

Appendix B Air Quality/GHG Modeling

Appendix

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Air Quality and Greenhouse Gas Appendix

Air Quality and Greenhouse Gas Background and Modeling Data

AIR QUALITY

Climate/Meteorology

SOUTH COAST AIR BASIN

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

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the project site with temperature data is the Montebello, California Monitoring Station (ID No. 045790). The lowest average temperature is reported at 47.2°F in December, and the highest average temperature is 89.7°F in August (WRCC 2021).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from October through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall historically averages 14.78 inches per year in the project area (WRCC 2021).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the (South Coast AQMD 2005).

Wind

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

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

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

Inversions

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

Air Quality Regulations

The proposed project has the potential to release gaseous emissions of criteria pollutants and dust into the ambient air; therefore, it falls under the ambient air quality standards promulgated at the local, state, and federal levels. The project site is in the SoCAB and is subject to the rules and regulations imposed by the South Coast Air Quality Management District (South Coast AQMD). However, South Coast AQMD reports to California Air Resources board (CARB), and all criteria emissions are also governed by the California and national Ambient Air Quality Standards (AAQS). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

AMBIENT AIR QUALITY STANDARDS

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

and maintain the California AAQS by the earliest practical date. The California AAQS tend to be more restrictive than the National AAQS, based on even greater health and welfare concerns.

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

Both California and the federal government have established health-based AAQS for seven air pollutants. As shown in Table 1, these pollutants include ozone (O₃), nitrogen dioxide (NO₂), carbon monoxide (CO), sulfur dioxide (SO₂), coarse inhalable particulate matter (PM₁₀), fine inhalable particulate matter (PM_{2.5}), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These standards are designed to protect the health and welfare of the populace with a reasonable margin of safety.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Ozone (O ₃) ³	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO ₂)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO ₂)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm	
Respirable Coarse Particulate Matter (PM ₁₀)	Annual Arithmetic Mean	20 µg/m ³	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m ³	150 µg/m ³	
Respirable Fine Particulate Matter (PM _{2.5}) ⁴	Annual Arithmetic Mean	12 µg/m ³	12 µg/m ³	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m ³	

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard ¹	Federal Primary Standard ²	Major Pollutant Sources
Lead (Pb)	30-Day Average	1.5 µg/m ³	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m ³	
	Rolling 3-Month Average	*	0.15 µg/m ³	
Sulfates (SO ₄) ⁵	24 hours	25 µg/m ³	*	Industrial processes.
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	No Federal Standard	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	No Federal Standard	Hydrogen sulfide (H ₂ S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hours	0.01 ppm	No Federal Standard	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.

Notes: ppm: parts per million; µg/m³: micrograms per cubic meter

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

1 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.

2 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 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

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

4 On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

5 On June 2, 2010, a new 1-hour 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

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 2021). The SoCAB is designated as being in attainment under the California AAQS and attainment (serious maintenance) under the National AAQS (CARB 2019).

Volatile Organic Compounds (VOC) are compounds composed primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Other sources of VOCs include evaporative emissions associated with the use of paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of ozone (O₃), South Coast AQMD has established a significance threshold for this pollutant (South Coast AQMD 2005).

Nitrogen Oxides (NO_x) are a byproduct of fuel combustion and contribute to the formation of O₃, PM₁₀, and PM_{2.5}. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO₂). The principal form of NO₂ produced by combustion is NO, but NO reacts with oxygen to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO₂ is only potentially irritating. There is some indication of a relationship between NO₂ and chronic pulmonary fibrosis. Some increase in bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 part per million (ppm). NO₂ absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure (South Coast AQMD 2005, USEPA 2021). The SoCAB is designated as an attainment (maintenance) area under the National AAQS and attainment area under the California AAQS (CARB 2019).

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 from chemical processes at chemical plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO₂ (South Coast AQMD 2005, USEPA 2021). 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. At lower concentrations and when combined with particulates, SO₂ may do greater harm by injuring lung tissue. The SoCAB is designated as attainment under the California and National AAQS (CARB 2019).

