

**Appendix A Air Quality, Energy, GHG, and Construction HRA
Technical Modeling**

APPENDIX

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Air Quality, Greenhouse Gas, and Construction HRA Appendix

ACCESSIBILITY COMPLIANCE DISCLAIMER

This appendix includes model outputs from CalEEMod and model spreadsheets. CalEEMod is a web-based model maintained by the California Air Pollution Control Officer's Association available at <https://www.caleemod.com/>. CalEEMod is accessed directly through a browser and requires an internet connection. The text in this appendix should be readable by a screen reader. However, this document may not fully comply with WCAG 2.1 Level AA standards because it contains model outputs. If you need an accessible version of this document, please contact us at the Lead Agency (Ana Gonzalez, Director of Facilities, 951.797.5373) and we will work to provide data in an accessible format.

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.

AQ/GHG APPENDIX

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) ⁴	Annual Arithmetic Mean	*	0.010 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 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}) ^{5,6}	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) ⁷	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.

AQ/GHG APPENDIX

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 2024, USEPA 2025a.

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 O₃, CO (except 8-hour Lake Tahoe), SO₂ (1 and 24 hour), NO₂, and particulate matter (PM₁₀, 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 O₃, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu\text{g}/\text{m}^3$ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
- On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- On December 27, 2024, the secondary annual SO₂ standard was revised to an annual average, averaged over three consecutive years, with a level of 10 parts per billion (ppb).
- On December 14, 2012, the national annual 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 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 PM₁₀ 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 February 7, 2024, the national annual 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 PM_{2.5} standards (primary and secondary), secondary annual PM_{2.5} standard, and PM₁₀ standards (primary and secondary) were retained.
- On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted 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; USEPA 2026a). The SoCAB is designated as being in attainment under the California AAQS and attainment (serious maintenance) under the National AAQS (CARB 2026a).

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.

AQ/GHG APPENDIX

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 2026a). The SoCAB is designated in attainment (maintenance) under the National AAQS and attainment under the California AAQS (CARB 2026a).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 2026a). The SoCAB is designated as attainment under the California and National AAQS (CARB 2026a).

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., ≤ 0.0025 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 2026b). Particulate matter can also cause environmental effects such as visibility impairment,² environmental damage,³ and aesthetic damage⁴ (South Coast AQMD 2005; USEPA 2026a). 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 2026a).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.

AQ/GHG APPENDIX

AQMD 2005; USEPA 2026a). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2026a).

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 2026a). 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)	<ul style="list-style-type: none"> ▪ 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)	<ul style="list-style-type: none"> ▪ 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)	<ul style="list-style-type: none"> ▪ Increased response to allergens ▪ Aggravation of respiratory illness 	Same as carbon monoxide sources
Particulate Matter (PM ₁₀ and PM _{2.5})	<ul style="list-style-type: none"> ▪ 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)	<ul style="list-style-type: none"> ▪ 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)	<ul style="list-style-type: none"> ▪ Behavioral and learning disabilities in children ▪ Nervous system impairment 	Contaminated soil

Source: CARB 2026c.

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.

AQ/GHG APPENDIX

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

AQ/GHG APPENDIX

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. In Beaumont, the lowest average temperature is reported at 39°F in December, and the highest average temperature is 93°F in August. The annual average rainfall is 0.6 inches (Weather Spark 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

AQ/GHG APPENDIX

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 2026a.

- 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). On May 24, 2012, CARB approved the SIP revision for the federal lead standard, which the USEPA revised in 2008. The SIP revision was submitted to the USEPA for approval and was approved in March 2014 (CARB 2014).

AQ/GHG APPENDIX

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) 29: Banning Pass Area. The air quality monitoring station closest to the proposed project is the Banning Airport 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, NO₂, PM₁₀, and PM_{2.5}. Table 4, *Ambient Air Quality Monitoring Summary*, shows common violations of the state and federal O₃ standards, and rare violations of state PM₁₀ 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)	30	28	42
State & Federal 8-hour ≥ 0.070 ppm (days exceed threshold)	56	51	73
Max. 1-Hour Conc. (ppm)	0.116	0.140	0.138
Max. 8-Hour Conc. (ppm)	0.100	0.106	0.111
Nitrogen Dioxide (NO₂)			
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0
Max. 1-Hour Conc. (ppb)	0.0515	0.0498	0.0535
Coarse Particulates (PM₁₀)			
State 24-Hour > 50 µg/m ³ (days exceed threshold)	0	2	0
Federal 24-Hour > 150 µg/m ³ (days exceed threshold)	0	0	0
Max. 24-Hour Conc. (µg/m ³)	52.4	100.0	48.4
Fine Particulates (PM_{2.5})			
Federal 24-Hour > 35 µg/m ³ (days exceed threshold)	*	*	*
Max. 24-Hour Conc. (µg/m ³)	37.9	68.2	26.2

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, NO₂, PM₁₀, and PM_{2.5} from Banning Airport Monitoring Station.

2 Most recent data available as of March 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

AQ/GHG APPENDIX

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 southeast of the project site, in addition to onsite student receptors at the Anna M Hause campus.

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

AQ/GHG APPENDIX

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. 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.

AQ/GHG APPENDIX

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 29 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	1,000	6	4
1.31 Acre Disturbed Per Day	117	1,169	7	5
3.07 Acre Disturbed Per Day	180	1,996	14	8

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:

AQ/GHG APPENDIX

- **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 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.

AQ/GHG APPENDIX

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 [CF₄] and perfluoroethane [C₂F₆]) 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 (SF₆)** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF₆ 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; USEPA 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 CO₂*. The GWP is used to convert GHGs to CO₂-equivalence (CO₂e) 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 CH₄, a project that generates 10 MT of CH₄ would be equivalent to 280 MT of CO₂.¹³

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

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. On February 12, 2026, in response to the Trump Administration’s Executive Order (EO), “Unleashing American Energy,” EPA rescinded the 2009 Greenhouse Gas Endangerment Finding. Therefore, GHG emissions are no longer regulated at the federal level.

Federal Fuel Economy and Fuel Standards

Update to Corporate Average Fuel Economy Standards

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 USEPA 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.

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).

Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles

In 2024, the USEPA issued a final rule, “Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles,” that sets new, more protective standards to reduce harmful air pollutant emissions from light-duty and medium-duty vehicles starting with MY 2027 (USEPA 2026b).

2025 Rollback of CAFE and Federal Fuel Standards

While both the new CAFE standards and fuel standard are currently in effect, the Trump Administration, directed the Department of Transportation to rescind and replace all existing CAFE standards and emissions standards on January 29, 2025. This action targeted regulations covering MY 2024 through 2035 for both light-duty and heavy-duty vehicles.

On June 6, 2025, the NHTSA published an interpretive rule that establishes the NHTSA’s authority to revise the CAFE standards without consideration of electric vehicles (EVs). California currently has no authority to implement these standards.

On June 11, 2025, the NHTSA published the final rule, “Resetting the Corporate Average Fuel Economy Program.” This rule does not immediately change current fuel economy standards; however, the rule clarifies the NHTSA’s interpretation of its obligations for CAFE standards stemming from the Energy Policy and Conservation Act of 1975 and the Energy Independence and Security Act of 2007. The rule asserts that some regulations, such as those established under previous presidential administrations, improperly considered electric vehicles (EVs) when identifying the “maximum feasibility” average fuel economy level upon which CAFE standards are developed, thereby establishing a legal foundation for future rollbacks of CAFE standards (NHTSA 2025).

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).

AQ/GHG APPENDIX

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.

Update to the SB 375 Targets

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. CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology, and then released another update in February 2018, which became effective in October 2018 (CARB 2018). All sustainable community's strategies (SCS) adopted after October 1, 2018, are subject to these new targets. The SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks compared 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 translates into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. CARB staff began the target update process in 2024 with a public workshop and plans to conclude it in 2026 with Board approval of the new targets (CARB 2026e).

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

Advanced Clean Trucks

In March 2021, CARB approved the Advanced Clean Trucks (ACT) regulation to accelerate the transition to zero-emission Class 2b and Class 8 medium- and heavy-duty trucks through manufacturer sales requirements. The regulation has two components including a manufacturer sales requirement, and a reporting requirement:

ZE Truck Sales: Manufacturers who certify Class 2b through 8 chassis or complete vehicles with combustion engines are required to sell ZE trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, ZE truck/chassis sales need to be 55 percent of Class 2b – 3 truck sales, 75 percent of Class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.

Company and Fleet Reporting: Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available ZE trucks and place them in service where suitable to meet their needs.

The ACT regulation was granted a separate waiver in 2023 by the Biden administration. On May 22, 2025, the U.S. Senate voted to revoke the waiver granted by the Biden administration for California's ACT rule through House Joint (H.J.) Resolution 87. On June 12, 2025, President

Trump formally nullified California's ACT rule. California currently has no authority to implement ACT.

Advanced Clean Fleets

CARB adopted the Advanced Clean Fleets (ACF) regulation in April 2023, requiring the use of ZEVs for targeted fleets and that manufacturers only produce ZEV trucks starting in 2036. The ACF regulation was adopted to complement the recently adopted ACT regulation to help advance the introduction of ZE technology into California's trucks and bus fleets. By 2050, the ACF regulation is expected to introduce 1,690,000 ZEVs into the California fleet and result in \$26.5 billion in statewide health benefits from improved air quality. This regulation will help contribute to the goals set by EO N-79-20 (described further below) and will help achieve emission reductions outlined in the State Implementation Plan, SB 350, AB 32, SB 32, and AB 32. The regulation has four components including a manufacturer sales mandate, drayage fleets requirements, high priority and federal fleets phase-in, and State and local agency procurement requirements.

On January 13, 2025, CARB withdrew their requests for the federal CAA waiver from the US EPA needed to support the ACF regulation. In addition, on September 25, 2025, CARB repealed the ACF drayage truck requirements (13 CCR § 2014) and the high priority and federal fleet requirements (13 CCR § 2015 through 2015.6). California currently has no authority to implement ACF.

Omnibus Regulation

CARB adopted the Heavy-Duty Low NO_x Omnibus Regulation rule in September 2021, and amended in December 2023, to reduce nitrogen oxide (NO_x) and particulate matter (PM) emissions from new medium- and heavy-duty engines and vehicles beginning in 2024 model year (MY). The lower NO_x standards for 2024 through 2026 MY engines represent a 75 percent reduction of the 2010 MY standard and the lower PM standards represents a 50 percent reduction compared to the 2010 MY standard. The regulation was amended in 2023 to provide engine manufacturers with additional flexibility, and to prevent product availability issues for the 2024 through 2026 MY period.

On May 22, 2025, the U.S. Senate voted to disapprove the USEPA's waiver authorizing California's Heavy-Duty Low NO_x regulation through House Joint (H.J.) Resolution 89. The resolution was signed into law on June 12, 2025, formally nullifying the USEPA waiver under the Congressional Review Act. As a result, California currently has no authority to implement or enforce the Heavy-Duty Low NO_x rule.

AQ/GHG APPENDIX

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 CO_{2e} 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.

AQ/GHG APPENDIX

Senate Bill 1020

SB 1020 was signed into law on September 16, 2022. It requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035 and 95 percent by 2040. Additionally, SB 1020 requires all State agencies to procure 100 percent of electricity from renewable energy and zero-carbon resources by 2035.

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. 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.¹⁴ 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.

¹⁴ The green building standards became mandatory in the 2010 edition of the code.

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–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

AQ/GHG APPENDIX

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 2025, the statewide GHG emissions inventory was updated for 2000 to 2023 emissions using the GWPs in IPCC's AR4 and reported that California produced 360.4 MMTCO_{2e} GHG emissions in 2023 (3.0 percent lower than 2022 levels). Since peak levels in 2004, California's GHG emissions have generally followed a decreasing trend. By 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 2025).

California's transportation sector remains the largest source of GHG emissions, producing 37.1 percent of the state's total emissions. Industrial sector emissions made up 18.6 percent, and electric power generation made up 15.9 percent of the state's emissions inventory. Other major sectors of GHG emissions include residential and commercial (12.0 percent), agriculture and forestry (8.1 percent), high GWP (5.9 percent), and recycling and waste (2.4 percent).

Emissions from transportation sector have generally decreased since their peak in 2002, but this sector has experienced periods of growth and decline. The decrease in 2023 was primarily due to reductions from on-road sources and decrease in the amount of fuel used. Electricity emissions also have decreased since the early 2000s due to the deployment of renewable and less carbon-intensive resources, leading to reduced dependence on fossil fuel electricity generation. Emissions from the industrial sector decreased from 2022, largely due to the continued downward trend in oil and gas production (CARB 2025).

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;

AQ/GHG APPENDIX

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.¹⁵

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 MTCO_{2e} annually for all land use types or the following land-use-specific thresholds: 1,400 MTCO_{2e} for commercial projects, 3,500 MTCO_{2e} for residential projects, or 3,000 MTCO_{2e} 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 MTCO_{2e} per year per service population (MTCO_{2e}/year/SP) for project-level analyses and 6.6 MTCO_{2e}/year/SP for plan level projects

¹⁵ 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 2020.¹⁶ 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.

¹⁶ 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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AQ/GHG APPENDIX

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Assumptions Worksheet

CalEEMod Inputs- Beaumont Early Childhood Education Center, Construction

Name: Beaumont Early Childhood Education Center
Project Number: BEA-13
Project Location: 1015 Carnation Lane Beaumont, CA 92223
County/Air Basin: Riverside-South Coast
Climate Zone: 10
Land Use Setting: Rural
Operational Year: 2028
Gas Utility: Southern California Gas
Electric Utility: Southern California Edison
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 29-Banning Pass Area

Project Site Acreage 12.73
Disturbed Site Acreage 3.07

Demolition	SQFT	Amount of Debris			
Asphalt Demolition (Tons)	2,770	41			
Project Components	SQFT	Building Footprint	Acres	Number of Stories	
Construction					
Building 1 & 2	19,846	19,846	0.46	1	
Surface Work	SQFT	Building Footprint	Acres	Number of Stalls	
Landscaping (including natural turf)	1,000	NA	0.02	NA	
Synthetic Turf	35,612	NA	0.82	NA	
Asphalt Surfaces (excluding parking)	912	NA	0.02	NA	
Non-Asphalt Surfaces	33,612	NA	0.77	NA	
Staff Parking (modified existing parking lot)	337	NA	0.01	2	
Parking Lot 2	42,410	NA	0.97	95	

Notes

¹ Asphalt Demolition includes demolition of existing parking, concrete hardscape, and other hardscape.

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet	Landscaped Area	Special Landscaped Area¹
Education	Day-Care Center	19.85	1000 sqft	1.30	19,846	1,000	35,612
Parking	Other Asphalt Surfaces	0.91	1000 sqft	0.02	912	-	-
Parking	Other Non-Asphalt Surfaces	33.61	1000 sqft	0.77	33,612	-	-
Parking	Parking Lot	42.75	1000 sqft	0.98	42,747	-	-
				3.07			

Notes

¹ Special landscaped area includes dedicated play areas and accounts for synthetic turf proposed as part of the project.

Demolition

Component	Amount to be Demolished (Tons)	Haul Truck Capacity (Tons per truck) ¹	Haul Distance (miles) ¹	Total Trip Ends	Duration (days)	Trip Ends Per Day
Asphalt Demolition	41	8	20	11	25	1
Total				11		

Notes

¹ CalEEMod default used.

Soil Haul

Construction Activities	Volume (CY) ¹	Haul Truck Capacity (CY) ²	Haul Distance (miles) ²	Total Trip Ends	Duration (days)	Trip Ends per Day
Grading Export	1,500	16	20	188	8	24

Notes

¹ Provided by District.

² 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

Structures	Land Use Square Feet	CalEEMod Factor ²	Total Paintable Surface Area	Paintable Interior Area ¹	Paintable Exterior Area ¹
Non-Residential Structures					
Buildings	19,846	2.0	39,692	29,769	9,923
				29,769	9,923
Parking					
Parking Area	77,271	6%	4,636	-	4,636
					4,636

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 The program assumes the total surface for painting equals 2 times that for nonresidential square footage defined by the user.

³ CalEEMod methodology assumes 6% of parking land uses will be striped.

CalEEMod Construction Measures

Sout Coast AQMD Rule 403

Water Unpaved Roads

Frequency:	2	per day
PM10:	55	% Reduction
PM25:	55	% Reduction

Unpaved Roads

Vehicle Speed:	25	mph
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SCAQMD Rule 1186

Sweep Paved Road	9	% PM Reduction
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Southern California Edison Carbon Intensity Factors

	Forecasted Factors 2027 ¹	
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 defaults used.

Pavement Volume to Weight Conversion

Component	Total SF of Area ¹	Assumed Thickness (foot) ²	Debris Volume (cu. ft)	Weight of Crushed Asphalt (lbs/cf) ³	AC Mass (lbs)	AC Mass (tons)
Asphalt Demolition	2,770	0.333	923	89	82,074	41.04
Total	2,770					41

Notes

¹ Provided information by 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>

Construction Activities and Schedule Assumptions

* based on construction timeframe provided by District: October 1, 2026 - December 1, 2027

CalEEMod Default Construction Schedule				
Construction Activities	Phase Type	Start Date	End Date	CalEEMod Duration (Workday)
Demolition	Demolition	10/1/2026	10/29/2026	21
Site Preparation	Site Preparation	10/30/2026	11/3/2026	3
Grading	Grading	11/4/2026	11/12/2026	7
Building Construction	Building Construction	11/13/2026	9/17/2027	221
Paving	Paving	9/4/2027	9/17/2027	10
Architectural Coating	Architectural Coating	9/4/2027	9/17/2027	10

Notes

¹ Assume Building Construction, Paving, and Architectural Coating phases overlap for conservative estimate.

Normalization Calculations

CalEEMod Defaults Construction Duration	
351	days of construction
0.96	years of construction
11.54	months of construction

Assumed Construction Duration	
10/1/2026	12/1/2027
426	days
14.01	months

Norm Factor: 1.21

New Construction Schedule (CalEEMod)			
Construction Activities	Start Date	End Date	CalEEMod Duration (Workday)
Demolition	10/1/2026	11/4/2026	25
Site Preparation	11/5/2026	11/10/2026	4
Grading	11/11/2026	11/20/2026	8
Building Construction	11/21/2026	12/1/2027	268
Paving	11/16/2027	12/1/2027	12
Architectural Coating	11/16/2027	12/1/2027	12

Overlapping Construction Schedule (CalEEMod)			
Construction Activities	Start Date	End Date	CalEEMod Duration (Workday)
Demolition	10/1/2026	11/4/2026	25
Site Preparation	11/5/2026	11/10/2026	4
Grading	11/11/2026	11/20/2026	8
Building Construction	11/21/2026	11/15/2027	256
Building Construction, Paving, and Architectural Coating	11/16/2027	12/1/2027	12

CalEEMod Construction Off-Road Equipment Inputs

Equipment mix filled per approved data request. Where information has not been provided, CalEEMod default equipment, worker, and vendor trips have been used.

