113.94	0.00	113.94	
PERIOD		3.13914	ug/m^3	R_348	414406.56	3754828.28	114.21	0.00	114.21	
PERIOD		2.50905	ug/m^3	R_349	414406.56	3754853.28	114.48	0.00	114.48	
PERIOD		2.05344	ug/m^3	R_350	414406.56	3754878.28	114.74	0.00	114.74	
PERIOD		1.71505	ug/m^3	R_351	414406.56	3754903.28	115.01	0.00	115.01	
PERIOD		1.45594	ug/m^3	R_352	414406.56	3754928.28	115.28	0.00	115.28	
PERIOD		1.24899	ug/m^3	R_353	414406.56	3754953.28	115.55	0.00	115.55	
PERIOD		3.19061	ug/m^3	R_354	414431.56	3754778.28	113.98	0.00	113.98	
PERIOD		2.90309	ug/m^3	R_355	414431.56	3754803.28	114.25	0.00	114.25	
PERIOD		2.50514	ug/m^3	R_356	414431.56	3754828.28	114.52	0.00	114.52	
PERIOD		2.13202	ug/m^3	R_357	414431.56	3754853.28	114.79	0.00	114.79	
PERIOD		1.81770	ug/m^3	R_358	414431.56	3754878.28	115.06	0.00	115.06	
PERIOD		1.56104	ug/m^3	R_359	414431.56	3754903.28	115.33	0.00	115.33	
PERIOD		1.35194	ug/m^3	R_360	414431.56	3754928.28	115.60	0.00	115.60	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.17889	ug/m^3	R_361	414431.56	3754953.28	115.87	0.00	115.87	
PERIOD		2.24717	ug/m^3	R_362	414456.56	3754778.28	113.98	0.00	113.98	
PERIOD		2.12908	ug/m^3	R_363	414456.56	3754803.28	114.25	0.00	114.25	
PERIOD		1.95034	ug/m^3	R_364	414456.56	3754828.28	114.52	0.00	114.52	
PERIOD		1.75116	ug/m^3	R_365	414456.56	3754853.28	114.79	0.00	114.79	
PERIOD		1.55588	ug/m^3	R_366	414456.56	3754878.28	115.06	0.00	115.06	
PERIOD		1.37877	ug/m^3	R_367	414456.56	3754903.28	115.33	0.00	115.33	
PERIOD		1.22299	ug/m^3	R_368	414456.56	3754928.28	115.60	0.00	115.60	
PERIOD		1.08721	ug/m^3	R_369	414456.56	3754953.28	115.87	0.00	115.87	
PERIOD		1.65195	ug/m^3	R_370	414481.56	3754778.28	113.98	0.00	113.98	
PERIOD		1.60211	ug/m^3	R_371	414481.56	3754803.28	114.25	0.00	114.25	
PERIOD		1.52072	ug/m^3	R_372	414481.56	3754828.28	114.52	0.00	114.52	
PERIOD		1.41690	ug/m^3	R_373	414481.56	3754853.28	114.79	0.00	114.79	
PERIOD		1.30306	ug/m^3	R_374	414481.56	3754878.28	115.06	0.00	115.06	
PERIOD		1.18937	ug/m^3	R_375	414481.56	3754903.28	115.33	0.00	115.33	
PERIOD		1.08112	ug/m^3	R_376	414481.56	3754928.28	115.60	0.00	115.60	
PERIOD		0.98081	ug/m^3	R_377	414481.56	3754953.28	115.87	0.00	115.87	
PERIOD		1.26847	ug/m^3	R_378	414506.56	3754778.28	113.98	0.00	113.98	
PERIOD		1.24234	ug/m^3	R_379	414506.56	3754803.28	114.25	0.00	114.25	
PERIOD		1.20158	ug/m^3	R_380	414506.56	3754828.28	114.52	0.00	114.52	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.14679	ug/m^3	R_381	414506.56	3754853.28	114.80	0.00	114.80	
PERIOD		1.08218	ug/m^3	R_382	414506.56	3754878.28	115.07	0.00	115.07	
PERIOD		1.01213	ug/m^3	R_383	414506.56	3754903.28	115.34	0.00	115.34	
PERIOD		0.94056	ug/m^3	R_384	414506.56	3754928.28	115.61	0.00	115.61	
PERIOD		0.87005	ug/m^3	R_385	414506.56	3754953.28	115.88	0.00	115.88	
PERIOD		1.00292	ug/m^3	R_386	414531.56	3754778.28	113.99	0.00	113.99	
PERIOD		0.98849	ug/m^3	R_387	414531.56	3754803.28	114.26	0.00	114.26	
PERIOD		0.96631	ug/m^3	R_388	414531.56	3754828.28	114.53	0.00	114.53	
PERIOD		0.93628	ug/m^3	R_389	414531.56	3754853.28	114.80	0.00	114.80	
PERIOD		0.89925	ug/m^3	R_390	414531.56	3754878.28	115.07	0.00	115.07	
PERIOD		0.85678	ug/m^3	R_391	414531.56	3754903.28	115.34	0.00	115.34	
PERIOD		0.81078	ug/m^3	R_392	414531.56	3754928.28	115.61	0.00	115.61	
PERIOD		0.76297	ug/m^3	R_393	414531.56	3754953.28	115.88	0.00	115.88	
PERIOD		0.40622	ug/m^3	R_394	414571.80	3754431.75	111.21	0.00	111.21	
PERIOD		0.38407	ug/m^3	R_395	414596.80	3754456.75	111.31	0.00	111.31	
PERIOD		0.41178	ug/m^3	R_396	414596.80	3754481.75	111.58	0.00	111.58	
PERIOD		0.43871	ug/m^3	R_397	414596.80	3754506.75	111.81	0.00	111.81	
PERIOD		0.46475	ug/m^3	R_398	414596.80	3754531.75	111.87	0.00	111.87	
PERIOD		0.48953	ug/m^3	R_399	414596.80	3754556.75	111.92	0.00	111.92	
PERIOD		0.51291	ug/m^3	R_400	414596.80	3754581.75	111.97	0.00	111.97	