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 the particulate matter with an aerodynamic diameter of 10 microns (i.e., 10 millionths of a meter or 0.0004 inch) or less. Inhalable fine particles, or PM_{2.5}, have an aerodynamic diameter of 2.5 microns (i.e., 2.5 millionths of a meter or 0.0001 inch) or less. Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. However, wind action on arid landscapes also contributes substantially to local particulate loading (i.e., fugitive dust). Both PM₁₀ and PM_{2.5} may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems (South Coast AQMD 2005).

The US Environmental Protection Agency's (EPA) scientific review concluded that PM_{2.5}, which penetrates deeply into the lungs, is more likely than PM₁₀ to contribute to health effects and at concentrations that extend well below those allowed by the current PM₁₀ standards. These health effects include premature death and increased hospital admissions and emergency room visits (primarily the elderly and individuals with cardiopulmonary disease); increased respiratory symptoms and disease (children and individuals with cardiopulmonary disease such as asthma); decreased lung functions (particularly in children and individuals with asthma); and alterations in lung tissue and structure and in respiratory tract defense mechanisms (South Coast AQMD 2005). There has been emerging evidence that even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.00004 inch), known as ultrafine particulates (UFPs), have human health implications, because UFPs 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 or CARB have yet to adopt AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by the CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,¹ environmental damage,² and aesthetic damage³ (South Coast AQMD 2005; USEPA 2021). The SoCAB is in nonattainment and serious nonattainment for PM_{2.5} under the California

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

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

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

and National AAQS, respectively. For PM₁₀, the SoCAB is nonattainment under the California AAQS and in attainment (serious maintenance) under the National AAQS (CARB 2019).⁴

Ozone (O₃) is commonly referred to as “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 the presence of sunlight. O₃ is a secondary criteria air pollutant. O₃ concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O₃ poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O₃ can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O₃ also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O₃ also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O₃ harms sensitive vegetation during the growing season (South Coast AQMD 2005; USEPA 2021). The SoCAB is designated as extreme nonattainment under the National AAQS (8-hour) and as nonattainment under the California AAQS (1-hour and 8-hour). (CARB 2019).

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 2021). 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 stricter lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.⁵ As a result of these violations, the Los Angeles County portion of the SoCAB is designated nonattainment under the National AAQS for lead (South Coast AQMD 2012; CARB 2019). 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 project.

⁴ CARB approved the South Coast AQMD’s request to redesignate the SoCAB from serious nonattainment for PM₁₀ to attainment for PM₁₀ under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM₁₀ standards from 2004 to 2007. The EPA approved the State of California’s request to redesignate the South Coast PM₁₀ nonattainment area to attainment of the PM₁₀ National AAQS, effective on July 26, 2013.

⁵ 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).

TOXIC AIR CONTAMINANTS

The public's exposure to air pollutants classified as toxic air contaminants (TACs) is a significant environmental health issue in California. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health. The California Health and Safety Code defines a TAC as "an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health." A substance that is listed as a hazardous air pollutant (HAP) pursuant to Section 112(b) of the federal Clean Air Act (42 United States Code §7412[b]) is a toxic air contaminant. Under state law, the California Environmental Protection Agency (Cal/EPA), acting through CARB, is authorized to identify a substance as a TAC if it determines that the substance is an air pollutant that may cause or contribute to an increase in mortality or to an increase in serious illness, or may pose a present or potential hazard to human health.

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

Air toxics from stationary sources are also regulated in California under the Air Toxics "Hot Spot" Information and Assessment Act of 1987. Under AB 2588, toxic air contaminant emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment and, if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified particulate emissions from diesel-fueled engines (diesel PM) as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particle mass is 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

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

- 13 CCR Chapter 10, Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling

- 13 CCR Chapter 10, Section 2480, Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- 13 CCR Section 2477 and Article 8, Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Community Risk

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

Multiple Airborne Toxics Exposure Study (MATES)

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and estimated the potential health risks from air toxics in the SoCAB. In 2008, South Coast AQMD conducted its third update to the MATES study (MATES III). The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, accounting for 84 percent of the cancer risk (South Coast AQMD 2008b).