Construction Equipment Details			
Equipment	# of Equipment	hr/day	total trips per day
Demolition			
Rubber Tired Dozers	2	8	
Excavators	3	8	
Concrete/Industrial Saws	1	8	
Worker Trips			15
Vendor Trips			2
Hauling Trips			1
Water Trucks	Acres Disturbed:	1	6
	Onsite Travel (mi/day)	0.83	
Site Preparation			
Rubber Tired Dozers	3	8	
Tractors/Loaders/Backhoes	4	8	
Worker Trips			18
Vendor Trips			1
Hauling Trips			0
Water Trucks	Acres Disturbed:	3.50	18
	Onsite Travel (mi/day)	2.89	
Grading			
Graders	1	8	
Excavators	2	8	
Tractors/Loaders/Backhoes	2	8	
Scrapers	2	8	
Rubber Tired Dozers	1	8	
Worker Trips			20
Vendor Trips			3
Hauling Trips			24
Water Trucks	Acres Disturbed:	4.00	20
	Onsite Travel (mi/day)	1.65	

Building Construction			
Forklifts	3	8	
Generator Sets	1	8	
Cranes	1	7	
Welders	1	8	
Tractors/Loaders/Backhoes	3	7	
Worker Trips			8
Vendor Trips			3
Hauling Trips			0
Paving			
Pavers	2	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			2
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. 2026, 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- Beaumont Early Childhood Education Center, Operation

Name: Beaumont Early Childhood Education Center
Project Number: BEA-13
Project Location: 1015 Carnation Lane Beaumont, CA 92223
County/Air Basin: Riverside-South Coast
Climate Zone: 10
Land Use Setting: Rural
Operational Year: 2028
Gas Utility: Southern California Gas
Electric Utility: Southern California Edison
Air Basin: South Coast Air Basin
Air District: South Coast AQMD
SRA: 29-Banning Pass Area

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet	Landscaped Area	Special Landscaped Area
Education	Day-Care Center	19.85	1000 sqft	1.30	19,846	1,000	35,612
Parking	Other Asphalt Surfaces	0.91	1000 sqft	0.02	912	-	-
Parking	Other Non-Asphalt Surfaces	33.61	1000 sqft	0.77	33,612	-	-
Parking	Parking Lot	42.75	1000 sqft	0.98	42,747	-	-
				3.07			

Trips (Average Daily)

Land Use Type	Average Daily Trips	CalEEMod Trip Rate	Saturday Trips	CalEEMod Trip Rate	Sunday Trips	CalEEMod Trip Rate
Day-Care Center	454	22.88	0	0.00	0	0.00

Source: DJ&A, 2026, March 11. Beaumont Early Childhood Education Center - Traffic Analysis.

Water Use (CalEEMod defaults used)

	Annual Indoor Water Demand (gpy)	Annual Outdoor Water Demand (gpy)
Day-Care Center	851,358	705,988

Notes

¹ Assume 100% aerobic treatment.

Solid Waste (CalEEMod defaults used)

Land Use	Total Solid Waste (tons/year)
Day-Care Center	25.81

Electricity (CalEEMod Defaults)

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)
Day-Care Center	129,159.31	475,121.92	111,638.62	274,214.97	17,520.69	200,906.95
Parking Lot	37,449.00	0.00	37,449.00	0.00	0.00	0.00
Total	166,608.31	475,121.92				

Architectural Coating (see construction land use tab)

Southern California Edison Carbon Intensity Factors

Forecasted Factors 2028 ¹		
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 defaults used.

Changes to the CalEEMod Defaults - Fleet Mix 2028

Trips 454

Default	HHD	LDA	LDT1	LDT2	LHD1	LHD2	MCY	MDV	MH	MHD	OBUS	SBUS	UBUS
FleetMix (Model Default)	1.664988138	49.4962126	3.610356897	21.19942307	3.038748913	0.86994227	2.250901982	15.59282541	0.538381003	1.50915971	0.058327202	0.132755598	0.0379768
Percentage													
FleetMix (Converted)	0.016649881	0.494962126	0.036103569	0.211994231	0.030387489	0.008699423	0.02250902	0.155928254	0.00538381	0.015091597	0.000583272	0.001327556	0.000379768
Trips	8	225	16	96	14	4	10	71	2	7	0	1	0
Percent		77%			8%			16%					
without buses/MH	0.016650	0.494962	0.036104	0.211994	0.030387	0.008699	0.022509	0.155928	0	0.015092	0	0.001328	0
Percent		77%			7%			16%					
Adjusted without buses/MH	0.018114	0.494962	0.036104	0.211994	0.033060	0.009465	0.024489	0.155928	0	0.016419	0	0.001444	0
Percent adjusted		77%			8%			16%					
Assumed Mix		97.0%			1.00%			2.00%					
Adjusted with Assumed Mix	0.002307	0.625515	0.045626	0.267911	0.004211	0.001206	0.030948	0.020000	0.000000	0.002092	0.000000	0.000184	0.000000
Percentage													
Adjusted CalEEMod Input	0.230749	62.551493	4.562636	26.791051	0.421136	0.120564	3.094819	2.000000	0.000000	0.209153	0.000000	0.018398	0.000000
Percent Check:		97%			1%			2%					
Trips	1	284	21	122	2	1	14	9	0	1	0	0	0
		440			27			9					

Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles than the regional VMT. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.

CalEEMod Construction and Operation Model

Beaumont Early Childhood Education Center Custom Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year
 - 2.2.1. Total Construction Emissions by Year, Unmitigated
 - 2.2.2. Onsite Construction Emissions by Year, Unmitigated
 - 2.2.3. Offsite Construction Emissions by Year, Unmitigated
 - 2.2.4. Total Construction Emissions by Year, Mitigated
 - 2.2.5. Onsite Construction Emissions by Year, Mitigated
 - 2.2.6. Offsite Construction Emissions by Year, Mitigated
 - 2.3. Operations Emissions Compared Against Thresholds
 - 2.4. Operations Emissions by Sector, Unmitigated

2.5. Operations Emissions by Sector, Mitigated

3. Construction Emissions Details

3.1. Demolition (2026)

3.1.1. Onsite - Unmitigated

3.1.2. Offsite - Unmitigated

3.1.3. Onsite - Mitigated

3.1.4. Offsite - Mitigated

3.2. Site Preparation (2026)

3.2.1. Onsite - Unmitigated

3.2.2. Offsite - Unmitigated

3.2.3. Onsite - Mitigated

3.2.4. Offsite - Mitigated

3.3. Grading (2026)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.3.3. Onsite - Mitigated

3.3.4. Offsite - Mitigated

3.4. Building Construction (2026)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

3.4.3. Onsite - Mitigated

3.4.4. Offsite - Mitigated

3.5. Building Construction (2027)

3.5.1. Onsite - Unmitigated

3.5.2. Offsite - Unmitigated

3.5.3. Onsite - Mitigated

3.5.4. Offsite - Mitigated

3.6. Paving (2027)

3.6.1. Onsite - Unmitigated

3.6.2. Offsite - Unmitigated

3.6.3. Onsite - Mitigated

3.6.4. Offsite - Mitigated

3.7. Architectural Coating (2027)

3.7.1. Onsite - Unmitigated

3.7.2. Offsite - Unmitigated

3.7.3. Onsite - Mitigated

3.7.4. Offsite - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

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

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

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

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

8.4.2. Off-Road Equipment

8.4.4. Dust from Material Movement

8.4.8. Architectural Coatings

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

8.5.1.2. Fleet Mix

8.5.2. Area Sources

8.5.2.3. Architectural Coatings

8.5.4. Water and Waste Water

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Beaumont Early Childhood Education Center
Construction Start Date	10/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	19.2000
Location	1015 Carnation Ln, Beaumont, CA 92223, USA
County	Riverside-South Coast
City	Beaumont
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5625
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.43

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
Day-Care Center	19.8500	1000sqft	1.30000	19,846.0	1,000.000	35,612.0	—	—

Other Asphalt Surfaces	0.91000	1000sqft	0.02089	0.00000	0.00000	0.00000	—	—
Other Non-Asphalt Surfaces	33.6100	1000sqft	0.77158	0.00000	0.00000	0.00000	—	—
Parking Lot	42.7500	1000sqft	0.98140	0.00000	0.00000	0.00000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	1.27268	1.06534	9.52041	13.5232	0.02413	0.33804	0.13678	0.47482	0.31111	0.03323	0.34434	—	2,606.03	2,606.03	0.10077	0.03780	0.59527	2,620.40
Mit.	0.63597	0.57554	9.25958	15.5400	0.02413	0.10115	0.13678	0.23793	0.09633	0.03323	0.12956	—	2,606.03	2,606.03	0.10077	0.03780	0.59527	2,620.40
% Reduced	50%	46%	3%	-15%	—	70%	—	50%	69%	—	62%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	12.0374	11.6563	29.9273	29.9670	0.07704	1.25125	9.13010	10.3814	1.15185	4.14570	5.29755	—	9,144.21	9,144.21	0.31757	0.42648	0.15820	9,279.40
Mit.	11.0131	10.8706	21.5831	37.1780	0.07702	0.21486	9.13010	9.23844	0.20449	4.14570	4.25403	—	9,141.33	9,141.33	0.31745	0.42646	0.15820	9,276.51
% Reduced	9%	7%	28%	-24%	—	83%	—	11%	82%	—	20%	—	< 0.5%	< 0.5%	—	—	—	< 0.5%

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.18711	1.04543	6.50901	9.18458	0.01635	0.23207	0.26085	0.38858	0.21358	0.09238	0.23691	—	1,766.31	1,766.31	0.06852	0.02577	0.18045	1,775.89
Mit.	0.75695	0.71459	6.33116	10.5281	0.01635	0.07005	0.26085	0.28644	0.06666	0.09238	0.11687	—	1,766.31	1,766.31	0.06852	0.02577	0.18045	1,775.89
% Reduced	36%	32%	3%	-15%	—	70%	—	26%	69%	—	51%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.21665	0.19079	1.18790	1.67619	0.00298	0.04235	0.04761	0.07092	0.03898	0.01686	0.04324	—	292.434	292.434	0.01134	0.00427	0.02988	294.018
Mit.	0.13814	0.13041	1.15544	1.92138	0.00298	0.01278	0.04761	0.05228	0.01216	0.01686	0.02133	—	292.434	292.434	0.01134	0.00427	0.02988	294.018
% Reduced	36%	32%	3%	-15%	—	70%	—	26%	69%	—	51%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.27268	1.06534	9.52041	13.5232	0.02413	0.33804	0.13678	0.47482	0.31111	0.03323	0.34434	—	2,606.03	2,606.03	0.10077	0.03780	0.59527	2,620.40
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.84665	3.22573	29.9273	29.9670	0.07704	1.25125	9.13010	10.3814	1.15185	4.14570	5.29755	—	9,144.21	9,144.21	0.31757	0.42648	0.15820	9,279.40
2027	12.0374	11.6563	17.4342	25.3243	0.04026	0.65611	0.37175	1.02786	0.60381	0.08902	0.69283	—	4,508.29	4,508.29	0.17188	0.06789	0.03754	4,532.86
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.42382	0.35453	3.22819	3.42108	0.00658	0.12774	0.26085	0.38858	0.11763	0.09238	0.21001	—	742.905	742.905	0.02777	0.01935	0.13379	749.498

2027	1.18711	1.04543	6.50901	9.18458	0.01635	0.23207	0.09623	0.32830	0.21358	0.02333	0.23691	—	1,766.31	1,766.31	0.06852	0.02577	0.18045	1,775.89
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07735	0.06470	0.58914	0.62435	0.00120	0.02331	0.04761	0.07092	0.02147	0.01686	0.03833	—	122.996	122.996	0.00460	0.00320	0.02215	124.088
2027	0.21665	0.19079	1.18790	1.67619	0.00298	0.04235	0.01756	0.05991	0.03898	0.00426	0.04324	—	292.434	292.434	0.01134	0.00427	0.02988	294.018

2.2.2. Onsite 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	0.00000	0.33657	0.30965	0.00000	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	0.00000	2,405.30
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.74275	3.14451	29.1872	28.8196	0.06099	1.24270	8.73880	9.98150	1.14330	4.04717	5.19047	—	6,605.63	6,605.63	0.26814	0.05467	0.00052	6,628.62
2027	11.9233	11.5585	17.1665	24.0165	0.03907	0.65375	0.00000	0.65375	0.60145	0.00000	0.60145	—	4,041.70	4,041.70	0.16395	0.03279	0.00000	4,055.57
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.40985	0.34380	3.12327	3.26317	0.00598	0.12633	0.20816	0.33449	0.11622	0.07904	0.19526	—	630.298	630.298	0.02559	0.00520	0.00037	632.488
2027	1.15839	1.02131	6.41212	8.84605	0.01585	0.23108	0.00000	0.23108	0.21259	0.00000	0.21259	—	1,625.54	1,625.54	0.06594	0.01319	0.00000	1,631.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07480	0.06274	0.57000	0.59553	0.00109	0.02306	0.03799	0.06105	0.02121	0.01442	0.03564	—	104.353	104.353	0.00424	0.00086	0.00006	104.716
2027	0.21141	0.18639	1.17021	1.61440	0.00289	0.04217	0.00000	0.04217	0.03880	0.00000	0.03880	—	269.127	269.127	0.01092	0.00218	0.00000	270.050

2.2.3. Offsite 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
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.04193	0.03547	0.12948	0.58523	0.00073	0.00146	0.13678	0.13824	0.00146	0.03323	0.03469	—	208.949	208.949	0.00354	0.01835	0.59527	215.101
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.18625	0.11743	2.68233	1.76121	0.01605	0.04143	0.88353	0.92496	0.04143	0.23493	0.27636	—	2,538.58	2,538.58	0.04943	0.37181	0.15790	2,650.78
2027	0.11411	0.09784	0.26774	1.30784	0.00118	0.00236	0.37175	0.37411	0.00236	0.08902	0.09138	—	466.597	466.597	0.00793	0.03510	0.03754	477.294
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.01397	0.01073	0.10492	0.15792	0.00059	0.00141	0.05269	0.05409	0.00141	0.01334	0.01474	—	112.607	112.607	0.00218	0.01414	0.13341	117.010
2027	0.02872	0.02412	0.09690	0.33853	0.00049	0.00099	0.09623	0.09722	0.00099	0.02333	0.02431	—	140.775	140.775	0.00258	0.01258	0.18045	144.769
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.00255	0.00196	0.01915	0.02882	0.00011	0.00026	0.00962	0.00987	0.00026	0.00243	0.00269	—	18.6434	18.6434	0.00036	0.00234	0.02209	19.3723
2027	0.00524	0.00440	0.01768	0.06178	0.00009	0.00018	0.01756	0.01774	0.00018	0.00426	0.00444	—	23.3070	23.3070	0.00043	0.00208	0.02988	23.9682

2.2.4. Total Construction Emissions by Year, Mitigated

Includes both onsite and offsite emissions.

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.63597	0.57554	9.25958	15.5400	0.02413	0.10115	0.13678	0.23793	0.09633	0.03323	0.12956	—	2,606.03	2,606.03	0.10077	0.03780	0.59527	2,620.40
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.17161	1.06615	21.5831	37.1780	0.07702	0.20829	9.13010	9.23844	0.20449	4.14570	4.25403	—	9,141.33	9,141.33	0.31745	0.42646	0.15820	9,276.51
2027	11.0131	10.8706	16.9648	27.9908	0.04026	0.21486	0.37175	0.58661	0.20288	0.08902	0.29190	—	4,508.29	4,508.29	0.17188	0.06789	0.03754	4,532.86
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2026	0.15045	0.13562	2.14698	3.70315	0.00658	0.02559	0.26085	0.28644	0.02449	0.09238	0.11687	—	742.842	742.842	0.02777	0.01935	0.13379	749.435
2027	0.75695	0.71459	6.33116	10.5281	0.01635	0.07005	0.09623	0.16628	0.06666	0.02333	0.08998	—	1,766.31	1,766.31	0.06852	0.02577	0.18045	1,775.89
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02746	0.02475	0.39182	0.67583	0.00120	0.00467	0.04761	0.05228	0.00447	0.01686	0.02133	—	122.986	122.986	0.00460	0.00320	0.02215	124.078
2027	0.13814	0.13041	1.15544	1.92138	0.00298	0.01278	0.01756	0.03035	0.01216	0.00426	0.01642	—	292.434	292.434	0.01134	0.00427	0.02988	294.018

2.2.5. Onsite Construction Emissions by Year, Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.59404	0.54007	9.13010	14.9548	0.02340	0.09968	0.00000	0.09968	0.09487	0.00000	0.09487	—	2,397.08	2,397.08	0.09724	0.01945	0.00000	2,405.30
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.98536	0.94872	18.9007	35.4167	0.06097	0.16686	8.73880	8.83859	0.16306	4.04717	4.14696	—	6,602.75	6,602.75	0.26802	0.05465	0.00052	6,625.73
2027	10.8990	10.7727	16.6971	26.6829	0.03907	0.21250	0.00000	0.21250	0.20052	0.00000	0.20052	—	4,041.70	4,041.70	0.16395	0.03279	0.00000	4,055.57
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.13648	0.12489	2.04206	3.54524	0.00598	0.02418	0.20816	0.23235	0.02308	0.07904	0.10212	—	630.235	630.235	0.02559	0.00520	0.00037	632.425
2027	0.72823	0.69048	6.23426	10.1896	0.01585	0.06906	0.00000	0.06906	0.06567	0.00000	0.06567	—	1,625.54	1,625.54	0.06594	0.01319	0.00000	1,631.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02491	0.02279	0.37268	0.64701	0.00109	0.00441	0.03799	0.04240	0.00421	0.01442	0.01864	—	104.343	104.343	0.00424	0.00086	0.00006	104.705
2027	0.13290	0.12601	1.13775	1.85960	0.00289	0.01260	0.00000	0.01260	0.01198	0.00000	0.01198	—	269.127	269.127	0.01092	0.00218	0.00000	270.050

2.2.6. Offsite Construction Emissions by Year, Mitigated

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
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.04193	0.03547	0.12948	0.58523	0.00073	0.00146	0.13678	0.13824	0.00146	0.03323	0.03469	—	208.949	208.949	0.00354	0.01835	0.59527	215.101
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.18625	0.11743	2.68233	1.76121	0.01605	0.04143	0.88353	0.92496	0.04143	0.23493	0.27636	—	2,538.58	2,538.58	0.04943	0.37181	0.15790	2,650.78
2027	0.11411	0.09784	0.26774	1.30784	0.00118	0.00236	0.37175	0.37411	0.00236	0.08902	0.09138	—	466.597	466.597	0.00793	0.03510	0.03754	477.294
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.01397	0.01073	0.10492	0.15792	0.00059	0.00141	0.05269	0.05409	0.00141	0.01334	0.01474	—	112.607	112.607	0.00218	0.01414	0.13341	117.010
2027	0.02872	0.02412	0.09690	0.33853	0.00049	0.00099	0.09623	0.09722	0.00099	0.02333	0.02431	—	140.775	140.775	0.00258	0.01258	0.18045	144.769
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.00255	0.00196	0.01915	0.02882	0.00011	0.00026	0.00962	0.00987	0.00026	0.00243	0.00269	—	18.6434	18.6434	0.00036	0.00234	0.02209	19.3723
2027	0.00524	0.00440	0.01768	0.06178	0.00009	0.00018	0.01756	0.01774	0.00018	0.00426	0.00444	—	23.3070	23.3070	0.00043	0.00208	0.02988	23.9682