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PERIOD		0.53466	ug/m^3	R_401	414596.80	3754606.75	112.14	0.00	112.14	
PERIOD		0.55349	ug/m^3	R_402	414596.80	3754631.75	112.41	0.00	112.41	
PERIOD		0.56850	ug/m^3	R_403	414596.80	3754656.75	112.68	0.00	112.68	
PERIOD		0.58057	ug/m^3	R_404	414596.80	3754681.75	112.95	0.00	112.95	
PERIOD		0.58936	ug/m^3	R_405	414596.80	3754706.75	113.22	0.00	113.22	
PERIOD		0.59463	ug/m^3	R_406	414596.80	3754731.75	113.49	0.00	113.49	
PERIOD		0.59656	ug/m^3	R_407	414596.80	3754756.75	113.76	0.00	113.76	
PERIOD		0.59554	ug/m^3	R_408	414596.80	3754781.75	114.03	0.00	114.03	
PERIOD		0.59202	ug/m^3	R_409	414596.80	3754806.75	114.30	0.00	114.30	
PERIOD		0.58635	ug/m^3	R_410	414596.80	3754831.75	114.57	0.00	114.57	
PERIOD		0.57864	ug/m^3	R_411	414596.80	3754856.75	114.84	0.00	114.84	
PERIOD		0.56888	ug/m^3	R_412	414596.80	3754881.75	115.11	0.00	115.11	
PERIOD		0.55699	ug/m^3	R_413	414596.80	3754906.75	115.38	0.00	115.38	
PERIOD		0.54298	ug/m^3	R_414	414596.80	3754931.75	115.65	0.00	115.65	
PERIOD		0.52693	ug/m^3	R_415	414596.80	3754956.75	115.92	0.00	115.92	
PERIOD		0.33726	ug/m^3	R_416	414621.80	3754456.75	110.99	0.00	110.99	
PERIOD		0.35925	ug/m^3	R_417	414621.80	3754481.75	111.26	0.00	111.26	
PERIOD		0.38042	ug/m^3	R_418	414621.80	3754506.75	111.51	0.00	111.51	
PERIOD		0.40063	ug/m^3	R_419	414621.80	3754531.75	111.65	0.00	111.65	
PERIOD		0.41969	ug/m^3	R_420	414621.80	3754556.75	111.79	0.00	111.79	