South Coast AQMD recently released the fourth update (MATES IV). The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the 2008 MATES III, monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources while 10 percent is attributed to TACs from stationary sources, such as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, accounting for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result, the estimated basin-wide population-weighted risk decreased by approximately 57 percent compared to the analysis done for the MATES III time period (South Coast AQMD 2015a).

The Office of Environmental Health Hazard Assessment (OEHHA) updated the guidelines for estimating cancer risks on March 6, 2015. The new method utilizes higher estimates of cancer potency during early life exposures, which result in a higher calculation of risk. There are also differences in the assumptions on

breathing rates and length of residential exposures. When combined together, South Coast AQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher using the proposed updated methods identified in MATES IV (e.g., 2.7 times higher than 418 in one million overall excess cancer risk) (South Coast AQMD 2015a).

Air Quality Management Planning

The South Coast AQMD is the agency 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.

2016 AQMP

On March 3, 2017, the South Coast AQMD adopted the 2016 AQMP as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 National 8-hour ozone standard by 2031,
- 2012 National annual PM_{2.5} standard by 2025⁶,
- 2006 National 24-hour PM_{2.5} standard by 2019,
- 1997 National 8-hour ozone standard by 2023, and the
- 1979 National 1-hour ozone standard by year 2022.

It is projected that total NO_x emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022 (South Coast AQMD 2017), which requires reducing NO_x emissions in the SoCAB to 250 tpd. This is approximately 45 percent additional reductions above existing regulations for the 2023 ozone standard and 55 percent additional reductions above existing regulations to meet the 2031 ozone standard.

Reducing NO_x emissions would also reduce PM_{2.5} concentrations in the SoCAB. However, as the goal is to meet the 2012 federal annual PM_{2.5} standard no later than year 2025, South Coast AQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under this federal standard. A “moderate” nonattainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA (South Coast AQMD 2017).

⁶ The 2016 AQMP requests a reclassification from moderate to serious non-attainment for the 2012 National PM_{2.5} standard.

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.

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 2. The SoCAB is designated in attainment of the California AAQS for sulfates. The SoCAB is designated as nonattainment for lead (Los Angeles County only) under the National AAQS.

Table 2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

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

Table 2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2019.

¹ The South Coast AQMD is seeking to reclassify the SoCAB from “moderate” to “serious” nonattainment under federal PM_{2.5} standard.

² In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas in the SoCAB are unclassified.

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) 11 – South San Gabriel Valley. The air quality monitoring station closest to the project site is the Pico Rivera-4144 San Gabriel Monitoring Station, which monitors O₃, NO_x, and PM_{2.5}. Information regarding PM₁₀ is supplemented by data from the Azusa Monitoring Station. The most current five years of data from these monitoring stations are included in Table 3, *Ambient Air Quality Monitoring Summary*. The data show regular violations of the state and federal O₃, state PM₁₀, and federal PM_{2.5} standards in the last five years.

Table 3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Threshold Were Exceeded and Maximum Levels during Such Violations				
	2015	2016	2017	2018	2019
Ozone (O₃)¹					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	6	9	7	3	5
State 8-hour ≥ 0.07 ppm (days exceed threshold)	11	6	9	5	7
Federal 8-Hour > 0.075 ppm (days exceed threshold)	2	2	4	2	3
Max. 1-Hour Conc. (ppm)	0.107	0.111	0.118	0.115	0.108
Max. 8-Hour Conc. (ppm)	0.081	0.081	0.086	0.082	0.091
Nitrogen Dioxide (NO₂)¹					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Federal 1-Hour ≥ 0.100 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	0.0704	0.0632	0.0750	0.0768	0.0618
Coarse Particulates (PM₁₀)¹					
State 24-Hour > 50 µg/m ³ (days exceed threshold)	12	12	7	10	4
Federal 24-Hour > 150 µg/m ³ (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m ³)	101.0	74.0	83.9	78.3	82.0
Fine Particulates (PM_{2.5})¹					
Federal 24-Hour > 35 µg/m ³ (days exceed threshold)	3	2	1	2	1
Max. 24-Hour Conc. (µg/m ³)	52.7	46.5	49.5	56.3	50.2

Source: CARB 2021.

ppm: parts per million; parts per billion, µg/m³: micrograms per cubic meter

Notes: * Data not available.