2.3. 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.	2.08964	1.99460	0.62483	9.44118	0.01641	0.01931	1.62586	1.64516	0.01832	0.41053	0.42885	15.7267	1,903.17	1,918.90	1.51545	0.06397	4.44182	1,980.29
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.86592	1.78056	0.66085	7.64771	0.01518	0.01778	1.62586	1.64363	0.01716	0.41053	0.42769	15.7267	1,780.60	1,796.33	1.52184	0.06703	0.18983	1,854.54
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.56202	1.49073	0.52169	6.25023	0.01122	0.01652	1.14682	1.16334	0.01582 A-77	0.28961	0.30543	15.7267	1,377.92	1,393.64	1.49464	0.05023	1.42297	1,447.40

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.28507	0.27206	0.09521	1.14067	0.00205	0.00301	0.20929	0.21231	0.00289	0.05285	0.05574	2.60373	228.130	230.734	0.24745	0.00832	0.23559	239.634

2.4. 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.46010	1.38392	0.48995	8.47084	0.01560	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,580.28	1,580.28	0.08966	0.05775	4.36516	1,604.09
Area	0.61551	0.60366	0.00726	0.86314	0.00005	0.00153	—	0.00153	0.00116	—	0.00116	—	3.54939	3.54939	0.00015	0.00003	—	3.56219
Energy	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	310.295	310.295	0.02854	0.00211	—	311.638
Water	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	2.08964	1.99460	0.62483	9.44118	0.01641	0.01931	1.62586	1.64516	0.01832	0.41053	0.42885	15.7267	1,903.17	1,918.90	1.51545	0.06397	4.44182	1,980.29
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39000	1.31166	0.53323	7.54051	0.01442	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,461.26	1,461.26	0.09620	0.06084	0.11317	1,481.90
Area	0.46188	0.46188	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	310.295	310.295	0.02854	0.00211	—	311.638
Water	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	1.86592	1.78056	0.66085	7.64771	0.01518	0.01778	1.62586	1.64363	0.01716	0.41053	0.42769	15.7267	1,780.60	1,796.33	1.52184	0.06703	0.18983	1,854.54
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.98088	0.92472	0.38910	5.55184	0.01042	0.00577	1.14682	1.15259	0.00533	0.28961	0.29494	—	1,056.14	1,056.14	0.06890	0.04402	1.34630	1,072.33

Area	0.56710	0.55899	0.00497	0.59119	0.00004	0.00105	—	0.00105	0.00079	—	0.00079	—	2.43109	2.43109	0.00010	0.00002	—	2.43985
Energy	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	310.295	310.295	0.02854	0.00211	—	311.638
Water	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	1.56202	1.49073	0.52169	6.25023	0.01122	0.01652	1.14682	1.16334	0.01582	0.28961	0.30543	15.7267	1,377.92	1,393.64	1.49464	0.05023	1.42297	1,447.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.17901	0.16876	0.07101	1.01321	0.00190	0.00105	0.20929	0.21035	0.00097	0.05285	0.05383	—	174.856	174.856	0.01141	0.00729	0.22290	177.536
Area	0.10350	0.10202	0.00091	0.10789	0.00001	0.00019	—	0.00019	0.00014	—	0.00014	—	0.40249	0.40249	0.00002	< 0.000005	—	0.40395
Energy	0.00256	0.00128	0.02329	0.01956	0.00014	0.00177	—	0.00177	0.00177	—	0.00177	—	51.3728	51.3728	0.00472	0.00035	—	51.5952
Water	—	—	—	—	—	—	—	—	—	—	—	0.30121	1.49840	1.79961	0.00118	0.00068	—	2.03031
Waste	—	—	—	—	—	—	—	—	—	—	—	2.30251	0.00000	2.30251	0.23013	0.00000	—	8.05572
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01269	0.01269
Total	0.28507	0.27206	0.09521	1.14067	0.00205	0.00301	0.20929	0.21231	0.00289	0.05285	0.05574	2.60373	228.130	230.734	0.24745	0.00832	0.23559	239.634

2.5. Operations Emissions by Sector, Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.46010	1.38392	0.48995	8.47084	0.01560	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,580.28	1,580.28	0.08966	0.05775	4.36516	1,604.09
Area	0.61551	0.60366	0.00726	0.86314	0.00005	0.00153	—	0.00153	0.00116	—	0.00116	—	3.54939	3.54939	0.00015	0.00003	—	3.56219
Energy	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	310.295	310.295	0.02854	0.00211	—	311.638
Water	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	2.08964	1.99460	0.62483	9.44118	0.01641	0.01931	1.62586	1.64516	0.01832 A-79	0.41053	0.42885	15.7267	1,903.17	1,918.90	1.51545	0.06397	4.44182	1,980.29

Beaumont Early Childhood Education Center Custom Report, 4/9/2026

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.39000	1.31166	0.53323	7.54051	0.01442	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,461.26	1,461.26	0.09620	0.06084	0.11317	1,481.90
Area	0.46188	0.46188	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	310.295	310.295	0.02854	0.00211	—	311.638
Water	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	1.86592	1.78056	0.66085	7.64771	0.01518	0.01778	1.62586	1.64363	0.01716	0.41053	0.42769	15.7267	1,780.60	1,796.33	1.52184	0.06703	0.18983	1,854.54
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.98088	0.92472	0.38910	5.55184	0.01042	0.00577	1.14682	1.15259	0.00533	0.28961	0.29494	—	1,056.14	1,056.14	0.06890	0.04402	1.34630	1,072.33
Area	0.56710	0.55899	0.00497	0.59119	0.00004	0.00105	—	0.00105	0.00079	—	0.00079	—	2.43109	2.43109	0.00010	0.00002	—	2.43985
Energy	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	310.295	310.295	0.02854	0.00211	—	311.638
Water	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	1.56202	1.49073	0.52169	6.25023	0.01122	0.01652	1.14682	1.16334	0.01582	0.28961	0.30543	15.7267	1,377.92	1,393.64	1.49464	0.05023	1.42297	1,447.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.17901	0.16876	0.07101	1.01321	0.00190	0.00105	0.20929	0.21035	0.00097	0.05285	0.05383	—	174.856	174.856	0.01141	0.00729	0.22290	177.536
Area	0.10350	0.10202	0.00091	0.10789	0.00001	0.00019	—	0.00019	0.00014	—	0.00014	—	0.40249	0.40249	0.00002	< 0.000005	—	0.40395
Energy	0.00256	0.00128	0.02329	0.01956	0.00014	0.00177	—	0.00177	0.00177	—	0.00177	—	51.3728	51.3728	0.00472	0.00035	—	51.5952
Water	—	—	—	—	—	—	—	—	—	—	—	0.30121	1.49840	1.79961	0.00118	0.00068	—	2.03031
Waste	—	—	—	—	—	—	—	—	—	—	—	2.30251	0.00000	2.30251	0.23013	0.00000	—	8.05572
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01269	0.01269
Total	0.28507	0.27206	0.09521	1.14067	0.00205	0.00301	0.20929	0.21231	0.00289	0.05285	0.05574	2.60373	228.130	230.734	0.24745	0.00832	0.23559	239.634

3. Construction Emissions Details

3.1. Demolition (2026)

3.1.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (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	—	—	—	—	—	—	0.02267	0.02267	—	0.00343	0.00343	—	—	—	—	—	—	—
Onsite truck	0.00111	0.00059	0.01717	0.01056	0.00004	0.00005	0.30804	0.30809	0.00005	0.03079	0.03085	—	4.33973	4.33973	0.00043	0.00070	0.00015	4.56042
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18664	0.15663	1.41449	1.30175	0.00223	0.05775	—	0.05775	0.05313	—	0.05313	—	234.698	234.698	0.00952	0.00190	—	235.504
Demolition	—	—	—	—	—	—	0.00155	0.00155	—	0.00024	0.00024	—	—	—	—	—	—	—
Onsite truck	0.00008	0.00005	0.00115	0.00071	< 0.000005	< 0.000005	0.01999	0.01999	< 0.000005	0.00200	0.00200	—	0.29577	0.29577	0.00003	0.00005	0.00017	0.31105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.03406	0.02858	0.25814	0.23757	0.00041	0.01054	—	0.01054	0.00970	—	0.00970	—	38.8570	38.8570	0.00158	0.00032	—	38.9903
Demolition	—	—	—	—	—	—	0.00028	0.00028	—	0.00004	0.00004	—	—	—	—	—	—	—
Onsite truck	0.00001	0.00001	0.00021	0.00013	< 0.000005	< 0.000005	0.00365	0.00365	< 0.000005	0.00036	0.00037	—	0.04897	0.04897	< 0.000005	0.00001	0.00003	0.05150

3.1.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06730	0.05986	0.06564	0.81681	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	190.219	190.219	0.00298	0.00744	0.01820	192.529
Vendor	0.01069	0.00480	0.26822	0.08187	0.00180	0.00360	0.06845	0.07205	0.00360	0.01891	0.02251	—	240.991	240.991	0.00536	0.03721	0.01706	252.232
Hauling	0.00123	0.00045	0.03415	0.00818	0.00020	0.00058	0.00796	0.00855	0.00058	0.00223	0.00282	—	29.8097	29.8097	0.00056	0.00477	0.00158	31.2476
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00459	0.00408	0.00492	0.05853	0.00000	0.00000	0.01326	0.01326	0.00000	0.00311	0.00311	—	13.1939	13.1939	0.00020	0.00051	0.02073	13.3716
Vendor	0.00073	0.00033	0.01846	0.00554	0.00012	0.00025	0.00464	0.00489	0.00025	0.00128	0.00153	—	16.4993	16.4993	0.00037	0.00255	0.01938	17.2874
Hauling	0.00009	0.00003	0.00235	0.00055	0.00001	0.00004	0.00054	0.00058	0.00004	0.00015	0.00019	—	2.04111	2.04111	0.00004	0.00033	0.00181	2.14129
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00084	0.00074	0.00090	0.01068	0.00000	0.00000	0.00242	0.00242	0.00000	0.00057	0.00057	—	2.18440	2.18440	0.00003	0.00008	0.00343	2.21382
Vendor	0.00013	0.00006	0.00337	0.00101	0.00002	0.00004	0.00085	0.00089	0.00004	0.00023	0.00028	—	2.73164	2.73164	0.00006	0.00042	0.00321	2.86213
Hauling	0.00002	0.00001	0.00043	0.00010	< 0.000005	0.00001	0.00010	0.00011	0.00001	0.00003	0.00003	—	0.33793	0.33793	0.00001	0.00005	0.00030	0.35452

3.1.3. Onsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86147	0.77057	10.6441	18.3519	0.03253	0.15930	—	0.15930	0.15070	—	0.15070	—	3,426.59	3,426.59	0.13900	0.02780	—	3,438.35
Demolition	—	—	—	—	—	—	0.02267	0.02267	—	0.00343	0.00343	—	—	—	—	—	—	—
Onsite truck	0.00111	0.00059	0.01717	0.01056	0.00004	0.00005	0.30804	0.30809	0.00005	0.03079	0.03085	—	4.33973	4.33973	0.00043	0.00070	0.00015	4.56042
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05901	0.05278	0.72905	1.25698	0.00223	0.01091	—	0.01091	0.01032	—	0.01032	—	234.698	234.698	0.00952	0.00190	—	235.504
Demolition	—	—	—	—	—	—	0.00155	0.00155	—	0.00024	0.00024	—	—	—	—	—	—	—
Onsite truck	0.00008	0.00005	0.00115	0.00071	< 0.000005	< 0.000005	0.01999	0.01999	< 0.000005	0.00200	0.00200	—	0.29577	0.29577	0.00003	0.00005	0.00017	0.31105
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01077	0.00963	0.13305	0.22940	0.00041	0.00199	—	0.00199	0.00188	—	0.00188	—	38.8570	38.8570	0.00158	0.00032	—	38.9903
Demolition	—	—	—	—	—	—	0.00028	0.00028	—	0.00004	0.00004	—	—	—	—	—	—	—

Onsite truck	0.00001	0.00001	0.00021	0.00013	< 0.000005	< 0.000005	0.00365	0.00365	< 0.000005	0.00036	0.00037	—	0.04897	0.04897	< 0.000005	0.00001	0.00003	0.05150
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3.1.4. Offsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06730	0.05986	0.06564	0.81681	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	190.219	190.219	0.00298	0.00744	0.01820	192.529
Vendor	0.01069	0.00480	0.26822	0.08187	0.00180	0.00360	0.06845	0.07205	0.00360	0.01891	0.02251	—	240.991	240.991	0.00536	0.03721	0.01706	252.232
Hauling	0.00123	0.00045	0.03415	0.00818	0.00020	0.00058	0.00796	0.00855	0.00058	0.00223	0.00282	—	29.8097	29.8097	0.00056	0.00477	0.00158	31.2476
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00459	0.00408	0.00492	0.05853	0.00000	0.00000	0.01326	0.01326	0.00000	0.00311	0.00311	—	13.1939	13.1939	0.00020	0.00051	0.02073	13.3716
Vendor	0.00073	0.00033	0.01846	0.00554	0.00012	0.00025	0.00464	0.00489	0.00025	0.00128	0.00153	—	16.4993	16.4993	0.00037	0.00255	0.01938	17.2874
Hauling	0.00009	0.00003	0.00235	0.00055	0.00001	0.00004	0.00054	0.00058	0.00004	0.00015	0.00019	—	2.04111	2.04111	0.00004	0.00033	0.00181	2.14129
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00084	0.00074	0.00090	0.01068	0.00000	0.00000	0.00242	0.00242	0.00000	0.00057	0.00057	—	2.18440	2.18440	0.00003	0.00008	0.00343	2.21382
Vendor	0.00013	0.00006	0.00337	0.00101	0.00002	0.00004	0.00085	0.00089	0.00004	0.00023	0.00028	—	2.73164	2.73164	0.00006	0.00042	0.00321	2.86213
Hauling	0.00002	0.00001	0.00043	0.00010	< 0.000005	0.00001	0.00010	0.00011	0.00001	0.00003	0.00003	—	0.33793	0.33793	0.00001	0.00005	0.00030	0.35452

3.2. Site Preparation (2026)

3.2.1. Onsite - 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
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (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	0.00129	0.00064	0.02366	0.01142	0.00009	0.00019	1.07256	1.07275	0.00019	0.10721	0.10740	—	11.1537	11.1537	0.00052	0.00179	0.00052	11.7018
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
Dust From Material Movement	—	—	—	—	—	—	0.08401	0.08401	—	0.04318	0.04318	—	—	—	—	—	—	—
Onsite truck	0.00001	0.00001	0.00026	0.00012	< 0.000005	< 0.000005	0.01114	0.01114	< 0.000005	0.00111	0.00112	—	0.12200	0.12200	0.00001	0.00002	0.00009	0.12809
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	0.00002	< 0.000005	< 0.000005	0.00203	0.00203	< 0.000005	0.00020	0.00020	—	0.02020	0.02020	< 0.000005	< 0.000005	0.00002	0.02121
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3.2.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07851	0.06983	0.07658	0.95295	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	221.922	221.922	0.00347	0.00868	0.02123	224.617
Vendor	0.02538	0.01139	0.63703	0.19444	0.00427	0.00855	0.16256	0.17111	0.00855	0.04491	0.05346	—	572.355	572.355	0.01273	0.08838	0.04051	599.052
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	0.00086	0.00076	0.00092	0.01093	0.00000	0.00000	0.00248	0.00248	0.00000	0.00058	0.00058	—	2.46286	2.46286	0.00004	0.00010	0.00387	2.49603
Vendor	0.00028	0.00012	0.00702	0.00210	0.00005	0.00009	0.00176	0.00186	0.00009	0.00049	0.00058	—	6.26973	6.26973	0.00014	0.00097	0.00737	6.56922
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	0.00016	0.00014	0.00017	0.00199	0.00000	0.00000	0.00045	0.00045	0.00000	0.00011	0.00011	—	0.40776	0.40776	0.00001	0.00002	0.00064	0.41325
Vendor	0.00005	0.00002	0.00128	0.00038	0.00001	0.00002	0.00032	0.00034	0.00002	0.00009	0.00011	—	1.03802	1.03802	0.00002	0.00016	0.00122	1.08761
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

3.2.3. Onsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64145	0.64145	14.7340	28.3078	0.04890	0.09960	—	0.09960	0.09960	—	0.09960	—	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	0.00129	0.00064	0.02366	0.01142	0.00009	0.00019	1.07256	1.07275	0.00019	0.10721	0.10740	—	11.1537	11.1537	0.00052	0.00179	0.00052	11.7018
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00703	0.00703	0.16147	0.31022	0.00054	0.00109	—	0.00109	0.00109	—	0.00109	—	58.0596	58.0596	0.00236	0.00047	—	58.2589
Dust From Material Movement	—	—	—	—	—	—	0.08401	0.08401	—	0.04318	0.04318	—	—	—	—	—	—	—
Onsite truck	0.00001	0.00001	0.00026	0.00012	< 0.000005	< 0.000005	0.01114	0.01114	< 0.000005	0.00111	0.00112	—	0.12200	0.12200	0.00001	0.00002	0.00009	0.12809
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00128	0.00128	0.02947	0.05662	0.00010	0.00020	—	0.00020	0.00020	—	0.00020	—	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	0.00002	< 0.000005	< 0.000005	0.00203	0.00203	< 0.000005	0.00020	0.00020	—	0.02020	0.02020	< 0.000005	< 0.000005	0.00002	0.02121

3.2.4. Offsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07851	0.06983	0.07658	0.95295	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	221.922	221.922	0.00347	0.00868	0.02123	224.617
Vendor	0.02538	0.01139	0.63703	0.19444	0.00427	0.00855	0.16256	0.17111	0.00855	0.04491	0.05346	—	572.355	572.355	0.01273	0.08838	0.04051	599.052
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	0.00086	0.00076	0.00092	0.01093	0.00000	0.00000	0.00248	0.00248	0.00000	0.00058	0.00058	—	2.46286	2.46286	0.00004	0.00010	0.00387	2.49603
Vendor	0.00028	0.00012	0.00702	0.00210	0.00005	0.00009	0.00176	0.00186	0.00009	0.00049	0.00058	—	6.26973	6.26973	0.00014	0.00097	0.00737	6.56922
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	0.00016	0.00014	0.00017	0.00199	0.00000	0.00000	0.00045	0.00045	0.00000	0.00011	0.00011	—	0.40776	0.40776	0.00001	0.00002	0.00064	0.41325
Vendor	0.00005	0.00002	0.00128	0.00038	0.00001	0.00002	0.00032	0.00034	0.00002	0.00009	0.00011	—	1.03802	1.03802	0.00002	0.00016	0.00122	1.08761
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