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PERIOD		0.43758	ug/m^3	R_421	414621.80	3754581.75	111.93	0.00	111.93	
PERIOD		0.45409	ug/m^3	R_422	414621.80	3754606.75	112.14	0.00	112.14	
PERIOD		0.46828	ug/m^3	R_423	414621.80	3754631.75	112.41	0.00	112.41	
PERIOD		0.47948	ug/m^3	R_424	414621.80	3754656.75	112.68	0.00	112.68	
PERIOD		0.48852	ug/m^3	R_425	414621.80	3754681.75	112.95	0.00	112.95	
PERIOD		0.49519	ug/m^3	R_426	414621.80	3754706.75	113.22	0.00	113.22	
PERIOD		0.49938	ug/m^3	R_427	414621.80	3754731.75	113.49	0.00	113.49	
PERIOD		0.50121	ug/m^3	R_428	414621.80	3754756.75	113.76	0.00	113.76	
PERIOD		0.50095	ug/m^3	R_429	414621.80	3754781.75	114.03	0.00	114.03	
PERIOD		0.49895	ug/m^3	R_430	414621.80	3754806.75	114.30	0.00	114.30	
PERIOD		0.49551	ug/m^3	R_431	414621.80	3754831.75	114.57	0.00	114.57	
PERIOD		0.49078	ug/m^3	R_432	414621.80	3754856.75	114.84	0.00	114.84	
PERIOD		0.48479	ug/m^3	R_433	414621.80	3754881.75	115.11	0.00	115.11	
PERIOD		0.47741	ug/m^3	R_434	414621.80	3754906.75	115.39	0.00	115.39	
PERIOD		0.46863	ug/m^3	R_435	414621.80	3754931.75	115.66	0.00	115.66	
PERIOD		0.29866	ug/m^3	R_436	414646.80	3754456.75	110.66	0.00	110.66	
PERIOD		0.31633	ug/m^3	R_437	414646.80	3754481.75	110.94	0.00	110.94	
PERIOD		0.33322	ug/m^3	R_438	414646.80	3754506.75	111.20	0.00	111.20	
PERIOD		0.34915	ug/m^3	R_439	414646.80	3754531.75	111.43	0.00	111.43	
PERIOD		0.36402	ug/m^3	R_440	414646.80	3754556.75	111.66	0.00	111.66	

Sensitive Receptor Summary

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.37780	ug/m^3	R_441	414646.80	3754581.75	111.89	0.00	111.89	
PERIOD		0.39046	ug/m^3	R_442	414646.80	3754606.75	112.14	0.00	112.14	
PERIOD		0.40123	ug/m^3	R_443	414646.80	3754631.75	112.41	0.00	112.41	
PERIOD		0.40966	ug/m^3	R_444	414646.80	3754656.75	112.68	0.00	112.68	
PERIOD		0.41645	ug/m^3	R_445	414646.80	3754681.75	112.95	0.00	112.95	
PERIOD		0.42149	ug/m^3	R_446	414646.80	3754706.75	113.22	0.00	113.22	
PERIOD		0.42476	ug/m^3	R_447	414646.80	3754731.75	113.49	0.00	113.49	
PERIOD		0.42631	ug/m^3	R_448	414646.80	3754756.75	113.76	0.00	113.76	
PERIOD		0.42639	ug/m^3	R_449	414646.80	3754781.75	114.03	0.00	114.03	
PERIOD		0.42517	ug/m^3	R_450	414646.80	3754806.75	114.31	0.00	114.31	
PERIOD		0.42302	ug/m^3	R_451	414646.80	3754831.75	114.58	0.00	114.58	
PERIOD		0.42003	ug/m^3	R_452	414646.80	3754856.75	114.85	0.00	114.85	
PERIOD		0.41627	ug/m^3	R_453	414646.80	3754881.75	115.12	0.00	115.12	
PERIOD		0.31882	ug/m^3	R_454	414671.80	3754556.75	111.60	0.00	111.60	
PERIOD		0.32960	ug/m^3	R_455	414671.80	3754581.75	111.87	0.00	111.87	
PERIOD		0.33942	ug/m^3	R_456	414671.80	3754606.75	112.14	0.00	112.14	
PERIOD		0.34768	ug/m^3	R_457	414671.80	3754631.75	112.41	0.00	112.41	
PERIOD		0.35405	ug/m^3	R_458	414671.80	3754656.75	112.68	0.00	112.68	
PERIOD		0.35913	ug/m^3	R_459	414671.80	3754681.75	112.96	0.00	112.96	
PERIOD		0.36309	ug/m^3	R_460	414671.80	3754706.75	113.19	0.00	113.19	

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Sonora High School
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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.36571	ug/m^3	R_461	414671.80	3754731.75	113.42	0.00	113.42	
PERIOD		0.36706	ug/m^3	R_462	414671.80	3754756.75	113.66	0.00	113.66	
PERIOD		0.36733	ug/m^3	R_463	414671.80	3754781.75	113.90	0.00	113.90	
PERIOD		0.36657	ug/m^3	R_464	414671.80	3754806.75	114.17	0.00	114.17	
PERIOD		0.36512	ug/m^3	R_465	414671.80	3754831.75	114.44	0.00	114.44	
PERIOD		0.31297	ug/m^3	R_466	414696.80	3754681.75	112.96	0.00	112.96	
PERIOD		0.31617	ug/m^3	R_467	414696.80	3754706.75	113.12	0.00	113.12	
PERIOD		0.31844	ug/m^3	R_468	414696.80	3754731.75	113.26	0.00	113.26	
PERIOD		0.31973	ug/m^3	R_469	414696.80	3754756.75	113.41	0.00	113.41	
PERIOD		2.79974	ug/m^3	S_001	414365.35	3754414.82	110.04	0.00	110.04	
PERIOD		4.11114	ug/m^3	S_002	414365.35	3754439.82	110.31	0.00	110.31	
PERIOD		5.22966	ug/m^3	S_003	414365.35	3754464.82	110.58	0.00	110.58	
PERIOD		6.06137	ug/m^3	S_004	414365.35	3754489.82	110.85	0.00	110.85	
PERIOD		6.69755	ug/m^3	S_005	414365.35	3754514.82	111.12	0.00	111.12	
PERIOD		7.20366	ug/m^3	S_006	414365.35	3754539.82	111.39	0.00	111.39	
PERIOD		7.65328	ug/m^3	S_007	414365.35	3754564.82	111.66	0.00	111.66	
PERIOD		7.98753	ug/m^3	S_008	414365.35	3754589.82	111.93	0.00	111.93	
PERIOD		8.25254	ug/m^3	S_009	414365.35	3754614.82	112.20	0.00	112.20	
PERIOD		8.62068	ug/m^3	S_010	414365.35	3754639.82	112.47	0.00	112.47	
PERIOD		1.73449	ug/m^3	S_011	414390.35	3754414.82	110.04	0.00	110.04	