¹ Data obtained from the Pico Rivera-4144 San Gabriel Monitoring Station

² Data obtained from the Azusa Monitoring Station

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Sensitive population groups include children, the elderly, the acutely ill, and the chronically ill, especially those with cardio-respiratory diseases.

Residential areas are also considered to be sensitive receptors to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Schools are also considered sensitive receptors, as children are present for extended durations and engage in regular outdoor activities. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial and commercial areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, as the majority of the workers tend to stay indoors most of the time. In addition, the working population is generally the healthiest segment of the public. The nearest sensitive receptors to the proposed project site are the residences along Marybeth Avenue to the north.

Methodology

Projected construction-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2.25. CalEEMod compiles an emissions inventory of construction (fugitive dust, off-gas emissions, on-road emissions, and off-road emissions), area sources, indirect emissions from energy use, mobile sources, indirect emissions from waste disposal (annual only), and indirect emissions from water/wastewater (annual only) use. The calculated emissions of the project are compared to thresholds of significance for individual projects using the South Coast AQMD's *CEQA Air Quality Analysis Guidance Handbook*.

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 4 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 EPA or CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, South Coast AQMD has not developed thresholds for them.

Table 4 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 2019.

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 2015b)

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 2015c).

Mass emissions in Table 4 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not single-handedly trigger a regional health impact. South Coast AQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, South Coast AQMD prepares an AQMP that details regional programs to attain the AAQS.

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 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 hot spot 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.⁷ 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 by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017).

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 5.

⁷ The four intersections were: Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. The busiest intersection evaluated (Wilshire and Veteran) had a daily traffic volume of approximately 100,000 vehicles per day with LOS E in the morning peak hour and LOS F in the evening peak hour.

Table 5 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 2019.

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. The screening-level construction LSTs for the project site in SRA 11 are shown in Table 6, *South Coast AQMD Screening-Level Construction Localized Significance Thresholds*, for sensitive receptors within 82 feet (25 meters).

Table 6 South Coast AQMD Screening-Level Construction 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	81	485	9.75	3.72
1.31 Acres Disturbed Per Day	92	557	11.50	4.26
2.50 Acres Disturbed Per Day	126	805	18.07	5.94
3.50 Acres Disturbed Per Day	149	984	23.52	6.94

Source: South Coast AQMD 2008a and 2011.

¹ LSTs are based on receptors within 82 feet (25 meters) in SRA 11.

Because the project is not an industrial project that has the potential to emit substantial sources of stationary emissions, operational LSTs are not an air quality impact of concern associated with the project.

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 7, *Toxic Air Contaminants Incremental Risk Thresholds*, lists the TAC incremental risk thresholds for operation of a project. 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)*). CEQA does not require CEQA-level environmental document to analyze the environmental effects of attracting development and people to an area. However, the environmental document must analyze the impacts of environmental hazards on future users, when a proposed project exacerbates an existing environmental hazard or condition. Residential, commercial, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards, so these thresholds are typically applied to new industrial projects.

Table 7 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 2019.	

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,⁸ 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).⁹ 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

⁸ 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.

⁹ 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 2017a). 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.

(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 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 2020).

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 8. 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 Fourth Assessment Report (AR4) GWP values for CH₄, a project that generates 10 metric tons (MT) of CH₄ would be equivalent to 250 MT of CO₂ (IPCC 2007).