3.3. Grading (2026)

3.3.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62261	3.04400	27.2253	27.5707	0.06093	1.12137	—	1.12137	1.03166	—	1.03166	—	6,598.58	6,598.58	0.26767	0.05353	—	6,621.22
Dust From Material Movement	—	—	—	—	—	—	3.59325	3.59325	—	1.42555	1.42555	—	—	—	—	—	—	—
Onsite truck	0.00118	0.00061	0.01975	0.01090	0.00006	0.00011	0.61236	0.61247	0.00011	0.06121	0.06132	—	7.05208	7.05208	0.00047	0.00114	0.00030	7.40312
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07940	0.06672	0.59672	0.60429	0.00134	0.02458	—	0.02458	0.02261	—	0.02261	—	144.626	144.626	0.00587	0.00117	—	145.123
Dust From Material Movement	—	—	—	—	—	—	0.07876	0.07876	—	0.03124	0.03124	—	—	—	—	—	—	—
Onsite truck	0.00003	0.00001	0.00042	0.00023	< 0.000005	< 0.000005	0.01272	0.01272	< 0.000005	0.00127	0.00127	—	0.15410	0.15410	0.00001	0.00002	0.00011	0.16189
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01449	0.01218	0.10890	0.11028	0.00024	0.00449	—	0.00449	0.00413	—	0.00413	—	23.9445	23.9445	0.00097	0.00019	—	24.0267
Dust From Material Movement	—	—	—	—	—	—	0.01437	0.01437	—	0.00570	0.00570	—	—	—	—	—	—	—
Onsite truck	< 0.000005	< 0.000005	0.00008	0.00004	< 0.000005	< 0.000005	0.00232	0.00232	< 0.000005	0.00023	0.00023	—	0.02551	0.02551	< 0.000005	< 0.000005	0.00002	0.02680

3.3.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08973	0.07981	0.08752	1.08908	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	253.625	253.625	0.00397	0.00992	0.02426	256.705
Vendor	0.03073	0.01379	0.77114	0.23538	0.00517	0.01034	0.19679	0.20713	0.01034	0.05437	0.06471	—	692.850	692.850	0.01541	0.10699	0.04904	725.168
Hauling	0.06580	0.02383	1.82366	0.43675	0.01088	0.03109	0.42533	0.45641	0.03109	0.11928	0.15037	—	1,592.11	1,592.11	0.03005	0.25490	0.08461	1,668.90
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00196	0.00174	0.00210	0.02497	0.00000	0.00000	0.00566	0.00566	0.00000	0.00133	0.00133	—	5.62940	5.62940	0.00009	0.00022	0.00885	5.70522
Vendor	0.00067	0.00030	0.01698	0.00509	0.00011	0.00023	0.00427	0.00450	0.00023	0.00118	0.00141	—	15.1793	15.1793	0.00034	0.00234	0.01783	15.9044
Hauling	0.00146	0.00056	0.04019	0.00947	0.00024	0.00068	0.00923	0.00991	0.00068	0.00259	0.00327	—	34.8845	34.8845	0.00066	0.00559	0.03085	36.5967
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00036	0.00032	0.00038	0.00456	0.00000	0.00000	0.00103	0.00103	0.00000	0.00024	0.00024	—	0.93201	0.93201	0.00001	0.00004	0.00146	0.94456
Vendor	0.00012	0.00006	0.00310	0.00093	0.00002	0.00004	0.00078	0.00082	0.00004	0.00022	0.00026	—	2.51311	2.51311	0.00006	0.00039	0.00295	2.63316
Hauling	0.00027	0.00010	0.00733	0.00173	0.00004	0.00012	0.00168	0.00181	0.00012	0.00047	0.00060	—	5.77552	5.77552	0.00011	0.00092	0.00511	6.05900

3.3.3. Onsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.98418	0.94811	18.8810	35.4058	0.06091	0.16675	—	0.16675	0.16295	—	0.16295	—	6,595.69	6,595.69	0.26755	0.05351	—	6,618.33
Dust From Material Movement	—	—	—	—	—	—	3.59325	3.59325	—	1.42555	1.42555	—	—	—	—	—	—	—
Onsite truck	0.00118	0.00061	0.01975	0.01090	0.00006	0.00011	0.61236	0.61247	0.00011	0.06121	0.06132	—	7.05208	7.05208	0.00047	0.00114	0.00030	7.40312
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02157	0.02078	0.41383	0.77602	0.00133	0.00365	—	0.00365	0.00357	—	0.00357	—	144.563	144.563	0.00586	0.00117	—	145.059
Dust From Material Movement	—	—	—	—	—	—	0.07876	0.07876	—	0.03124	0.03124	—	—	—	—	—	—	—
Onsite truck	0.00003	0.00001	0.00042	0.00023	< 0.000005	< 0.000005	0.01272	0.01272	< 0.000005	0.00127	0.00127	—	0.15410	0.15410	0.00001	0.00002	0.00011	0.16189
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00394	0.00379	0.07552	0.14162	0.00024	0.00067	—	0.00067	0.00065	—	0.00065	—	23.9341	23.9341	0.00097	0.00019	—	24.0162
Dust From Material Movement	—	—	—	—	—	—	0.01437	0.01437	—	0.00570	0.00570	—	—	—	—	—	—	—
Onsite truck	< 0.000005	< 0.000005	0.00008	0.00004	< 0.000005	< 0.000005	0.00232	0.00232	< 0.000005	0.00023	0.00023	—	0.02551	0.02551	< 0.000005	< 0.000005	0.00002	0.02680

3.3.4. Offsite - Mitigated

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
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08973	0.07981	0.08752	1.08908	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	253.625	253.625	0.00397	0.00992	0.02426	256.705
Vendor	0.03073	0.01379	0.77114	0.23538	0.00517	0.01034	0.19679	0.20713	0.01034	0.05437	0.06471	—	692.850	692.850	0.01541	0.10699	0.04904	725.168
Hauling	0.06580	0.02383	1.82366	0.43675	0.01088	0.03109	0.42533	0.45641	0.03109	0.11928	0.15037	—	1,592.11	1,592.11	0.03005	0.25490	0.08461	1,668.90
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00196	0.00174	0.00210	0.02497	0.00000	0.00000	0.00566	0.00566	0.00000	0.00133	0.00133	—	5.62940	5.62940	0.00009	0.00022	0.00885	5.70522
Vendor	0.00067	0.00030	0.01698	0.00509	0.00011	0.00023	0.00427	0.00450	0.00023	0.00118	0.00141	—	15.1793	15.1793	0.00034	0.00234	0.01783	15.9044
Hauling	0.00146	0.00056	0.04019	0.00947	0.00024	0.00068	0.00923	0.00991	0.00068	0.00259	0.00327	—	34.8845	34.8845	0.00066	0.00559	0.03085	36.5967
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00036	0.00032	0.00038	0.00456	0.00000	0.00000	0.00103	0.00103	0.00000	0.00024	0.00024	—	0.93201	0.93201	0.00001	0.00004	0.00146	0.94456
Vendor	0.00012	0.00006	0.00310	0.00093	0.00002	0.00004	0.00078	0.00082	0.00004	0.00022	0.00026	—	2.51311	2.51311	0.00006	0.00039	0.00295	2.63316
Hauling	0.00027	0.00010	0.00733	0.00173	0.00004	0.00012	0.00168	0.00181	0.00012	0.00047	0.00060	—	5.77552	5.77552	0.00011	0.00092	0.00511	6.05900

3.4. Building Construction (2026)

3.4.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	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	0.10270	0.08593	0.79063	1.04036	0.00188	0.03038	—	0.03038	0.02795	—	0.02795	—	192.342	192.342	0.00780	0.00156	—	193.002
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	0.01874	0.01568	0.14429	0.18986	0.00034	0.00554	—	0.00554	0.00510	—	0.00510	—	31.8444	31.8444	0.00129	0.00026	—	31.9537
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

3.4.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03740	0.03326	0.03648	0.45389	0.00000	0.00000	0.10895	0.10895	0.00000	0.02554	0.02554	—	105.702	105.702	0.00165	0.00413	0.01011	106.986
Vendor	0.00435	0.00195	0.10906	0.03329	0.00073	0.00146	0.02783	0.02929	0.00146	0.00769	0.00915	—	97.9859	97.9859	0.00218	0.01513	0.00693	102.556
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	0.00299	0.00265	0.00320	0.03810	0.00000	0.00000	0.00863	0.00863	0.00000	0.00202	0.00202	—	8.58856	8.58856	0.00013	0.00033	0.01350	8.70423
Vendor	0.00035	0.00016	0.00879	0.00264	0.00006	0.00012	0.00221	0.00233	0.00012	0.00061	0.00073	—	7.85855	7.85855	0.00017	0.00121	0.00923	8.23394
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	0.00054	0.00048	0.00058	0.00695	0.00000	0.00000	0.00158	0.00158	0.00000	0.00037	0.00037	—	1.42193	1.42193	0.00002	0.00005	0.00223	1.44108
Vendor	0.00006	0.00003	0.00160	0.00048	0.00001	0.00002	0.00040	0.00042	0.00002	0.00011	0.00013	—	1.30107	1.30107	0.00003	0.00020	0.00153	1.36322
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

3.4.3. Onsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60764	0.55132	9.17159	14.9679	0.02340	0.10617	—	0.10617	0.10084	—	0.10084	—	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	0.04875	0.04423	0.73588	1.20095	0.00188	0.00852	—	0.00852	0.00809	—	0.00809	—	192.342	192.342	0.00780	0.00156	—	193.002
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	0.00890	0.00807	0.13430	0.21917	0.00034	0.00155	—	0.00155	0.00148	—	0.00148	—	31.8444	31.8444	0.00129	0.00026	—	31.9537
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

3.4.4. Offsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03740	0.03326	0.03648	0.45389	0.00000	0.00000	0.10895	0.10895	0.00000	0.02554	0.02554	—	105.702	105.702	0.00165	0.00413	0.01011	106.986
Vendor	0.00435	0.00195	0.10906	0.03329	0.00073	0.00146	0.02783	0.02929	0.00146	0.00769	0.00915	—	97.9859	97.9859	0.00218	0.01513	0.00693	102.556
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	0.00299	0.00265	0.00320	0.03810	0.00000	0.00000	0.00863	0.00863	0.00000	0.00202	0.00202	—	8.58856	8.58856	0.00013	0.00033	0.01350	8.70423
Vendor	0.00035	0.00016	0.00879	0.00264	0.00006	0.00012	0.00221	0.00233	0.00012	0.00061	0.00073	—	7.85855	7.85855	0.00017	0.00121	0.00923	8.23394
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	0.00054	0.00048	0.00058	0.00695	0.00000	0.00000	0.00158	0.00158	0.00000	0.00037	0.00037	—	1.42193	1.42193	0.00002	0.00005	0.00223	1.44108
Vendor	0.00006	0.00003	0.00160	0.00048	0.00001	0.00002	0.00040	0.00042	0.00002	0.00011	0.00013	—	1.30107	1.30107	0.00003	0.00020	0.00153	1.36322
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. Building Construction (2027)

3.5.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
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	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
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	0.80686	0.67516	6.15648	8.48183	0.01534	0.22065	—	0.22065	0.20300	—	0.20300	—	1,571.47	1,571.47	0.06375	0.01275	—	1,576.86
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	0.14725	0.12322	1.12356	1.54793	0.00280	0.04027	—	0.04027	0.03705	—	0.03705	—	260.175	260.175	0.01055	0.00211	—	261.068
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

3.5.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03758	0.03344	0.02894	0.55368	0.00000	0.00000	0.10895	0.10895	0.00000	0.02554	0.02554	—	112.825	112.825	0.00129	0.00395	0.35051	114.385
Vendor	0.00435	0.00202	0.10054	0.03155	0.00073	0.00146	0.02783	0.02929	0.00146	0.00769	0.00915	—	96.1236	96.1236	0.00225	0.01440	0.24476	100.716
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	0.03574	0.03161	0.03271	0.41852	0.00000	0.00000	0.10895	0.10895	0.00000	0.02554	0.02554	—	103.766	103.766	0.00147	0.00395	0.00909	104.989
Vendor	0.00427	0.00188	0.10504	0.03249	0.00073	0.00146	0.02783	0.02929	0.00146	0.00769	0.00915	—	96.1968	96.1968	0.00218	0.01440	0.00636	100.549
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	0.02343	0.02072	0.02367	0.28798	0.00000	0.00000	0.07054	0.07054	0.00000	0.01652	0.01652	—	68.8871	68.8871	0.00096	0.00259	0.09912	69.7822
Vendor	0.00285	0.00128	0.06873	0.02101	0.00048	0.00096	0.01806	0.01901	0.00096	0.00499	0.00595	—	63.0366	63.0366	0.00148	0.00944	0.06926	65.9559
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	0.00428	0.00378	0.00432	0.05256	0.00000	0.00000	0.01287	0.01287	0.00000	0.00302	0.00302	—	11.4050	11.4050	0.00016	0.00043	0.01641	11.5532
Vendor	0.00052	0.00023	0.01254	0.00384	0.00009	0.00018	0.00330	0.00347	0.00018	0.00091	0.00109	—	10.4364	10.4364	0.00024	0.00156	0.01147	10.9198
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

3.5.3. Onsite - Mitigated

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
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59404	0.54007	9.13010	14.9548	0.02340	0.09968	—	0.09968	0.09487	—	0.09487	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
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	0.59404	0.54007	9.13010	14.9548	0.02340	0.09968	—	0.09968	0.09487	—	0.09487	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
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	0.38944	0.35406	5.98548	9.80401	0.01534	0.06535	—	0.06535	0.06219	—	0.06219	—	1,571.47	1,571.47	0.06375	0.01275	—	1,576.86
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	0.07107	0.06462	1.09235	1.78923	0.00280	0.01193	—	0.01193	0.01135	—	0.01135	—	260.175	260.175	0.01055	0.00211	—	261.068
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

3.5.4. Offsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03758	0.03344	0.02894	0.55368	0.00000	0.00000	0.10895	0.10895	0.00000	0.02554	0.02554	—	112.825	112.825	0.00129	0.00395	0.35051	114.385
Vendor	0.00435	0.00202	0.10054	0.03155	0.00073	0.00146	0.02783	0.02929	0.00146	0.00769	0.00915	—	96.1236	96.1236	0.00225	0.01440	0.24476	100.716
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	0.03574	0.03161	0.03271	0.41852	0.00000	0.00000	0.10895	0.10895	0.00000	0.02554	0.02554	—	103.766	103.766	0.00147	0.00395	0.00909	104.989
Vendor	0.00427	0.00188	0.10504	0.03249	0.00073	0.00146	0.02783	0.02929	0.00146	0.00769	0.00915	—	96.1968	96.1968	0.00218	0.01440	0.00636	100.549
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	0.02343	0.02072	0.02367	0.28798	0.00000	0.00000	0.07054	0.07054	0.00000	0.01652	0.01652	—	68.8871	68.8871	0.00096	0.00259	0.09912	69.7822
Vendor	0.00285	0.00128	0.06873	0.02101	0.00048	0.00096	0.01806	0.01901	0.00096	0.00499	0.00595	—	63.0366	63.0366	0.00148	0.00944	0.06926	65.9559
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	0.00428	0.00378	0.00432	0.05256	0.00000	0.00000	0.01287	0.01287	0.00000	0.00302	0.00302	—	11.4050	11.4050	0.00016	0.00043	0.01641	11.5532
Vendor	0.00052	0.00023	0.01254	0.00384	0.00009	0.00018	0.00330	0.00347	0.00018	0.00091	0.00109	—	10.4364	10.4364	0.00024	0.00156	0.01147	10.9198
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

3.6. Paving (2027)

3.6.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87761	0.73744	6.94439	9.95313	0.01395	0.29813	—	0.29813	0.27428	—	0.27428	—	1,511.11	1,511.11	0.06130	0.01226	—	1,516.29
Paving	0.21883	0.21883	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.02885	0.02424	0.22831	0.32723	0.00046	0.00980	—	0.00980	0.00902	—	0.00902	—	49.6802	49.6802	0.00202	0.00040	—	49.8507
Paving	0.00719	0.00719	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00527	0.00442	0.04167	0.05972	0.00008	0.00179	—	0.00179	0.00165	—	0.00165	—	8.22513	8.22513	0.00033	0.00007	—	8.25335
Paving	0.00131	0.00131	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

3.6.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06432	0.05688	0.05886	0.75315	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	186.733	186.733	0.00265	0.00711	0.01636	188.935
Vendor	0.00263	0.00116	0.06459	0.01997	0.00045	0.00090	0.01711	0.01801	0.00090	0.00473	0.00563	—	59.1478	59.1478	0.00134	0.00885	0.00391	61.8236
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	0.00211	0.00187	0.00214	0.02599	0.00000	0.00000	0.00637	0.00637	0.00000	0.00149	0.00149	—	6.21686	6.21686	0.00009	0.00023	0.00895	6.29764
Vendor	0.00009	0.00004	0.00212	0.00065	0.00001	0.00003	0.00056	0.00059	0.00003	0.00015	0.00018	—	1.94373	1.94373	0.00005	0.00029	0.00214	2.03374
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	0.00039	0.00034	0.00039	0.00474	0.00000	0.00000	0.00116	0.00116	0.00000	0.00027	0.00027	—	1.02927	1.02927	0.00001	0.00004	0.00148	1.04265
Vendor	0.00002	0.00001	0.00039	0.00012	< 0.000005	0.00001	0.00010	0.00011	0.00001	0.00003	0.00003	—	0.32181	0.32181	0.00001	0.00005	0.00035	0.33671
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

3.6.3. Onsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49000	0.44151	6.73583	10.6028	0.01395	0.09376	—	0.09376	0.08813	—	0.08813	—	1,511.11	1,511.11	0.06130	0.01226	—	1,516.29
Paving	0.21883	0.21883	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01611	0.01452	0.22145	0.34858	0.00046	0.00308	—	0.00308	0.00290	—	0.00290	—	49.6802	49.6802	0.00202	0.00040	—	49.8507
Paving	0.00719	0.00719	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00294	0.00265	0.04042	0.06362	0.00008	0.00056	—	0.00056	0.00053	—	0.00053	—	8.22513	8.22513	0.00033	0.00007	—	8.25335
Paving	0.00131	0.00131	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