Sensitive Receptor Summary

Sonora High School
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PM2.5 - Concentration - Source Group: ONSITE

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.27521	ug/m^3	S_012	414390.35	3754439.82	110.31	0.00	110.31	
PERIOD		2.80850	ug/m^3	S_013	414390.35	3754464.82	110.58	0.00	110.58	
PERIOD		3.27230	ug/m^3	S_014	414390.35	3754489.82	110.85	0.00	110.85	
PERIOD		3.68504	ug/m^3	S_015	414390.35	3754514.82	111.12	0.00	111.12	
PERIOD		4.03759	ug/m^3	S_016	414390.35	3754539.82	111.39	0.00	111.39	
PERIOD		4.34152	ug/m^3	S_017	414390.35	3754564.82	111.66	0.00	111.66	
PERIOD		4.61239	ug/m^3	S_018	414390.35	3754589.82	111.93	0.00	111.93	
PERIOD		4.88324	ug/m^3	S_019	414390.35	3754614.82	112.20	0.00	112.20	
PERIOD		5.21499	ug/m^3	S_020	414390.35	3754639.82	112.47	0.00	112.47	
PERIOD		5.81447	ug/m^3	S_021	414390.35	3754664.82	112.74	0.00	112.74	
PERIOD		7.07028	ug/m^3	S_022	414390.35	3754689.82	113.01	0.00	113.01	
PERIOD		8.32774	ug/m^3	S_023	414390.35	3754714.82	113.14	0.00	113.14	
PERIOD		8.65432	ug/m^3	S_024	414390.35	3754739.82	113.27	0.00	113.27	
PERIOD		1.23113	ug/m^3	S_025	414415.35	3754414.82	110.04	0.00	110.04	
PERIOD		1.50562	ug/m^3	S_026	414415.35	3754439.82	110.31	0.00	110.31	
PERIOD		1.80041	ug/m^3	S_027	414415.35	3754464.82	110.58	0.00	110.58	
PERIOD		2.09053	ug/m^3	S_028	414415.35	3754489.82	110.85	0.00	110.85	
PERIOD		2.35007	ug/m^3	S_029	414415.35	3754514.82	111.12	0.00	111.12	
PERIOD		2.57985	ug/m^3	S_030	414415.35	3754539.82	111.39	0.00	111.39	
PERIOD		2.79327	ug/m^3	S_031	414415.35	3754564.82	111.66	0.00	111.66	

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Sonora High School
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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		3.00191	ug/m^3	S_032	414415.35	3754589.82	111.94	0.00	111.94	
PERIOD		3.22142	ug/m^3	S_033	414415.35	3754614.82	112.21	0.00	112.21	
PERIOD		3.45643	ug/m^3	S_034	414415.35	3754639.82	112.48	0.00	112.48	
PERIOD		3.75245	ug/m^3	S_035	414415.35	3754664.82	112.75	0.00	112.75	
PERIOD		4.12319	ug/m^3	S_036	414415.35	3754689.82	113.01	0.00	113.01	
PERIOD		4.46806	ug/m^3	S_037	414415.35	3754714.82	113.24	0.00	113.24	
PERIOD		4.64107	ug/m^3	S_038	414415.35	3754739.82	113.46	0.00	113.46	
PERIOD		0.93953	ug/m^3	S_039	414440.35	3754414.82	110.22	0.00	110.22	
PERIOD		1.11002	ug/m^3	S_040	414440.35	3754439.82	110.44	0.00	110.44	
PERIOD		1.29778	ug/m^3	S_041	414440.35	3754464.82	110.66	0.00	110.66	
PERIOD		1.49217	ug/m^3	S_042	414440.35	3754489.82	110.88	0.00	110.88	
PERIOD		1.67634	ug/m^3	S_043	414440.35	3754514.82	111.13	0.00	111.13	
PERIOD		1.83897	ug/m^3	S_044	414440.35	3754539.82	111.40	0.00	111.40	
PERIOD		1.98036	ug/m^3	S_045	414440.35	3754564.82	111.67	0.00	111.67	
PERIOD		2.11500	ug/m^3	S_046	414440.35	3754589.82	111.94	0.00	111.94	
PERIOD		2.26177	ug/m^3	S_047	414440.35	3754614.82	112.21	0.00	112.21	
PERIOD		2.41783	ug/m^3	S_048	414440.35	3754639.82	112.48	0.00	112.48	
PERIOD		2.58029	ug/m^3	S_049	414440.35	3754664.82	112.75	0.00	112.75	
PERIOD		2.73858	ug/m^3	S_050	414440.35	3754689.82	113.02	0.00	113.02	
PERIOD		2.86031	ug/m^3	S_051	414440.35	3754714.82	113.29	0.00	113.29	