Table 8 GHG Emissions and Their Relative Global Warming Potential Compared to CO₂

GHGs	Second Assessment Report Atmospheric Lifetime (Years)	Fourth Assessment Report Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO ₂ ¹	Fourth Assessment Report Global Warming Potential Relative to CO ₂ ¹
Carbon Dioxide (CO ₂)	50 to 200	50 to 200	1	1
Methane ² (CH ₄)	12 (±3)	12	21	25
Nitrous Oxide (N ₂ O)	120	114	310	298
Hydrofluorocarbons:				
HFC-23	264	270	11,700	14,800
HFC-32	5.6	4.9	650	675
HFC-125	32.6	29	2,800	3,500
HFC-134a	14.6	14	1,300	1,430
HFC-143a	48.3	52	3,800	4,470
HFC-152a	1.5	1.4	140	124
HFC-227ea	36.5	34.2	2,900	3,220
HFC-236fa	209	240	6,300	9,810
HFC-4310mee	17.1	15.9	1,300	1,030
Perfluoromethane: CF ₄	50,000	50,000	6,500	7,390
Perfluoroethane: C ₂ F ₆	10,000	10,000	9,200	12,200
Perfluorobutane: C ₄ F ₁₀	2,600	NA	7,000	8,860
Perfluoro-2-methylpentane: C ₆ F ₁₄	3,200	NA	7,400	9,300
Sulfur Hexafluoride (SF ₆)	3,200	NA	23,900	22,800

Source: IPCC 1995, 2007, 2013.

Notes:

¹ 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.

² Based on 100-year time horizon of the GWP of the air pollutant compared to CO₂.

³ The GWP values in the IPCC's Fifth Assessment Report (2013) reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO₂. However, South Coast AQMD uses the AR4 GWP values to maintain consistency in statewide GHG emissions modeling. In addition, the 2017 Scoping Plan Update was based on the AR4 GWP values.

California's Greenhouse Gas Sources and Relative Contribution

In 2020, the statewide GHG emissions inventory was updated for 2000 to 2018 emissions using the GWPs in IPCC's AR4.¹⁰ Based on these GWPs, California produced 425.3 MMTCO₂e GHG emissions in 2018. California's transportation sector was the single largest generator of GHG emissions, producing 39.9 percent of the state's total emissions. Industrial sector emissions made up 21.0 percent, and electric power generation made up 14.8 percent of the state's emissions inventory. Other major sectors of GHG emissions include

¹⁰ Methodology for determining the statewide GHG inventory is not the same as the methodology used to determine statewide GHG emissions under Assembly Bill 32 (2006).

commercial and residential (9.7 percent), agriculture and forestry (7.7 percent) high GWP (4.8 percent), and recycling and waste (2.1 percent) (CARB 2020a).

Since the peak level in 2004, California statewide GHG emissions dropped below the 2020 GHG limit of 431 MMCO₂e in 2016 and have remained below the 2020 GHG limit since then. In 2018, emissions from routine GHG emitting activities statewide were 6 MMTCO₂e lower than the 2020 GHG limit. Per capita GHG emissions in California have dropped from a 2001 peak of 14.0 MTCO₂e per person to 10.7 MTCO₂e per person in 2018, a 24 percent decrease. Transportation emissions decreased in 2018 compared to the previous year, which is the first year over year decrease since 2013. Since 2008, California's electricity sector has followed an overall downward trend in emissions. In 2018, solar power generation has continued its rapid growth since 2013. Emissions from high-GWP gases increased 2.3 percent in 2018 (2000-2018 average year-over-year increase is 6.8 percent), continuing the increasing trend as they replace Ozone Depleting Substances (ODS) being phased out under the 1987 Montreal Protocol. Overall trends in the inventory also demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product (GDP)) is declining, representing a 43 percent decline since the 2001 peak, while the state's GDP has grown 59 percent during this period (CARB 2020a).

Regulatory Settings

REGULATION OF GHG EMISSIONS ON A NATIONAL LEVEL

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

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

US Mandatory Report Rule for GHGs (2009)

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

Update to Corporate Average Fuel Economy Standards (2017 to 2026)