3.6.4. Offsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06432	0.05688	0.05886	0.75315	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	186.733	186.733	0.00265	0.00711	0.01636	188.935
Vendor	0.00263	0.00116	0.06459	0.01997	0.00045	0.00090	0.01711	0.01801	0.00090	0.00473	0.00563	—	59.1478	59.1478	0.00134	0.00885	0.00391	61.8236
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	0.00211	0.00187	0.00214	0.02599	0.00000	0.00000	0.00637	0.00637	0.00000	0.00149	0.00149	—	6.21686	6.21686	0.00009	0.00023	0.00895	6.29764

Vendor	0.00009	0.00004	0.00212	0.00065	0.00001	0.00003	0.00056	0.00059	0.00003	0.00015	0.00018	—	1.94373	1.94373	0.00005	0.00029	0.00214	2.03374
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	0.00039	0.00034	0.00039	0.00474	0.00000	0.00000	0.00116	0.00116	0.00000	0.00027	0.00027	—	1.02927	1.02927	0.00001	0.00004	0.00148	1.04265
Vendor	0.00002	0.00001	0.00039	0.00012	< 0.000005	0.00001	0.00010	0.00011	0.00001	0.00003	0.00003	—	0.32181	0.32181	0.00001	0.00005	0.00035	0.33671
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. Architectural Coating (2027)

3.7.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13715	0.11335	0.83116	1.12539	0.00173	0.01905	—	0.01905	0.01752	—	0.01752	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	9.45897	9.45897	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00451	0.00373	0.02733	0.03700	0.00006	0.00063	—	0.00063	0.00058	—	0.00058	—	4.38946	4.38946	0.00018	0.00004	—	4.40452
Architectural Coatings	0.31098	0.31098	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00082	0.00068	0.00499	0.00675	0.00001	0.00011	—	0.00011	0.00011	—	0.00011	—	0.72673	0.72673	0.00003	0.00001	—	0.72922
Architectural Coatings	0.05675	0.05675	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

3.7.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00715	0.00632	0.00654	0.08370	0.00000	0.00000	0.02179	0.02179	0.00000	0.00511	0.00511	—	20.7531	20.7531	0.00029	0.00079	0.00182	20.9978
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	0.00024	0.00021	0.00024	0.00289	0.00000	0.00000	0.00071	0.00071	0.00000	0.00017	0.00017	—	0.69093	0.69093	0.00001	0.00003	0.00099	0.69990
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	0.00004	0.00004	0.00004	0.00053	0.00000	0.00000	0.00013	0.00013	0.00000	0.00003	0.00003	—	0.11439	0.11439	< 0.000005	< 0.000005	0.00016	0.11588
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

3.7.3. Onsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13715	0.11335	0.83116	1.12539	0.00173	0.01905	—	0.01905	0.01752	—	0.01752	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	9.45897	9.45897	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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 Equipm	0.00451	0.00373	0.02733	0.03700	0.00006	0.00063	—	0.00063	0.00058	—	0.00058	—	4.38946	4.38946	0.00018	0.00004	—	4.40452
Architectural Coatings	0.31098	0.31098	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00082	0.00068	0.00499	0.00675	0.00001	0.00011	—	0.00011	0.00011	—	0.00011	—	0.72673	0.72673	0.00003	0.00001	—	0.72922
Architectural Coatings	0.05675	0.05675	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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

3.7.4. Offsite - Mitigated

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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00715	0.00632	0.00654	0.08370	0.00000	0.00000	0.02179	0.02179	0.00000	0.00511	0.00511	—	20.7531	20.7531	0.00029	0.00079	0.00182	20.9978
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	0.00024	0.00021	0.00024	0.00289	0.00000	0.00000	0.00071	0.00071	0.00000	0.00017	0.00017	—	0.69093	0.69093	0.00001	0.00003	0.00099	0.69990
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	0.00004	0.00004	0.00004	0.00053	0.00000	0.00000	0.00013	0.00013	0.00000	0.00003	0.00003	—	0.11439	0.11439	< 0.000005	< 0.000005	0.00016	0.11588
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

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	1.46010	1.38392	0.48995	8.47084	0.01560	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,580.28	1,580.28	0.08966	0.05775	4.36516	1,604.09
Other 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
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
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	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	1.46010	1.38392	0.48995	8.47084	0.01560	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,580.28	1,580.28	0.08966	0.05775	4.36516	1,604.09

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	1.39000	1.31166	0.53323	7.54051	0.01442	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,461.26	1,461.26	0.09620	0.06084	0.11317	1,481.90
Other 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
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
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	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	1.39000	1.31166	0.53323	7.54051	0.01442	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,461.26	1,461.26	0.09620	0.06084	0.11317	1,481.90
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.17901	0.16876	0.07101	1.01321	0.00190	0.00105	0.20929	0.21035	0.00097	0.05285	0.05383	—	174.856	174.856	0.01141	0.00729	0.22290	177.536
Other 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
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
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.17901	0.16876	0.07101	1.01321	0.00190	0.00105	0.20929	0.21035	0.00097	0.05285	0.05383	—	174.856	174.856	0.01141	0.00729	0.22290	177.536

4.1.2. Mitigated

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
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Beaumont Early Childhood Education Center Custom Report, 4/9/2026

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	1.46010	1.38392	0.48995	8.47084	0.01560	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,580.28	1,580.28	0.08966	0.05775	4.36516	1,604.09
Other 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
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
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	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	1.46010	1.38392	0.48995	8.47084	0.01560	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,580.28	1,580.28	0.08966	0.05775	4.36516	1,604.09
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	1.39000	1.31166	0.53323	7.54051	0.01442	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,461.26	1,461.26	0.09620	0.06084	0.11317	1,481.90
Other 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
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
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	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	1.39000	1.31166	0.53323	7.54051	0.01442	0.00808	1.62586	1.63393	0.00746	0.41053	0.41799	—	1,461.26	1,461.26	0.09620	0.06084	0.11317	1,481.90
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.17901	0.16876	0.07101	1.01321	0.00190	0.00105	0.20929	0.21035	0.00097	0.05285	0.05383	—	174.856	174.856	0.01141	0.00729	0.22290	177.536
Other 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

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	0.00000
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	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	0.17901	0.16876	0.07101	1.01321	0.00190	0.00105	0.20929	0.21035	0.00097	0.05285	0.05383	—	174.856	174.856	0.01141	0.00729	0.22290	177.536	

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	122.505	122.505	0.01168	0.00142	—	123.219
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	35.5197	35.5197	0.00339	0.00041	—	35.7267
Total	—	—	—	—	—	—	—	—	—	—	—	—	158.025	158.025	0.01506	0.00183	—	158.946
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	122.505	122.505	0.01168	0.00142	—	123.219

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	35.5197	35.5197	0.00339	0.00041	—	35.7267
Total	—	—	—	—	—	—	—	—	—	—	—	—	158.025	158.025	0.01506	0.00183	—	158.946
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	20.2822	20.2822	0.00193	0.00023	—	20.4003
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.88069	5.88069	0.00056	0.00007	—	5.91496
Total	—	—	—	—	—	—	—	—	—	—	—	—	26.1628	26.1628	0.00249	0.00030	—	26.3153

4.2.2. Electricity Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	122.505	122.505	0.01168	0.00142	—	123.219

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	35.5197	35.5197	0.00339	0.00041	—	35.7267
Total	—	—	—	—	—	—	—	—	—	—	—	—	158.025	158.025	0.01506	0.00183	—	158.946
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	122.505	122.505	0.01168	0.00142	—	123.219
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	35.5197	35.5197	0.00339	0.00041	—	35.7267
Total	—	—	—	—	—	—	—	—	—	—	—	—	158.025	158.025	0.01506	0.00183	—	158.946
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	20.2822	20.2822	0.00193	0.00023	—	20.4003
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.88069	5.88069	0.00056	0.00007	—	5.91496

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	26.1628	26.1628	0.00249	0.00030	—	26.3153
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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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	152.270	152.270	0.01348	0.00029	—	152.692
Other 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
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
Parking Lot	0.00000	0.00000	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	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	152.270	152.270	0.01348	0.00029	—	152.692
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	152.270	152.270	0.01348	0.00029	—	152.692
Other 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
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
Parking Lot	0.00000	0.00000	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	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	152.270	152.270	0.01348	0.00029	—	152.692
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Car e Center	0.00256	0.00128	0.02329	0.01956	0.00014	0.00177	—	0.00177	0.00177	—	0.00177	—	25.2100	25.2100	0.00223	0.00005	—	25.2799
Other 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
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
Parking Lot	0.00000	0.00000	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	0.00256	0.00128	0.02329	0.01956	0.00014	0.00177	—	0.00177	0.00177	—	0.00177	—	25.2100	25.2100	0.00223	0.00005	—	25.2799

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Car e Center	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	152.270	152.270	0.01348	0.00029	—	152.692
Other 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
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
Parking Lot	0.00000	0.00000	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	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	152.270	152.270	0.01348	0.00029	—	152.692

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	152.270	152.270	0.01348	0.00029	—	152.692
Other 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
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
Parking Lot	0.00000	0.00000	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	0.01404	0.00702	0.12762	0.10720	0.00077	0.00970	—	0.00970	0.00970	—	0.00970	—	152.270	152.270	0.01348	0.00029	—	152.692
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	0.00256	0.00128	0.02329	0.01956	0.00014	0.00177	—	0.00177	0.00177	—	0.00177	—	25.2100	25.2100	0.00223	0.00005	—	25.2799
Other 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
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
Parking Lot	0.00000	0.00000	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	0.00256	0.00128	0.02329	0.01956	0.00014	0.00177	—	0.00177	0.00177	—	0.00177	—	25.2100	25.2100	0.00223	0.00005	—	25.2799

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
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.43078	0.43078	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03110	0.03110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.15363	0.14178	0.00726	0.86314	0.00005	0.00153	—	0.00153	0.00116	—	0.00116	—	3.54939	3.54939	0.00015	0.00003	—	3.56219
Total	0.61551	0.60366	0.00726	0.86314	0.00005	0.00153	—	0.00153	0.00116	—	0.00116	—	3.54939	3.54939	0.00015	0.00003	—	3.56219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.43078	0.43078	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03110	0.03110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.46188	0.46188	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.07862	0.07862	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00568	0.00568	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.01920	0.01772	0.00091	0.10789	0.00001	0.00019	—	0.00019	0.00014	—	0.00014	—	0.40249	0.40249	0.00002	< 0.000005	—	0.40395
Total	0.10350	0.10202	0.00091	0.10789	0.00001	0.00019	—	0.00019	0.00014	—	0.00014	—	0.40249	0.40249	0.00002	< 0.000005	—	0.40395

4.3.2. Mitigated

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	0.43078	0.43078	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03110	0.03110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.15363	0.14178	0.00726	0.86314	0.00005	0.00153	—	0.00153	0.00116	—	0.00116	—	3.54939	3.54939	0.00015	0.00003	—	3.56219
Total	0.61551	0.60366	0.00726	0.86314	0.00005	0.00153	—	0.00153	0.00116	—	0.00116	—	3.54939	3.54939	0.00015	0.00003	—	3.56219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.43078	0.43078	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03110	0.03110	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.46188	0.46188	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.07862	0.07862	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00568	0.00568	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01920	0.01772	0.00091	0.10789	0.00001	0.00019	—	0.00019	0.00014	—	0.00014	—	0.40249	0.40249	0.00002	< 0.000005	—	0.40395
Total	0.10350	0.10202	0.00091	0.10789	0.00001	0.00019	—	0.00019	0.00014	—	0.00014	—	0.40249	0.40249	0.00002	< 0.000005	—	0.40395

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Total	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.30121	1.49840	1.79961	0.00118	0.00068	—	2.03031
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.30121	1.49840	1.79961	0.00118	0.00068	—	2.03031

4.4.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1.81934	9.05041	10.8697	0.00711	0.00408	—	12.2632
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	0.30121	1.49840	1.79961	0.00118	0.00068	—	2.03031
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.30121	1.49840	1.79961	0.00118	0.00068	—	2.03031

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570	
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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	
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	
Total	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570	

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	2.30251	0.00000	2.30251	0.23013	0.00000	—	8.05572
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	2.30251	0.00000	2.30251	0.23013	0.00000	—	8.05572

4.5.2. Mitigated

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	13.9073	0.00000	13.9073	1.38999	0.00000	—	48.6570
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	2.30251	0.00000	2.30251	0.23013	0.00000	—	8.05572
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	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
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Total	—	—	—	—	—	—	—	—	—	—	—	2.30251	0.00000	2.30251	0.23013	0.00000	—	8.05572
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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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Car e Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Car e Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Car e Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01269	0.01269
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01269	0.01269

4.6.2. Mitigated

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
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07666	0.07666
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Day-Care Center	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01269	0.01269
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01269	0.01269

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	10/1/2026	11/4/2026	5.00000	25.0000	—
Site Preparation	Site Preparation	11/5/2026	11/10/2026	5.00000	4.00000	—
Grading	Grading	11/11/2026	11/20/2026 ^{A-128}	5.00000	8.00000	—

Building Construction	Building Construction	11/21/2026	12/1/2027	5.00000	268.000	—
Paving	Paving	11/16/2027	12/1/2027	5.00000	12.0000	—
Architectural Coating	Architectural Coating	11/16/2027	12/1/2027	5.00000	12.0000	—

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	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
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
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	8.00000	84.0000	0.37000
Grading	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Grading	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
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	Tractors/Loaders/Back hoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
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
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5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Interim	2.00000	8.00000	367.000	0.40000
Demolition	Excavators	Diesel	Average	3.00000	8.00000	36.0000	0.38000
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Interim	4.00000	8.00000	84.0000	0.37000
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00000	8.00000	367.000	0.40000
Grading	Graders	Diesel	Tier 4 Interim	1.000000	8.00000	148.000	0.41000
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	1.000000	8.00000	367.000	0.40000
Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Interim	2.00000	8.00000	84.0000	0.37000
Grading	Excavators	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Grading	Scrapers	Diesel	Tier 4 Interim	2.00000	8.00000	423.000	0.48000
Building Construction	Cranes	Diesel	Tier 4 Interim	1.000000	7.00000	367.000	0.29000
Building Construction	Forklifts	Diesel	Tier 4 Interim	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Interim	3.00000	7.00000	84.0000	0.37000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Paving	Pavers	Diesel	Tier 4 Interim	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Tier 4 Interim	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	0.44000	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	20.0000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	23.0000	10.2000	HHDT,MHDT
Grading	Hauling	23.5000	20.0000	HHDT
Grading	Onsite truck	1.000000	1.65000	HHDT
Building Construction	Worker	8.33532	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	3.25276	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	0.00000	0.00000	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	0.00000	0.00000	HHDT
Architectural Coating	Worker	1.66706	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00000	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	0.00000	0.00000	HHDT

5.3.2. Mitigated

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	0.44000	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	20.0000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	23.0000	10.2000	HHDT,MHDT
Grading	Hauling	23.5000	20.0000	HHDT
Grading	Onsite truck	1.000000	1.65000	HHDT
Building Construction	Worker	8.33532	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	3.25276	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	0.00000	0.00000	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	0.00000	0.00000	HHDT
Architectural Coating	Worker	1.66706	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00000	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	0.00000	0.00000	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	29,769.0	9,923.00	4,636.20

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	41.0000	0.00000
Site Preparation	0.00000	0.00000	4.50000	0.00000	0.00000
Grading	0.00000	1,500.00	6.00000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	1.77388

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	Day-Care Center	0.00000	0%
Paving	Other Asphalt Surfaces	0.02089	100%
Paving	Other Non-Asphalt Surfaces	0.77158	0%
Paving	Parking Lot	0.98140	100%

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
2027	0.00000	531.983	0.03300	0.00400

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
Day-Care Center	454.168	0.00000	0.00000	118,408	2,331.21	0.00000	0.00000	607,780
Other 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
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Day-Care Center	454.168	0.00000	0.00000	118,408	2,331.21	0.00000	0.00000	607,780

Other 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
Parking Lot	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)
Day-Care Center	Wood Fireplaces	0	0
Day-Care Center	Gas Fireplaces	0	0
Day-Care Center	Propane Fireplaces	0	0
Day-Care Center	Electric Fireplaces	0	0
Day-Care Center	No Fireplaces	0	0
Day-Care Center	Conventional Wood Stoves	0	0
Day-Care Center	Catalytic Wood Stoves	0	0
Day-Care Center	Non-Catalytic Wood Stoves	0	0
Day-Care Center	Pellet Wood Stoves	0	0
Other Asphalt Surfaces	Wood Fireplaces	0	0
Other Asphalt Surfaces	Gas Fireplaces	0	0
Other Asphalt Surfaces	Propane Fireplaces	0	0
Other Asphalt Surfaces	Electric Fireplaces	0	0
Other Asphalt Surfaces	No Fireplaces	0	0
Other Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other 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
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	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	29,769.0	9,923.00	4,636.20

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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)
Day-Care Center	129,159	346.196	0.0330	0.0040	475,122
Other Asphalt Surfaces	0.00000	346.196	0.0330	0.0040	0.00000
Other Non-Asphalt Surfaces	0.00000	346.196	0.0330	0.0040	0.00000
Parking Lot	37,449.0	346.196	0.0330	0.0040	0.00000

5.11.2. Mitigated

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)
Day-Care Center	129,159	346.196	0.0330	0.0040	475,122
Other Asphalt Surfaces	0.00000	346.196	0.0330	0.0040	0.00000
Other Non-Asphalt Surfaces	0.00000	346.196	0.0330	0.0040	0.00000
Parking Lot	37,449.0	346.196	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)
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Day-Care Center	851,358	705,988
Other Asphalt Surfaces	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
Parking Lot	0.00000	0.00000

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Day-Care Center	851,358	705,988
Other Asphalt Surfaces	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
Parking Lot	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Day-Care Center	25.8050	0.00000
Other Asphalt Surfaces	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
Parking Lot	0.00000	0.00000

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Day-Care Center	25.8050	0.00000
Other Asphalt Surfaces	0.00000	0.00000
Other Non-Asphalt Surfaces	0.00000	0.00000
Parking Lot	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
Day-Care Center	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Day-Care Center	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Day-Care Center	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
Day-Care Center	Walk-in refrigerators and freezers	R-404A	3,922.00	0.00040	7.50000	7.50000	20.0000

5.14.2. Mitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Day-Care Center	Household refrigerators and/or freezers	R-134a	1,430.00	0.01679	0.60000	0.00000	1.000000
Day-Care Center	Other commercial A/C and heat pumps	R-410A	2,088.00	0.00180	4.00000	4.00000	18.0000
Day-Care Center	Stand-alone retail refrigerators and freezers	R-134a	1,430.00	0.00004	1.000000	0.00000	1.000000
Day-Care Center	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