Sensitive Receptor Summary

Sonora High School
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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		2.91548	ug/m^3	S_052	414440.35	3754739.82	113.56	0.00	113.56	
PERIOD		0.75677	ug/m^3	S_053	414465.35	3754414.82	110.53	0.00	110.53	
PERIOD		0.87423	ug/m^3	S_054	414465.35	3754439.82	110.66	0.00	110.66	
PERIOD		1.00077	ug/m^3	S_055	414465.35	3754464.82	110.79	0.00	110.79	
PERIOD		1.13253	ug/m^3	S_056	414465.35	3754489.82	110.93	0.00	110.93	
PERIOD		1.26150	ug/m^3	S_057	414465.35	3754514.82	111.13	0.00	111.13	
PERIOD		1.38017	ug/m^3	S_058	414465.35	3754539.82	111.40	0.00	111.40	
PERIOD		1.48677	ug/m^3	S_059	414465.35	3754564.82	111.67	0.00	111.67	
PERIOD		1.58672	ug/m^3	S_060	414465.35	3754589.82	111.94	0.00	111.94	
PERIOD		1.68715	ug/m^3	S_061	414465.35	3754614.82	112.21	0.00	112.21	
PERIOD		1.78479	ug/m^3	S_062	414465.35	3754639.82	112.48	0.00	112.48	
PERIOD		1.87938	ug/m^3	S_063	414465.35	3754664.82	112.75	0.00	112.75	
PERIOD		1.96173	ug/m^3	S_064	414465.35	3754689.82	113.02	0.00	113.02	
PERIOD		0.62647	ug/m^3	S_065	414490.35	3754414.82	110.84	0.00	110.84	
PERIOD		0.71130	ug/m^3	S_066	414490.35	3754439.82	110.88	0.00	110.88	
PERIOD		0.80092	ug/m^3	S_067	414490.35	3754464.82	110.93	0.00	110.93	
PERIOD		0.89345	ug/m^3	S_068	414490.35	3754489.82	110.97	0.00	110.97	
PERIOD		0.98515	ug/m^3	S_069	414490.35	3754514.82	111.13	0.00	111.13	
PERIOD		1.07197	ug/m^3	S_070	414490.35	3754539.82	111.40	0.00	111.40	
PERIOD		1.15255	ug/m^3	S_071	414490.35	3754564.82	111.67	0.00	111.67	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		1.22862	ug/m^3	S_072	414490.35	3754589.82	111.94	0.00	111.94	
PERIOD		0.52943	ug/m^3	S_073	414515.35	3754414.82	111.01	0.00	111.01	
PERIOD		0.59270	ug/m^3	S_074	414515.35	3754439.82	111.05	0.00	111.05	
PERIOD		0.65844	ug/m^3	S_075	414515.35	3754464.82	111.09	0.00	111.09	
PERIOD		0.72557	ug/m^3	S_076	414515.35	3754489.82	111.12	0.00	111.12	
PERIOD		0.79194	ug/m^3	S_077	414515.35	3754514.82	111.26	0.00	111.26	
PERIOD		0.85580	ug/m^3	S_078	414515.35	3754539.82	111.49	0.00	111.49	
PERIOD		0.91631	ug/m^3	S_079	414515.35	3754564.82	111.72	0.00	111.72	
PERIOD		4.88515	ug/m^3	S_080	414227.51	3754399.07	108.85	0.00	108.85	
PERIOD		3.75372	ug/m^3	S_081	414257.09	3754397.03	108.83	0.00	108.83	
PERIOD		3.50503	ug/m^3	S_082	414290.13	3754397.82	109.08	0.00	109.08	
PERIOD		2.69348	ug/m^3	S_083	414332.14	3754395.77	109.60	0.00	109.60	
PERIOD		2.26831	ug/m^3	S_084	414357.63	3754398.44	109.87	0.00	109.87	
PERIOD		1.71694	ug/m^3	S_085	414375.88	3754398.29	109.91	0.00	109.91	
PERIOD		1.52668	ug/m^3	S_086	414384.37	3754397.97	109.92	0.00	109.92	
PERIOD		0.20444	ug/m^3	W_001	414013.18	3754959.39	113.38	0.00	113.38	
PERIOD		0.32461	ug/m^3	W_002	414091.17	3754953.02	113.00	0.00	113.00	
PERIOD		0.44176	ug/m^3	W_003	413902.11	3754372.51	111.80	0.00	111.80	
PERIOD		0.36668	ug/m^3	W_004	413901.75	3754342.38	111.80	0.00	111.80	
PERIOD		0.40863	ug/m^3	W_005	414017.65	3754321.83	110.30	0.00	110.30	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.30044	ug/m^3	W_006	414048.48	3754289.22	109.89	0.00	109.89	
PERIOD		0.22277	ug/m^3	W_007	414066.20	3754252.71	109.66	0.00	109.66	
PERIOD		0.20584	ug/m^3	W_008	413989.29	3754254.49	110.17	0.00	110.17	
PERIOD		0.16427	ug/m^3	W_009	413991.78	3754223.65	109.97	0.00	109.97	
PERIOD		0.34006	ug/m^3	W_010	414170.88	3754279.42	108.30	0.00	108.30	
PERIOD		0.25869	ug/m^3	W_011	414171.23	3754246.81	108.29	0.00	108.29	
PERIOD		0.30066	ug/m^3	W_012	414219.43	3754257.80	108.00	0.00	108.00	
PERIOD		0.25045	ug/m^3	W_013	414219.79	3754234.76	108.00	0.00	108.00	
PERIOD		0.27016	ug/m^3	W_014	414269.41	3754238.66	108.00	0.00	108.00	
PERIOD		0.26413	ug/m^3	W_015	414294.22	3754234.40	108.02	0.00	108.02	
PERIOD		0.23442	ug/m^3	W_016	414321.16	3754218.46	107.91	0.00	107.91	
PERIOD		1.22727	ug/m^3	W_017	414201.53	3754352.55	108.35	0.00	108.35	
PERIOD		1.43383	ug/m^3	W_018	414226.54	3754358.81	108.42	0.00	108.42	
PERIOD		1.33517	ug/m^3	W_019	414254.90	3754359.64	108.43	0.00	108.43	
PERIOD		1.21114	ug/m^3	W_020	414290.34	3754358.81	108.66	0.00	108.66	
PERIOD		1.08780	ug/m^3	W_021	414337.05	3754358.81	109.27	0.00	109.27	
PERIOD		0.52177	ug/m^3	W_022	414299.93	3754303.77	108.31	0.00	108.31	
PERIOD		0.50844	ug/m^3	W_023	414337.46	3754305.02	108.72	0.00	108.72	
PERIOD		0.45413	ug/m^3	W_024	414389.17	3754303.77	109.37	0.00	109.37	
PERIOD		0.38951	ug/m^3	W_025	414432.95	3754301.27	109.81	0.00	109.81	

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Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.81428	ug/m^3	W_026	414395.01	3754357.98	109.77	0.00	109.77	
PERIOD		0.62538	ug/m^3	W_027	414434.20	3754357.14	110.04	0.00	110.04	
PERIOD		0.46967	ug/m^3	W_028	414485.49	3754359.23	110.35	0.00	110.35	
PERIOD		0.38837	ug/m^3	W_029	414522.61	3754360.06	110.46	0.00	110.46	
PERIOD		0.31850	ug/m^3	W_030	414491.75	3754301.68	109.82	0.00	109.82	
PERIOD		0.28089	ug/m^3	W_031	414525.52	3754300.43	109.81	0.00	109.81	
PERIOD		0.35575	ug/m^3	W_032	414393.76	3754278.75	109.16	0.00	109.16	
PERIOD		0.32452	ug/m^3	W_033	414433.37	3754278.33	109.57	0.00	109.57	
PERIOD		0.39179	ug/m^3	W_034	414343.72	3754280.83	108.55	0.00	108.55	
PERIOD		0.27766	ug/m^3	W_035	414489.25	3754277.91	109.57	0.00	109.57	
PERIOD		0.24968	ug/m^3	W_036	414526.78	3754278.75	109.58	0.00	109.58	
PERIOD		0.22193	ug/m^3	W_037	414489.66	3754239.97	109.16	0.00	109.16	
PERIOD		0.19040	ug/m^3	W_038	414515.10	3754220.79	108.95	0.00	108.95	
PERIOD		0.17609	ug/m^3	W_039	414531.78	3754211.20	108.85	0.00	108.85	
PERIOD		0.18517	ug/m^3	W_040	414499.25	3754209.94	108.83	0.00	108.83	
PERIOD		0.20655	ug/m^3	W_041	414587.56	3754276.59	109.50	0.00	109.50	
PERIOD		0.22072	ug/m^3	W_042	414599.34	3754302.20	109.63	0.00	109.63	
PERIOD		0.29251	ug/m^3	W_043	414589.87	3754365.96	110.40	0.00	110.40	
PERIOD		0.32691	ug/m^3	W_044	414592.69	3754400.03	110.74	0.00	110.74	
PERIOD		0.27429	ug/m^3	W_045	414624.44	3754390.04	110.22	0.00	110.22	