5.15.2. Mitigated

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	Based on District preliminary information, see assumptions file
Construction: Construction Phases	Based on overall construction schedule provided by District, see assumptions file
Construction: Off-Road Equipment	Equipment mix filled per approved data request, see assumptions file
Construction: Dust From Material Movement	Provided by District, see assumptions file
Construction: Architectural Coatings	South Coast AQMD Rule 1113
Operations: Vehicle Data	DJ&A, 2026, March 11. Beaumont Early Childhood Education Center - Traffic Analysis.
Operations: Fleet Mix	Fleet mix for the project is modified to reflect a higher proportion of passenger vehicles than the regional VMT. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.
Operations: Architectural Coatings	South Coast AQMD Rule 1113
Operations: Water and Waste Water	Assume 100% aerobic treatment

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.45569	1.30000

Building Area	sq. ft	19,850.0	19,846.0
Landscape Area	sq. ft	—	1,000.000
Special Landscape Area	sq. ft	—	35,612.0

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	10/29/2026	11/4/2026
Demolition	Demolition	Work Days per Phase	20.0000	25.0000
Site Preparation	Site Preparation	Start Date	10/30/2026	11/5/2026
Site Preparation	Site Preparation	End Date	11/6/2026	11/10/2026
Site Preparation	Site Preparation	Work Days per Phase	5.00000	4.00000
Grading	Grading	Start Date	11/7/2026	11/11/2026
Grading	Grading	End Date	11/18/2026	11/20/2026
Building Construction	Building Construction	Start Date	11/19/2026	11/21/2026
Building Construction	Building Construction	End Date	10/7/2027	12/1/2027
Building Construction	Building Construction	Work Days per Phase	230.000	268.000
Paving	Paving	Start Date	10/8/2027	11/16/2027
Paving	Paving	End Date	11/2/2027	12/1/2027
Paving	Paving	Work Days per Phase	18.0000	12.0000
Architectural Coating	Architectural Coating	Start Date	11/3/2027	11/16/2027
Architectural Coating	Architectural Coating	End Date	11/28/2027	12/1/2027
Architectural Coating	Architectural Coating	Work Days per Phase	18.0000	12.0000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Grading	Tractors/Loaders/Backhoes	Number per Day	3.00000	2.00000

Grading	Excavators	Number per Day	1.000000	2.00000
Paving	Pavers	Number per Day	1.000000	2.00000
Paving	Paving Equipment	Hours Per Day	6.00000	8.00000
Paving	Rollers	Hours Per Day	6.00000	8.00000

8.4.4. Dust from Material Movement

Phase Name	Model Parameter	Units	Default Value	New Value
Site Preparation	Material Imported	Cubic Yards	—	0.00000
Site Preparation	Material Exported	Cubic Yards	—	0.00000
Site Preparation	Total Acres Graded	acres	6.00000	4.50000
Grading	Material Imported	Cubic Yards	—	0.00000
Grading	Material Exported	Cubic Yards	—	1,500.00
Grading	Total Acres Graded	acres	24.0000	6.00000

8.4.8. Architectural Coatings

Phase Name	Model Parameter	Units	Default Value	New Value
Architectural Coating	Non-Residential Interior VOC	g/L	100.0000	50.0000
Architectural Coating	Non-Residential Exterior VOC	g/L	100.0000	50.0000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Day-Care Center	Weekday Trip Rate	size/day	47.6200	22.8800
Day-Care Center	Saturday Trip Rate	size/day	6.22000	0.00000
Day-Care Center	Sunday Trip Rate	size/day A-142	5.84000	0.00000

8.5.1.2. Fleet Mix

Land Use	Season	Model Parameter	Units	Default Value	New Value
Day-Care Center	A	Heavy-Heavy-Duty Trucks	%	2%	< 0.5%
Day-Care Center	A	Passenger Cars	%	49%	63%
Day-Care Center	A	Light-Duty Trucks 1	%	4%	5%
Day-Care Center	A	Light-Duty Trucks 2	%	21%	27%
Day-Care Center	A	Light Heavy-Duty Trucks 1	%	3%	< 0.5%
Day-Care Center	A	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Day-Care Center	A	Motorcycles	%	2%	3%
Day-Care Center	A	Medium-Duty Trucks	%	16%	2%
Day-Care Center	A	Motor Homes	%	1%	0%
Day-Care Center	A	Medium-Heavy-Duty Trucks	%	2%	< 0.5%
Day-Care Center	A	Other Buses	%	< 0.5%	0%
Day-Care Center	A	School Buses	%	< 0.5%	< 0.5%
Day-Care Center	A	Urban Buses	%	< 0.5%	0%
Day-Care Center	S	Heavy-Heavy-Duty Trucks	%	2%	< 0.5%
Day-Care Center	S	Passenger Cars	%	49%	63%
Day-Care Center	S	Light-Duty Trucks 1	%	4%	5%
Day-Care Center	S	Light-Duty Trucks 2	%	21%	27%
Day-Care Center	S	Light Heavy-Duty Trucks 1	%	3%	< 0.5%
Day-Care Center	S	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Day-Care Center	S	Motorcycles	%	2%	3%
Day-Care Center	S	Medium-Duty Trucks	%	16%	2%
Day-Care Center	S	Motor Homes	%	1%	0%
Day-Care Center	S	Medium-Heavy-Duty Trucks	%	2%	< 0.5%
Day-Care Center	S	Other Buses	%	< 0.5%	0%
Day-Care Center	S	School Buses	%	< 0.5%	< 0.5%
Day-Care Center	S	Urban Buses	A-143	< 0.5%	0%

Day-Care Center	W	Heavy-Heavy-Duty Trucks	%	2%	< 0.5%
Day-Care Center	W	Passenger Cars	%	49%	63%
Day-Care Center	W	Light-Duty Trucks 1	%	4%	5%
Day-Care Center	W	Light-Duty Trucks 2	%	21%	27%
Day-Care Center	W	Light Heavy-Duty Trucks 1	%	3%	< 0.5%
Day-Care Center	W	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Day-Care Center	W	Motorcycles	%	2%	3%
Day-Care Center	W	Medium-Duty Trucks	%	16%	2%
Day-Care Center	W	Motor Homes	%	1%	0%
Day-Care Center	W	Medium-Heavy-Duty Trucks	%	2%	< 0.5%
Day-Care Center	W	Other Buses	%	< 0.5%	0%
Day-Care Center	W	School Buses	%	< 0.5%	< 0.5%
Day-Care Center	W	Urban Buses	%	< 0.5%	0%

8.5.2. Area Sources

8.5.2.3. Architectural Coatings

Model Parameter	Units	Default Value	New Value
Non-Residential Interior VOC	g/L	100.0000	50.0000
Non-Residential Exterior VOC	g/L	100.0000	50.0000

8.5.4. Water and Waste Water

Land Use	Model Parameter	Units	Default Value	New Value
Day-Care Center	Treated by Septic Tank	%	10.3300	0.00000
Day-Care Center	Treated by Aerobic Processes	%	87.4600	100.0000
Day-Care Center	Treated by Facultative Lagoons	%	2.21000	0.00000

Emissions Worksheet

Regional Construction Emissions Worksheet:

3.1. Demolition (2026)		2					
		ROG	NOx	CO	SO	PM10 Total	PM2.5Total
Onsite		Winter					
	Off-Road Equipment	2.29	20.65	19.01	0.03	0.84	0.78
	Demolition	0.00	0.00	0.00	0.00	0.02	0.00
	Onsite truck	0.00	0.02	0.01	0.00	0.31	0.03
	Total	2.29	20.67	19.02	0.03	1.17	0.81
Offsite							
	Worker	0.06	0.07	0.82	0.00	0.20	0.05
	Vendor	0.00	0.27	0.08	0.00	0.07	0.02
	Hauling	0.00	0.03	0.01	0.00	0.01	0.00
	Total	0.07	0.37	0.91	0.00	0.28	0.07
TOTAL		2.35	21.04	19.92	0.03	1.45	0.88

3.2. Site Preparation (2026)		2					
		ROG	NOx	CO	SO	PM10 Total	PM2.5Total
Onsite		Winter					
	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	0.07	0.08	0.95	0.00	0.23	0.05
	Vendor	0.01	0.64	0.19	0.00	0.17	0.05
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.08	0.71	1.15	0.00	0.40	0.11
TOTAL		3.23	29.90	29.97	0.05	10.38	5.30

3.3. Grading (2026)		2					
		ROG	NOx	CO	SO	PM10 Total	PM2.5Total
Onsite		Winter					
	Off-Road Equipment	3.04	27.23	27.57	0.06	1.12	1.03
	Dust From Material Movement	0.00	0.00	0.00	0.00	3.59	1.43
	Onsite truck	0.00	0.02	0.01	0.00	0.61	0.06
	Total	3.04	27.25	27.58	0.06	5.33	2.52
Offsite							
	Worker	0.08	0.09	1.09	0.00	0.26	0.06
	Vendor	0.01	0.77	0.24	0.01	0.21	0.06
	Hauling	0.02	1.82	0.44	0.01	0.46	0.15
	Total	0.12	2.68	1.76	0.02	0.92	0.28
TOTAL		3.16	29.93	29.34	0.08	6.25	2.79

3.4. Building Construction (2026)		2					
		ROG	NOx	CO	SO	PM10 Total	PM2.5Total
Onsite		Winter					
	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	0.03	0.04	0.45	0.00	0.11	0.03
	Vendor	0.00	0.11	0.03	0.00	0.03	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.04	0.15	0.49	0.00	0.14	0.03
TOTAL		1.11	10.00	13.45	0.02	0.52	0.38

3.5. Building Construction (2027)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	Summer						
	Off-Road Equipment	1.03	9.39	12.94	0.02	0.34	0.31
	Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00
	Total	1.03	9.39	12.94	0.02	0.34	0.31
Offsite	Worker	0.03	0.03	0.55	0.00	0.11	0.03
	Vendor	0.00	0.10	0.03	0.00	0.03	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.04	0.13	0.59	0.00	0.14	0.03
TOTAL		1.07	9.52	13.52	0.02	0.47	0.34

3.6. Paving (2027)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	Winter						
	Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	0.27
	Paving	0.22	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	0.96	6.94	9.95	0.01	0.30	0.27
Offsite	Worker	0.06	0.06	0.75	0.00	0.20	0.05
	Vendor	0.00	0.06	0.02	0.00	0.02	0.01
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.06	0.12	0.77	0.00	0.21	0.05
TOTAL		1.01	7.07	10.73	0.01	0.51	0.33

3.7. Architectural Coating (2027)							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite	Winter						
	Off-Road Equipment	0.11	0.83	1.13	0.00	0.02	0.02
	Architectural Coating	9.46	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	9.57	0.83	1.13	0.00	0.02	0.02
Offsite	Worker	0.01	0.01	0.08	0.00	0.02	0.01
	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	0.01	0.01	0.08	0.00	0.02	0.01
TOTAL		9.58	0.84	1.21	0.00	0.04	0.02

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Demolition	2	21	20	0	1	1
Site Preparation	3	30	30	0	10	5
Grading	3	30	29	0	6	3
Building Construction 2026	1	10	13	0	1	0
Building Construction 2027	1	10	14	0	0	0
Building Construction, Paving, and Architectural Coating	12	17	25	0	1	1
MAX DAILY	12	30	30	0	10	5
Regional Thresholds	75	100	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

Unmitigated Construction LST Worksheet:

3.1. Demolition (2026)

		NOx	CO	PM10 Total	PM2.5Total
Onsite					
	Off-Road Equipment	20.65	19.01	0.84	0.78
	Demolition	0.00	0.00	0.02	0.00
	Onsite truck	0.02	0.01	0.31	0.03
	Total	20.67	19.02	1.17	0.81

3.2. Site Preparation (2026)

		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

3.3. Grading (2026)

		NOx	CO	PM10 Total	PM2.5Total
Onsite					
	Off-Road Equipment	27.23	27.57	1.12	1.03
	Dust From Material Movement	0.00	0.00	3.59	1.43
	Onsite truck	0.02	0.01	0.61	0.06
	Total	27.25	27.58	5.33	2.52

3.4. Building Construction (2026)

		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

3.5. Building Construction (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	9.39	12.94	0.34	0.31
	Onsite truck	0.00	0.00	0.00	0.00
	Total	9.39	12.94	0.34	0.31

3.6. Paving (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	6.94	9.95	0.30	0.27
	Paving	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	6.94	9.95	0.30	0.27

3.7. Architectural Coating (2027)

		NOx	CO	PM10 Total	PM2.5 Total
Onsite					
	Off-Road Equipment	0.83	1.13	0.02	0.02
	Architectural Coating	0.00	0.00	0.00	0.00
	Onsite truck	0.00	0.00	0.00	0.00
	Total	0.83	1.13	0.02	0.02

	NOx	CO	PM10 Total	PM2.5 Total
Demolition	21	19	1.17	0.81
≤ 1.00 Acre LST	103	1,000	6.00	4.00
Exceeds LST?	no	no	no	no
Site Preparation	29	29	9.98	5.19
3.07 Acre LST	180	1,996	13.92	7.78
Exceeds LST?	no	no	no	no
Grading	27	28	5	3
3.07 Acre LST	180	1,996	13.92	7.78
Exceeds LST?	no	no	no	no
Building Construction 2026	10	13	0.38	0.35
1.31 Acre LST	117	1,169	7.25	4.62
Exceeds LST?	no	no	no	no
Building Construction 2027	9	13	0.34	0.31
1.31 Acre LST	117	1,169	7.25	4.62
Exceeds LST?	no	no	no	no
Building Construction, Paving, and Architectural Coating	17	24	0.65	0.60
1.31 Acre LST	117	1,169	7.25	4.62
Exceeds LST?	no	no	no	no

Regional Operation Emissions Worksheet

¹ CalEEMod, Version 2022.1.

Proposed Project

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	1.38	0.49	8.47	0.02	1.63	0.42
Area	0.60	0.01	0.86	0.00	0.00	0.00
Energy	0.01	0.13	0.11	0.00	0.01	0.01
Total	1.99	0.62	9.44	0.02	1.65	0.43

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	1.31	0.53	7.54	0.01	1.63	0.42
Area	0.46	0.00	0.00	0.00	0.00	0.00
Energy	0.01	0.13	0.11	0.00	0.01	0.01
Total	1.78	0.66	7.65	0.02	1.64	0.43

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	1.38	0.53	8.47	0.02	1.63	0.42
Area	0.60	0.01	0.86	0.00	0.00	0.00
Energy	0.01	0.13	0.11	0.00	0.01	0.01
Total	1.99	0.66	9.44	0.02	1.65	0.43

Regional Thresholds (lb/day)	55	55	550	150	150	55
Exceeds Thresholds?	No	No	No	No	No	No

GHG Emissions Inventory

Proposed Project Buildout

Construction¹

	MTCO ₂ e
2026	124
2027	294
Total Construction	418
30-Year Amortization ²	14

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

	MTCO ₂ e/Year ²	
	Operations	%
Mobile	178	70%
Area	0	0%
Energy	52	20%
Water	2	1%
Solid Waste	8	3%
Refrigerants	0	0%
30-Year Construction Amortization	14	5%
	254	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.

LST Worksheets

Construction Localized Significance Thresholds: 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)	
29	1.00	25	82	25	82	3.07

Source Receptor Distance (meters)	Banning Airport	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25					
NOx	103	Tractors	0.5		0.0625	0
CO	1,000	Graders	0.5		0.0625	0
PM10	6.00	Dozers	0.5	8	0.0625	1
PM2.5	4.00	Scrapers	1		0.125	0
					Acres	1.00

	Acres	25	50	100	200	500
NOx	1	103	131	189	299	585
	1	103	131	189	299	585
	1	103	131	189	299	585
CO	1	1000	1420	2623	6154	25057
	1	1000	1420	2623	6154	25057
	1	1000	1420	2623	6154	25057
PM10	1	6	19	55	129	348
	1	6	19	55	129	348
	1	6	19	55	129	348
PM2.5	1	4	7	14	36	156
	1	4	7	14	36	156
	1	4	7	14	36	156

Banning Airport		25	50	100	200	500
1.00 Acres						
NOx	103	131	189	299	585	
CO	1000	1420	2623	6154	25057	
PM10	6	19	55	129	348	
PM2.5	4	7	14	36	156	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
29	1	29	1
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds: 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)			
29	3.07	25	82	25	82	3.07		
Source Receptor Distance (meters)								
	Banning Airport		Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
	25							
	NOx	180	Tractors	0.5	0.0625	8	4	2
	CO	1,996	Graders	0.5	0.0625			0
	PM10	13.92	Dozers	0.5	0.0625	8	3	1.5
	PM2.5	7.78	Scrapers	1	0.125			0
						Acres		3.50
Acres								
	25	50				100	200	500
	NOx	3	178	206		267	371	642
		4	207	235		300	403	670
			180	208		269	374	644
	CO	3	1966	2558		4150	8391	28561
		4	2392	3066		4842	9387	30232
			1996	2593		4198	8461	28678
	PM10	3	14	44		83	165	406
		4	17	55		94	172	406
			14	44		84	165	406
	PM2.5	3	8	11		20	46	174
		4	9	12		22	50	181
			8	11		20	46	174
Banning Airport								
	3.07 Acres							
	25	50				100	200	500
	NOx	180	208	269		374	644	
	CO	1996	2593	4198		8461	28678	
	PM10	14	44	84		165	406	
	PM2.5	8	11	20		46	174	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
29	3	29	4
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds: 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)	
29	3.07	25	82	25	82	3.07

Source Receptor Distance (meters)	Banning Airport	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25					
NOx	180	Tractors	0.5	0.0625	8	2
CO	1,996	Graders	0.5	0.0625	8	1
PM10	13.92	Dozers	0.5	0.0625	8	1
PM2.5	7.78	Scrapers	1	0.125	8	2
					Acres	4.00

	Acres	25	50	100	200	500
NOx	3	178	206	267	371	642
	4	207	235	300	403	670
CO	3	180	208	269	374	644
	4	1966	2558	4150	8391	28561
PM10	3	2392	3066	4842	9387	30232
	4	1996	2593	4198	8461	28678
PM2.5	3	14	44	83	165	406
	4	17	55	94	172	406
	3	14	44	84	165	406
	4	8	11	20	46	174
	3	8	11	20	46	174
	4	9	12	22	50	181
		8	11	20	46	174

Banning Airport

3.07 Acres

	25	50	100	200	500
NOx	180	208	269	374	644
CO	1996	2593	4198	8461	28678
PM10	14	44	84	165	406
PM2.5	8	11	20	46	174

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
29	3	29	4
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds: Building Construction

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)		
29	1.31	25	82	25	82	3.07	
Source Receptor Distance (meters)							
	Banning Airport		Equipment	Acres/8-hr Day	Daily hours	Equipment Used Acres	
	25						
	NOx	117	Tractors	0.5	0.0625	7 3 1.3125	
	CO	1,169	Graders	0.5	0.0625	0	
	PM10	7.25	Dozers	0.5	0.0625	0	
	PM2.5	4.62	Scrapers	1	0.125	0	
					Acres	1.31	
	Acres	25	50		100	200	500
	NOx	1	103	131	189	299	585
		2	149	176	234	340	614
			117	145	203	312	594
	CO	1	1000	1420	2623	6154	25057
		2	1541	2049	3458	7395	26890
			1169	1617	2884	6542	25630
	PM10	1	6	19	55	129	348
		2	10	32	73	157	407
			7	23	61	138	366
	PM2.5	1	4	7	14	36	156
		2	6	9	17	41	166
			5	8	15	38	159
Banning Airport							
	1.31 Acres						
	25	50	100		200	500	
	NOx	117	145	203	312	594	
	CO	1169	1617	2884	6542	25630	
	PM10	7	23	61	138	366	
	PM2.5	5	8	15	38	159	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
29	1	29	2
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds: Building Construction, Paving, and Architectural Coating

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)	
29	1.31	25	82	25	82	3.07

Source Receptor Distance (meters)	Banning Airport	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
	25						
NOx	117	Tractors	0.5	0.0625	7	3	1.3125
CO	1,169	Graders	0.5	0.0625			0
PM10	7.25	Dozers	0.5	0.0625			0
PM2.5	4.62	Scrapers	1	0.125			0
					Acres		1.31

	Acres	25	50	100	200	500
NOx	1	103	131	189	299	585
	2	149	176	234	340	614
CO	1	117	145	203	312	594
	2	1000	1420	2623	6154	25057
PM10	1	1541	2049	3458	7395	26890
	2	1169	1617	2884	6542	25630
PM2.5	1	6	19	55	129	348
	2	10	32	73	157	407
	1	7	23	61	138	366
	2	4	7	14	36	156
	1	6	9	17	41	166
	2	5	8	15	38	159

Banning Airport

1.31 Acres

	25	50	100	200	500
NOx	117	145	203	312	594
CO	1169	1617	2884	6542	25630
PM10	7	23	61	138	366
PM2.5	5	8	15	38	159

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
29	1	29	2
Distance Increment Below			
25			
Distance Increment Above			
25			

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

1. CONSTRUCTION HEALTH RISK ASSESSMENT

1.1 INTRODUCTION

The Beaumont Unified School District (District) proposes to construct several improvements (referred to as the “Proposed Project”) at the Anna M Hause Elementary School campus. The Proposed Project includes construction of new classroom buildings for the Beaumont Early Childhood Education Center, new play areas, lunch shelter, and various parking and circulation improvements on campus. Construction of the Proposed Project is anticipated to occur in one phase and is anticipated to start in October 2026 and end by December 2027.

The nearby residences surrounding the Project Site and onsite 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). Since the school campus would continue to operate during construction of the Proposed Project, students and employees of the Anna M Hause Elementary 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:

AQ/GHG APPENDIX

- 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 offsite sensitive receptors in close proximity to the site and in addition to onsite receptors that would be present at the Anna M Hause Elementary 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 offsite residential receptors (both children and adults) stood outdoors and are subject to DPM at their residence for 24 hours per day, and approximately 261 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 elementary 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 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 onsite, construction was modeled for 5-day work week schedule and default CalEEMod daily hours of operation for equipment.

The average daily emission rates from onsite 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 and 2027). The offsite hauling emission rates were adjusted to evaluate localized emissions from the 0.28-mile of haul route along Carnation Lane 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 maximum exposed receptor (MER) of each receptor type (e.g., residential, 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 (Banning Airport, 2019-2023) to represent local weather conditions and prevailing winds. The prevailing wind direction at the Banning 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

AQ/GHG APPENDIX

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 onsite sources and line sources for the offsite 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 Residential and Elementary School MER. 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 group. Once determined, contaminant dose is multiplied by the cancer potency factor in units of inverse dose expressed in milligrams per kilogram per day ($\text{mg}/\text{kg}/\text{day}$)⁻¹ to derive the cancer

risk estimate. Therefore, the following dose algorithm was used to accommodate the unique exposures associated with each receptor type.

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

Where:

- Dose_{AIR} = dose by inhalation (mg/kg-day), per age group
- C_{air} = concentration of contaminant in air (µg/m³)
- 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 m³)

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 elementary 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:

AQ/GHG APPENDIX

<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	0.92	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	640	1.17	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

(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 maximum exposed receptors for each type were identified as the following:

- Residential Receptor: Single-family residence along Lilies Way, adjacent to the Project Site's southeastern boundary.
- Elementary School Receptor: Anna M Hause Elementary School student receptors directly north of proposed improvements on campus.

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.

AQ/GHG APPENDIX

Table 1 Construction Risk Summary

Receptor	Cancer Risk (per million)¹	Chronic Hazards¹
Offsite Residential MER	12	<0.1
Onsite Elementary School MER	<1	<0.1
South Coast AQMD Threshold	10	1.0
Exceeds Threshold?	Yes	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 maximum exposed individual receptor consists of a pregnant woman in the third trimester that subsequently gives birth to an infant during the approximately 1.17-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 the Residential MER would exceed the South Coast AQMD threshold of 10 in one million, but the Elementary School MER would not exceed the South Coast AQMD threshold. For non-carcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one for all sensitive receptors. Therefore, chronic non-carcinogenic hazards are less than significant. However, since the incremental cancer risk at the Residential MER location would exceed the South Coast AQMD threshold, project-related construction activities would result in potentially significant health risk impacts without mitigation.

Consequently, Mitigation Measure AQ-1 would require the use of construction equipment meeting Tier 4 interim or higher emissions standards to minimize short-term emissions and associated health risk impacts. As shown in Table 2, with the implementation of Mitigation Measure AQ-1, the cancer risk at the Residential MER location during project construction would be reduced to 3 in one million and be below the South Coast AQMD’s significance threshold of 10 in one million. Additionally, the already less than significant cancer risk and chronic hazard impacts at the Elementary School MER would be further reduced below the significance thresholds with implementation of Mitigation Measure AQ-1. Accordingly, the Proposed Project would not expose offsite sensitive receptors to substantial concentrations of toxic air contaminant emissions during construction and impacts would be less than significant with mitigation incorporated.

Table 2. Mitigated Construction Risk Summary

Receptor	Cancer Risk (per million)	Chronic Hazards
Offsite Residential MER	3	<0.1
South Coast AQMD Threshold	10	1.0
Exceeds Threshold?	No	No

Note: Cancer risk calculated using 2015 OEHHA HRA guidance. Includes Mitigation Measure AQ-1, which requires all off-road construction equipment to be fitted with engines that meet the USEPA Tier 4 Interim emissions standards for offroad equipment with engines 50 horsepower or higher during all onsite construction activities.

Mitigation Measures

The following Mitigation Measure AQ-1 would help reduce short-term emissions and health risk impacts from proposed construction activities.

AQ-1 The District’s construction contractor shall implement the following requirements for all off-road equipment used for project construction.

Requirements for off-road equipment:

- Prior to construction, the project applicant shall ensure that all demolition and grading plans clearly show the requirement for United States Environmental Protection Agency (USEPA) Tier 4 interim or higher emissions standards for off-road, diesel-powered construction equipment with more than 50 horsepower during all onsite construction activities.
- If Tier 4 interim equipment is not commercially available, the contractor may apply other available technologies available for construction equipment such that it would achieve a comparable reduction in NO_x and PM emissions comparable to that of Tier 4 construction equipment. For purposes of this mitigation measure, “commercially available” shall mean the availability of Tier 4 interim engines similar to the availability for other large-scale construction projects in the project region occurring at the same time and taking into consideration factors such as (i) potential significant delays to critical-path timing of construction and (ii) geographic proximity to the project site of Tier 4 interim equipment.

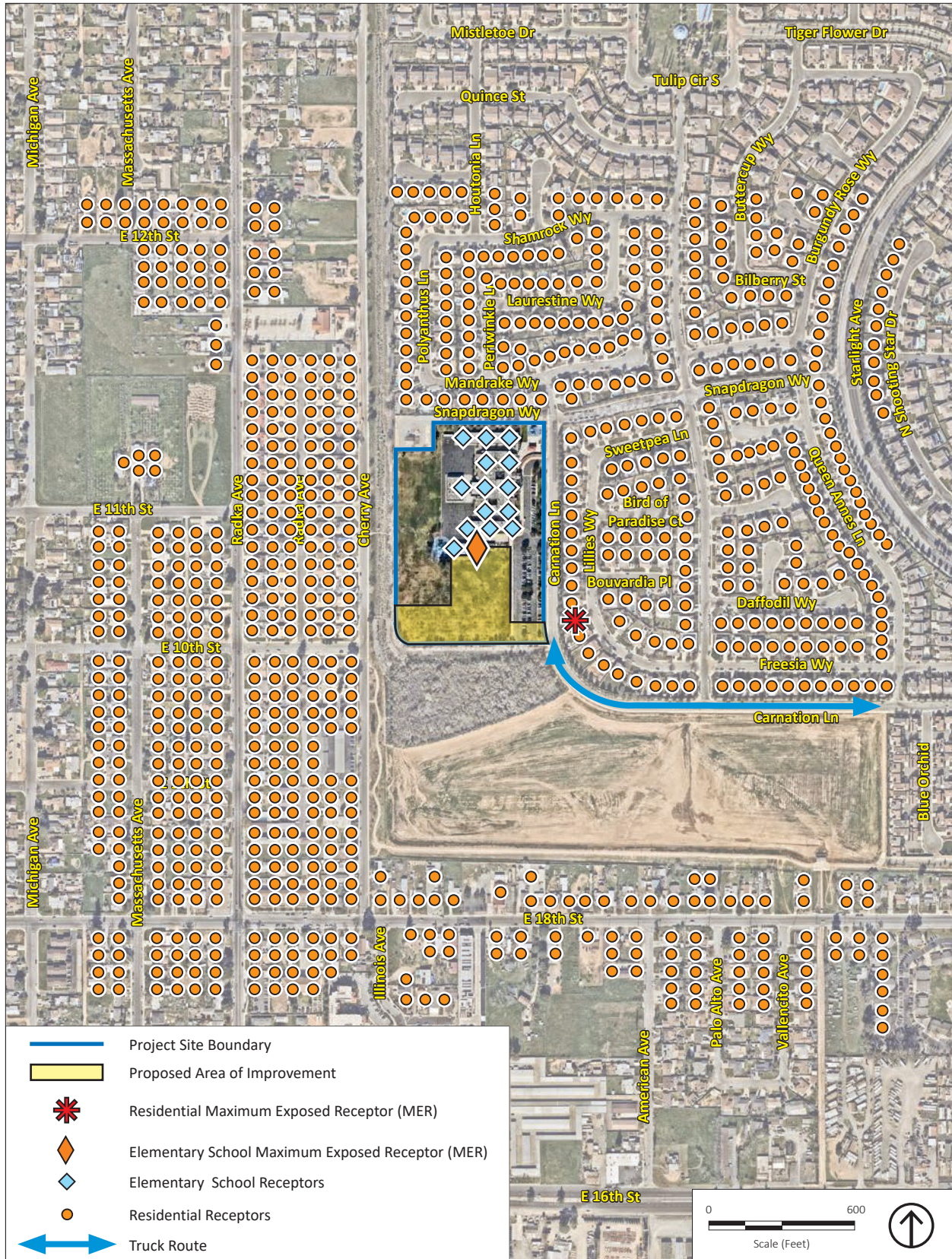
AQ/GHG APPENDIX

- Where such equipment is not commercially available, as demonstrated by the construction contractor, Tier 3 equipment retrofitted with a California Air Resources Board's Level 3 Verified Diesel Emissions Control Strategy (VDECS) shall be used.
- During construction, the construction contractor shall maintain a list of all operating off-road equipment on the construction site for verification by the District.
- The construction equipment list shall state the makes, models, Engine Identification Numbers, Engine Family Numbers, and numbers of off-road construction equipment onsite.
- To the extent that equipment is available and cost-effective, contractors shall use electric, hybrid, or alternate-fueled off-road construction equipment.
- Contractors shall use electric construction tools, such as saws, drills, and compressors, where grid electricity is available.
- Construction contractors shall ensure that all nonessential idling of construction equipment is restricted to 5 minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.
- All sub-contracts and construction documents shall identify that all non-essential idling of construction equipment is restricted to 5 minutes or less in compliance with California Air Resources Board Rule 2449. The construction contractor is responsible for ensuring that this requirement is met.

2. REFERENCES

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- CARB (California Air Resources Board). 2000, October. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. <https://ww2.arb.ca.gov/sites/default/files/classic/diesel/documents/rrpfinal.pdf>.
- OEHHA (Office of Environmental Health Hazard Assessment). 2004, February. 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. <https://oehha.ca.gov/media/downloads/crn/schoolscreenfinal.pdf>.
- OEHHA. 2015, February. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments. <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>.
- South Coast AQMD. 2023, March. South Coast AQMD Air Quality Significance Thresholds. <https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25>.
- South Coast AQMD. 2026, March 26 (accessed). Data for AERMOD. 2019-2023. Meteorological Data Set for Banning Airport Meteorological Station. <http://www.aqmd.gov/home/air-quality/meteorological-data/data-for-aermod>.
- USEPA (United States Environmental Protection Agency). 2005. Guideline on Air Quality Models (Revised). EPA-450/2-78-027R.
- USEPA. 2011. Exposure Factors Handbook 2011 Edition (Final). EPA/600/R-09/052F, 2011. <https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=236252>.

BEAUMONT EARLY CHILDHOOD EDUCATION CENTER
 INITIAL STUDY / MITIGATION NEGATIVE DECLARATION
 BEAUMONT UNIFIED SCHOOL DISTRICT



Source: Nearmap 2026.

Figure 1
 Project Site and Receptor Locations

Attachment A. CalEEMod Emission Outputs and Risk Calculations

Construction Risk Assessment Emissions Worksheet: Unmitigated - Beaumont Early Childhood Education Center

Total Construction Workdays:				
2026	10/1/2026	12/31/2026	66	workdays
2027	1/1/2027	12/1/2027	239	workdays
		total	305	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	0.06274	0.57000	0.59553	0.00109	0.02306	0.03799	0.06105	0.02121	0.01442	0.03564
2027	0.18639	1.17021	1.61440	0.00289	0.04217	0.00000	0.04217	0.03880	0.00000	0.03880

Pounds/Day

Year	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
2026	1.90130	17.27262	18.04631	0.03308	0.69864	1.15121	1.84985	0.64275	0.43712	1.07987
2027	1.55974	9.79256	13.50966	0.02421	0.35290	0.00000	0.35290	0.32467	0.00000	0.32467

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	0.00196	0.01915	0.02882	0.00011	0.00026	0.00962	0.00987	0.00026	0.00243	0.00269
2027	0.00440	0.01768	0.06178	0.00009	0.00018	0.01756	0.01774	0.00018	0.00426	0.00444

Pounds/Day

Year	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
2026	0.05936	0.58024	0.87332	0.00329	0.00777	0.29137	0.29914	0.00777	0.07377	0.08154
2027	0.03683	0.14798	0.51699	0.00075	0.00151	0.14696	0.14847	0.00151	0.03562	0.03713

Construction Risk Assessment Emissions Worksheet: Mitigated - Beaumont Early Childhood Education Center, Tier 4-Interim equipment > 50 hp

Total Construction Workdays:

2026	10/1/2026	12/31/2026	66	workdays
2027	1/1/2027	12/1/2027	239	workdays
		total	305	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	0.02279	0.37268	0.64701	0.00109	0.00441	0.03799	0.04240	0.00421	0.01442	0.01864
2027	0.12601	1.13775	1.85960	0.00289	0.01260	0.00000	0.01260	0.01198	0.00000	0.01198

Pounds/Day

Year	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
2026	0.69069	11.29319	19.60623	0.03308	0.13375	1.15121	1.28496	0.12766	0.43712	0.56478
2027	1.05449	9.52095	15.56152	0.02421	0.10547	0.00000	0.10547	0.10029	0.00000	0.10029

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	0.00196	0.01915	0.02882	0.00011	0.00026	0.00962	0.00987	0.00026	0.00243	0.00269
2027	0.00440	0.01768	0.06178	0.00009	0.00018	0.01756	0.01774	0.00018	0.00426	0.00444

Pounds/Day

Year	ROG	NOx	CO	SO2	Exhaust PM10	Fugitive PM10	PM10 Total	Exhaust PM2.5	Fugitive PM2.5	PM2.5 Total
2026	0.05936	0.58024	0.87332	0.00329	0.00777	0.29137	0.29914	0.00777	0.07377	0.08154
2027	0.03683	0.14798	0.51699	0.00075	0.00151	0.14696	0.14847	0.00151	0.03562	0.03713

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
Single Family Residence	Residential	3rd Trimester	24-Hour	Yes	70 Years	1	Diesel Particulate Matter

DPM Offsite Residential Maximum Exposed Receptor (MER) UTM coordinates: 503556.19 E, 3755053.76 N.

Schedule and Duration

Activity Schedule Information							
Year	Start Date	End Date	Workday Duration	Seconds/Day	Annual Workdays	Actual Workdays	Annual Duration
2026	10/1/2026	12/31/2026	8 Hours/Day	28,800	261	66	0.25
2027	1/1/2027	12/1/2027	8 Hours/Day	28,800	261	239	0.92

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

DPM Emission Rates and Concentrations

Year	Emission Rates		Concentration		Calculated Pollutant Concentration		
	On-site Emission Rate (lbs/day)	Off-site Emission Rate (lbs/day)	On-site Concentration (ug/m ³)	Off-site Concentration (ug/m ³)	On-site Concentration (ug/m ³)	Off-site Concentration (ug/m ³)	Total Concentration (ug/m ³)
2026	6.99E-01	7.77E-03	1.44E+01	2.77E+00	1.59E-01	4.75E-06	1.59E-01
2027	3.53E-01	1.51E-03	1.44E+01	2.77E+00	8.02E-02	9.23E-07	8.02E-02
	Off-site Haul Distance:	0.28	miles		Maximum Annual Average Concentration:		1.59E-01
	Default Haul Distance:	20	miles		Hazard Index:		0.032

Assumptions: DPM Emissions utilize PM10 Exhaust.

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	0.00	0.00	0.00	0.00	0.00	0.25
2027	0.00	0.92	0.00	0.00	0.00	0.00	0.92

Daily Breathing Rates

Year	Daily Breathing Rates by Age						Max
	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						361
2027		1090					1090

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	
2026	1.83E-06						1.83
2027		1.02E-05					10.25
	TOTAL RISK:						12.08

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
Single Family Residence	Residential	3rd Trimester	24-Hour	Yes	70 Years	1	Diesel Particulate Matter

DPM Offsite Residential Maximum Exposed Receptor (MER) UTM coordinates: 503556.19 E, 3755053.76 N.