Sensitive Receptor Summary

Sonora High School
Construction Health Risk Assessment

PM2.5 - Concentration - Source Group: ONSITE

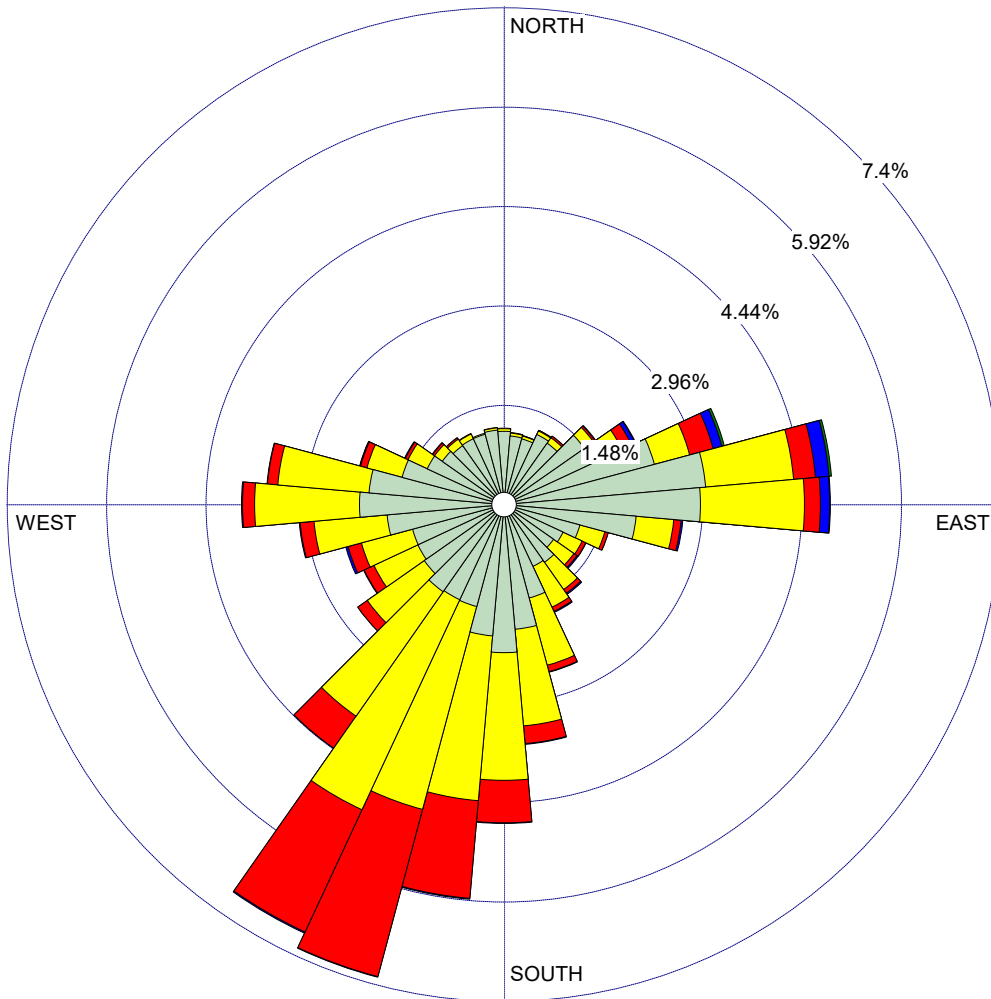
Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
PERIOD		0.12338	ug/m^3	W_046	414060.03	3754145.75	108.82	0.00	108.82	
PERIOD		0.11959	ug/m^3	W_047	414223.51	3754098.38	107.20	0.00	107.20	

WIND ROSE PLOT:

**KONT Wind Rose
2019-2023**

DISPLAY:

**Wind Speed
Direction (blowing from)**



COMMENTS:

DATA PERIOD:

**Start Date: 1/1/2018 - 00:00
End Date: 12/31/2023 - 23:59**

COMPANY NAME:

MODELER:

CALM WINDS:

2.56%

TOTAL COUNT:

43302 hrs.

AVG. WIND SPEED:

4.11 Knots

DATE:

2/10/2026

PROJECT NO.:

PROJECT TITLE:
Sonora High School
Construction Health Risk Assessment

COMMENTS:

SOURCES:

3

RECEPTORS:

2868

OUTPUT TYPE:

Concentration

MAX:

16.8 ug/m³

COMPANY NAME:

MODELER:

DATE:

2/10/2026

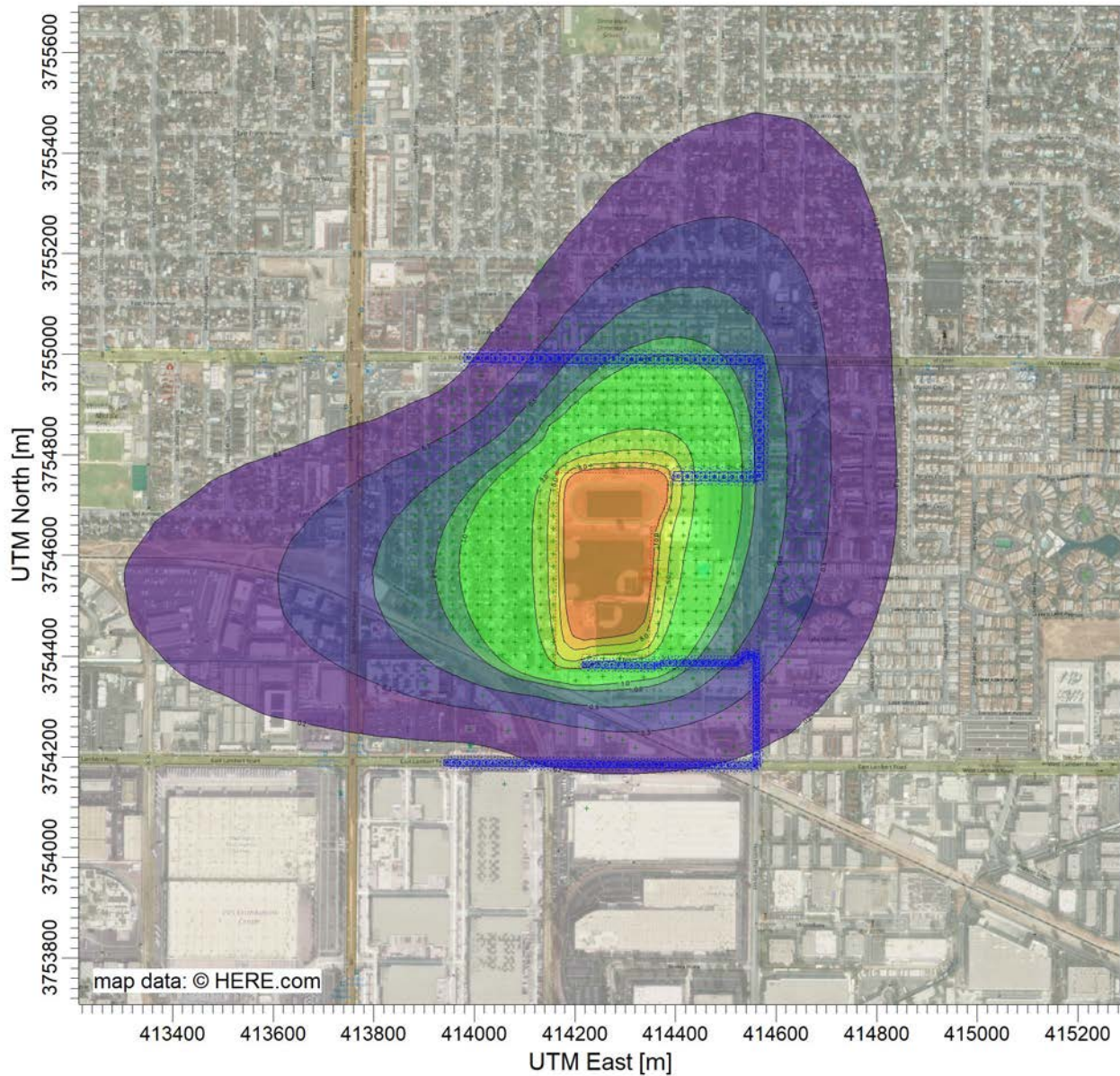
SCALE:

1:13,517

0

0.4 km

PROJECT NO.:



PLOT FILE OF PERIOD VALUES AVERAGED ACROSS 0 YEARS FOR SOURCE GROUP: ONSITE

Max: 16.8 [ug/m³] at (414277.63, 3754669.08)