Schedule and Duration

Activity Schedule Information							
Year	Start Date	End Date	Workday Duration	Seconds/Day	Annual Workdays	Actual Workdays	Annual Duration
2026	10/1/2026	12/31/2026	8 Hours/Day	28,800	261	66	0.25
2027	1/1/2027	12/1/2027	8 Hours/Day	28,800	261	239	0.92

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

DPM Emission Rates and Concentrations

Year	Emission Rates		Concentration		Calculated Pollutant Concentration		
	On-site Emission Rate (lbs/day)	Off-site Emission Rate (lbs/day)	On-site Concentration (ug/m3)	Off-site Concentration (ug/m3)	On-site Concentration (ug/m3)	Off-site Concentration (ug/m3)	Total Concentration (ug/m3)
2026	1.34E-01	7.77E-03	1.44E+01	2.77E+00	3.04E-02	4.75E-06	3.04E-02
2027	1.05E-01	1.51E-03	1.44E+01	2.77E+00	2.40E-02	9.23E-07	2.40E-02
	Off-site Haul Distance:	0.28	miles		Maximum Annual Average Concentration:		3.04E-02
	Default Haul Distance:	20	miles		Hazard Index:		0.006

Assumptions: DPM Emissions utilize PM10 Exhaust.

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	0.00	0.00	0.00	0.00	0.00	0.25
2027	0.00	0.92	0.00	0.00	0.00	0.00	0.92

Daily Breathing Rates

Year	Daily Breathing Rates by Age						Max
	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						361
2027		1090					1090

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	
2026	3.51E-07						0.35
2027		3.06E-06					3.06
	TOTAL RISK:						3.41

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
Elementary School Receptor	Elementary School	3	8-Hour	No	70 Years	1	Diesel Particulate Matter

DPM Onsite Elementary School Maximum Exposed Receptor (MER) UTM coordinates: 503431.39 E, 3755137.63 N.

Schedule and Duration

Activity Schedule Information							
Year	Start Date	End Date	Workday Duration	Seconds/Day	Annual Workdays	Actual Workdays	Annual Duration
2026	10/1/2026	12/31/2026	8 Hours/Day	28,800	261	66	0.25
2027	1/1/2027	12/1/2027	8 Hours/Day	28,800	261	239	0.92

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

DPM Emission Rates and Concentrations

Year	Emission Rates		Concentration		Calculated Pollutant Concentration		
	On-site Emission Rate (lbs/day)	Off-site Emission Rate (lbs/day)	On-site Concentration (ug/m ³)	Off-site Concentration (ug/m ³)	On-site Concentration (ug/m ³)	Off-site Concentration (ug/m ³)	Total Concentration (ug/m ³)
2026	6.99E-01	7.77E-03	7.67E+00	3.01E-01	8.44E-02	5.16E-07	8.44E-02
2027	3.53E-01	1.51E-03	7.67E+00	3.01E-01	4.26E-02	1.00E-07	4.26E-02
	Off-site Haul Distance:	0.28	miles		Maximum Annual Average Concentration:		8.44E-02
	Default Haul Distance:	20	miles		Hazard Index:		0.017

Assumptions: DPM Emissions utilize PM10 Exhaust.

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	0.25	0.00	0.00	0.00	0.25
2027	0.00	0.00	0.92	0.00	0.00	0.00	0.92

Daily Breathing Rates

Year	Daily Breathing Rates by Age						
	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	Max
2026			640				640
2027			640				640

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			3.18E-07				0.32
2027			5.81E-07				0.58
	TOTAL RISK:						0.90

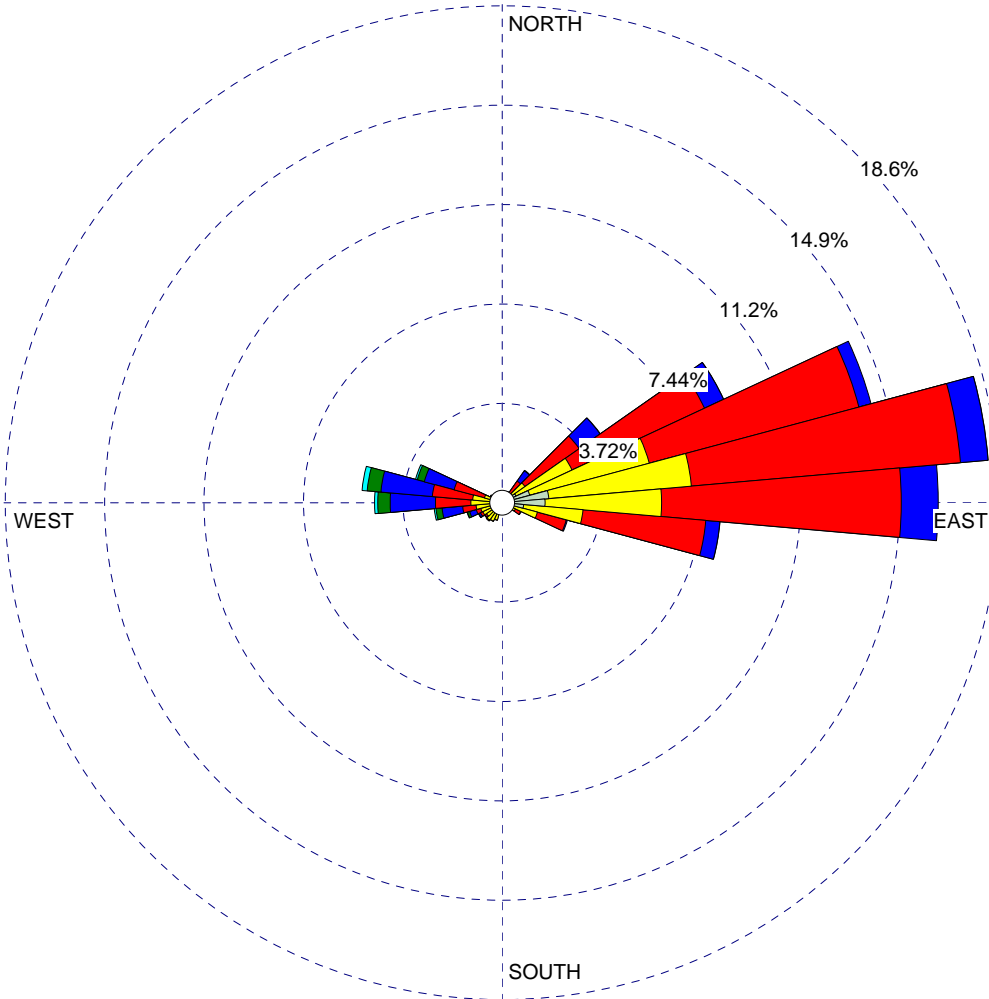
Attachment B. Air Dispersion Model Output

WIND ROSE PLOT:

Banning Airport met station

DISPLAY:

**Wind Speed
Flow Vector (blowing to)**



WIND SPEED
(m/s)

- >= 11.10
 - 8.80 - 11.10
 - 5.70 - 8.80
 - 3.60 - 5.70
 - 2.10 - 3.60
 - 0.50 - 2.10
- Calms: 0.13%

COMMENTS:

Banning Airport met station
660 m elevation
All Hours

DATA PERIOD:

**Start Date: 1/1/2019 - 00:00
End Date: 12/31/2023 - 23:59**

COMPANY NAME:

PlaceWorks

MODELER:

EP

CALM WINDS:

0.13%

TOTAL COUNT:

43823 hrs.

AVG. WIND SPEED:

4.11 m/s

DATE:

3/26/2026

PROJECT NO.:

BEA-13

Model Output – Unit Emission Rates (1 g/s)

and: 0 LINE source(s)
and: 0 RLINE/RLINEXT source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with a total of 0 line(s)

**Model Set To Continue RUNNING After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 22112

**Output Options Selected:

Model Outputs Tables of PERIOD Averages by Receptor
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 660.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.7 MB of RAM.

**Input Runstream File: aermod.inp

**Output Print File: aermod.out

**Detailed Error/Message File: Early Childhood Education Center.err

**File for Summary of Results: Early Childhood Education Center.sum

Model Output – Unit Emission Rates (1 g/s)

L0000038	0	0.22222E-01	503863.0	3754938.7	800.9	4.15	4.68	3.26	YES	HRDOW
L0000039	0	0.22222E-01	503873.0	3754938.7	800.9	4.15	4.68	3.26	YES	HRDOW
L0000040	0	0.22222E-01	503883.1	3754938.7	800.9	4.15	4.68	3.26	YES	HRDOW

Model Output – Unit Emission Rates (1 g/s)

```

*** AERMOD - VERSION 21112 ***   *** Beaumont Early Childhood Education Center   ***   03/21/26
*** AERMET - VERSION 22112 ***   *** Construction HRA   ***   15:56:07
*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FASTALL URBAN ADJ_U*   ***   PAGE 4
  
```

*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X Y (METERS) (METERS)		BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
1	0	0.70278E-04	503399.3	3755123.8	804.9	4.15	13	1.93	YES	HRDOW

Model Output – Unit Emission Rates (1 g/s)

*** AERMOD - VERSION 21112 *** *** Beaumont Early Childhood Education Center
 *** AERMET - VERSION 22112 *** *** Construction HRA

*** MODELOPTs: NonDEFAULT CONC FLAT and ELEV FASTALL URBAN ADJ_U*

*** 03/21/26
 *** 15:56:07
 PAGE 5

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs															
-----	-----															
ONSITE	1	,														
HAUL	L0000001	,	L0000002	,	L0000003	,	L0000004	,	L0000005	,	L0000006	,	L0000007	,	L0000008	,
	L0000009	,	L0000010	,	L0000011	,	L0000012	,	L0000013	,	L0000014	,	L0000015	,	L0000016	,
	L0000017	,	L0000018	,	L0000019	,	L0000020	,	L0000021	,	L0000022	,	L0000023	,	L0000024	,
	L0000025	,	L0000026	,	L0000027	,	L0000028	,	L0000029	,	L0000030	,	L0000031	,	L0000032	,
	L0000033	,	L0000034	,	L0000035	,	L0000036	,	L0000037	,	L0000038	,	L0000039	,	L0000040	,
	L0000041	,	L0000042	,	L0000043	,	L0000044	,	L0000045	,						

Model Output – Unit Emission Rates (1 g/s)

```

*** AERMOD - VERSION 21112 ***   *** Beaumont Early Childhood Education Center   ***   03/21/26
*** AERMET - VERSION 22112 ***   *** Construction HRA   ***   15:56:07
                                     PAGE 7

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*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FASTALL URBAN ADJ_U*

```

* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = 1		; SOURCE TYPE = AREAPOLY :													
HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR	HRDOW	SCALAR
DAY OF WEEK = WEEKDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.1000E+01
9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01	15	.1000E+01	16	.1000E+01
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SATURDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00
DAY OF WEEK = SUNDAY															
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00	8	.0000E+00
9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00	15	.0000E+00	16	.0000E+00
17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00	22	.0000E+00	23	.0000E+00	24	.0000E+00

Model Output – Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Beaumont Early Childhood Education Center   ***   03/21/26
*** AERMET - VERSION 22112 ***   *** Construction HRA   ***   15:56:07
*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FASTALL URBAN ADJ_U*   ***   PAGE 8
  
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* SOURCE EMISSION RATE SCALARS WHICH VARY DIURNALLY AND BY DAY OF WEEK (HRDOW) *

SOURCE ID = L0000001 to L0000045 ; SOURCE TYPE = VOLUME :													
HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR	HR	SCALAR
DAY OF WEEK = WEEKDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.1000E+01	9	.1000E+01	10	.1000E+01	11	.1000E+01	12	.0000E+00	13	.1000E+01	14	.1000E+01
15	.1000E+01	16	.1000E+01	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00								
DAY OF WEEK = SATURDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00								
DAY OF WEEK = SUNDAY													
1	.0000E+00	2	.0000E+00	3	.0000E+00	4	.0000E+00	5	.0000E+00	6	.0000E+00	7	.0000E+00
8	.0000E+00	9	.0000E+00	10	.0000E+00	11	.0000E+00	12	.0000E+00	13	.0000E+00	14	.0000E+00
15	.0000E+00	16	.0000E+00	17	.0000E+00	18	.0000E+00	19	.0000E+00	20	.0000E+00	21	.0000E+00
22	.0000E+00	23	.0000E+00	24	.0000E+00								

Model Output – Unit Emission Rates (1 g/s)

*** AERMOD - VERSION 21112 *** *** Beaumont Early Childhood Education Center
 *** AERMET - VERSION 22112 *** *** Construction HRA

*** 03/21/26
 *** 15:56:07
 PAGE 62

*** MODELOPTs: NonDEFAULT CONC FLAT and ELEV FASTALL URBAN ADJ_U*

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
 LESS THAN 1.0 METER; WITHIN OPENPIT; OR BEYOND 80KM FOR FASTAREA/FASTALL

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS) YR (METERS)		DISTANCE (METERS)
- - - - -			
L0000007	503564.4	3754968.8	-4.79
L0000008	503564.4	3754968.8	-3.62

Model Output – Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Beaumont Early Childhood Education Center   ***   03/21/26
*** AERMET - VERSION 22112 ***   *** Construction HRA   ***   15:56:07
                                                                    ***   PAGE 64
  
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*** MODELOPTs: NonDEFAULT CONC FLAT and ELEV FASTALL URBAN ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

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Surface file: MET DATA\BNAP_V11_trimmed.sfc           Met Version: 22112
Profile file: MET DATA\BNAP_V11_trimmed.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 3171           Upper air station no.: 3190
Name: UNKNOWN                       Name: UNKNOWN
Year: 2019                           Year: 2019
  
```

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS	WD	HT	REF	TA	HT
19	01	01	1	01	-41.3	0.439	-9.000	-9.000	-999.	709.	212.5	0.02	0.62	1.00	6.84	120.	10.0	279.4	9.5			
19	01	01	1	02	-46.3	0.492	-9.000	-9.000	-999.	827.	266.1	0.02	0.62	1.00	7.62	107.	10.0	279.2	9.5			
19	01	01	1	03	-53.6	0.568	-9.000	-9.000	-999.	1025.	354.6	0.02	0.62	1.00	8.75	95.	10.0	278.4	9.5			
19	01	01	1	04	-51.8	0.548	-9.000	-9.000	-999.	974.	329.8	0.02	0.62	1.00	8.45	98.	10.0	278.1	9.5			
19	01	01	1	05	-49.1	0.518	-9.000	-9.000	-999.	897.	295.6	0.02	0.62	1.00	8.01	97.	10.0	277.8	9.5			
19	01	01	1	06	-52.9	0.557	-9.000	-9.000	-999.	996.	340.9	0.02	0.62	1.00	8.58	95.	10.0	277.6	9.5			
19	01	01	1	07	-49.2	0.517	-9.000	-9.000	-999.	895.	294.0	0.03	0.62	1.00	7.66	85.	10.0	277.3	9.5			
19	01	01	1	08	-44.7	0.649	-9.000	-9.000	-999.	1252.	514.0	0.02	0.62	0.53	9.90	99.	10.0	277.5	9.5			
19	01	01	1	09	19.9	0.640	0.420	0.005	125.	1229.	-1108.0	0.02	0.62	0.32	9.59	100.	10.0	278.5	9.5			
19	01	01	1	10	55.3	0.657	0.713	0.005	220.	1276.	-431.1	0.02	0.62	0.25	9.77	91.	10.0	278.9	9.5			
19	01	01	1	11	79.6	0.730	1.047	0.005	485.	1492.	-410.9	0.02	0.62	0.23	10.84	93.	10.0	279.2	9.5			
19	01	01	1	12	90.9	0.709	1.296	0.005	804.	1434.	-329.1	0.02	0.62	0.22	10.50	102.	10.0	280.0	9.5			
19	01	01	1	13	89.0	0.683	1.335	0.005	898.	1357.	-300.2	0.02	0.62	0.22	10.10	104.	10.0	280.9	9.5			
19	01	01	1	14	73.7	0.600	1.285	0.005	968.	1124.	-245.3	0.02	0.62	0.24	8.84	115.	10.0	280.8	9.5			
19	01	01	1	15	45.8	0.666	1.112	0.005	1009.	1301.	-540.1	0.02	0.62	0.27	9.92	107.	10.0	280.8	9.5			
19	01	01	1	16	8.0	0.600	0.622	0.005	1015.	1122.	-2277.0	0.02	0.62	0.36	9.02	106.	10.0	280.4	9.5			
19	01	01	1	17	-43.8	0.491	-9.000	-9.000	-999.	838.	265.0	0.02	0.62	0.65	7.60	94.	10.0	279.9	9.5			
19	01	01	1	18	-50.4	0.533	-9.000	-9.000	-999.	933.	312.6	0.03	0.62	1.00	7.88	86.	10.0	279.3	9.5			
19	01	01	1	19	-50.4	0.532	-9.000	-9.000	-999.	931.	311.2	0.03	0.62	1.00	7.87	82.	10.0	278.6	9.5			
19	01	01	1	20	-45.8	0.484	-9.000	-9.000	-999.	810.	257.2	0.03	0.62	1.00	7.18	85.	10.0	278.5	9.5			
19	01	01	1	21	-17.1	0.181	-9.000	-9.000	-999.	310.	36.2	0.05	0.62	1.00	2.61	344.	10.0	277.9	9.5			
19	01	01	1	22	-19.4	0.204	-9.000	-9.000	-999.	222.	45.8	0.02	0.62	1.00	3.43	29.	10.0	278.2	9.5			
19	01	01	1	23	-15.4	0.170	-9.000	-9.000	-999.	168.	31.7	0.03	0.62	1.00	2.60	38.	10.0	278.0	9.5			
19	01	01	1	24	-25.3	0.267	-9.000	-9.000	-999.	331.	78.3	0.03	0.62	1.00	3.99	45.	10.0	278.7	9.5			

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
19	01	01	01	9.5	0	-999.	-99.00	279.5	99.0	-99.00	-99.00
19	01	01	01	10.0	1	120.	6.84	-999.0	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

Model Output – Unit Emission Rates (1 g/s)

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*** AERMOD - VERSION 21112 ***   *** Beaumont Early Childhood Education Center   ***   03/21/26
*** AERMET - VERSION 22112 ***   *** Construction HRA   ***   15:56:07
*** MODELOPTs:   NonDEFAULT CONC FLAT and ELEV FASTALL URBAN ADJ_U*   ***   PAGE 86

*** Message Summary : AERMOD Model Execution ***

----- Summary of Total Messages -----

A Total of           0 Fatal Error Message(s)
A Total of           2 Warning Message(s)
A Total of          651 Informational Message(s)

A Total of          43824 Hours Were Processed

A Total of           1 Calm Hours Identified

A Total of           650 Missing Hours Identified ( 1.48 Percent)

***** FATAL ERROR MESSAGES *****
*** NONE ***

***** WARNING MESSAGES *****
ME W186    759      MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used   0.50
ME W187    759      MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

*****
*** AERMOD Finishes Successfully ***
*****
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