The federal government issued new Corporate Average Fuel Economy (CAFE) standards in 2012 for model years 2017 to 2025, which required a fleet average of 54.5 miles per gallon in 2025. On March 30, 2020, the EPA finalized an updated CAFE and GHG emissions standards for passenger cars and light trucks and established new standards covering model years 2021 through 2026, known as the Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021 to 2026. However, in May 2020, California and 22 other states; the District of Columbia; the cities of Los Angeles, Denver, and New York; and the counties of San Francisco and Denver filed a lawsuit with the U.S. Court of Appeals for the District of Columbia Circuit, challenging the SAFE Rule. To date, a ruling has not been made on the lawsuit. In addition, a consortium of automakers and California have agreed on a voluntary framework to reduce emissions that can serve as an alternative path forward for clean vehicle standards nationwide. Automakers who agreed to the framework are Ford, Honda, BMW of North America, and Volkswagen Group of America. The framework supports continued annual reductions of vehicle GHG emissions through the 2026 model year, encourages innovation to accelerate the transition to electric vehicles, and gives industry the certainty needed to make investments and create jobs. This commitment means that the auto companies which are party to the voluntary agreement will only sell cars in the United States that meet these standards (CARB 2020b).

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

Pursuant to its authority under the Clean Air Act, the EPA has been developing regulations for new, large, stationary sources of emissions, such as power plants and refineries. Under former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources as well. On June 19, 2019, the EPA issued the final Affordable Clean Energy (ACE) rule which became effective on August 19, 2019. The ACE rule was crafted under the direction of President Trump's Energy Independence Executive Order. It officially rescinds the Clean Power Plan rule issued during the Obama Administration and sets emissions guidelines for states in developing plans to limit CO₂ emissions from coal-fired power plants.

REGULATION OF GHG EMISSIONS ON A STATE LEVEL

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-3-05, Executive Order B-30-15, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32) and Senate Bill 375 (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)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32. 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 Executive Order S-03-05.

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. The *2008 Scoping Plan* identified that GHG emissions in California are anticipated to be approximately 596 MMTCO_{2e} in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 MMTCO_{2e} (471 million tons) for the state (CARB 2008). In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 MTCO_{2e} per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

First Update to the Scoping Plan

CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan was adopted at the May 22, 2014, board hearing. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan. As part of the update, CARB recalculated the 1990 GHG emission levels with the updated AR4 GWPs, and the 427 MMTCO_{2e} 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher at 431 MMTCO_{2e} (CARB 2014).

As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the update also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high-level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals (CARB 2014). CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014).

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions in the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs 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 Executive Order 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.

2017 Climate Change Scoping Plan Update

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On December 24, 2017, CARB adopted the 2017 Climate Change Scoping Plan Update, which outlines potential regulations and programs, including strategies consistent with AB 197 requirements, to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 MMTCO_{2e} for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017c).

California's climate strategy will require contributions from all sectors of the economy, including enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, such as solar roofs, wind, and other types of distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning, to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for GHG reductions at stationary sources complement local air pollution control efforts by the local air districts to tighten criteria air pollutants and TACs emissions limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks;
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydrofluorocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- Continued implementation of SB 375.

- Development of a Natural and Working Lands Action Plan to secure California’s land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Climate Change Scoping Plan also identified local governments as essential partners in achieving the State’s long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends statewide targets of no more than 6 MTCO_{2e} or less per capita by 2030 and 2 MTCO_{2e} or less per capita by 2050. CARB recommends that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the State’s sustainable development objectives and develop plans to achieve the local goals. The statewide per capita goals were developed by applying the percent reductions necessary to reach the 2030 and 2050 climate goals (i.e., 40 percent and 80 percent, respectively) to the State’s 1990 emissions limit established under AB 32. For CEQA projects, CARB states that lead agencies have discretion to develop evidenced-based numeric thresholds (mass emissions, per capita, or per service population)—consistent with the Scoping Plan and the state’s long-term GHG goals. To the degree a project relies on GHG mitigation measures, CARB recommends that lead agencies prioritize on-site design features that reduce emissions, especially from VMT, and direct investments in GHG reductions within the project’s region that contribute potential air quality, health, and economic co-benefits. Where further project design or regional investments are infeasible or not proven to be effective, CARB recommends mitigating potential GHG impacts through purchasing and retiring carbon credits.

The Scoping Plan scenario is set against what is called the business-as-usual (BAU) yardstick—that is, what would the GHG emissions look like if the State did nothing at all beyond the existing policies that are required and already in place to achieve the 2020 limit, as shown in Table 9. It includes the existing renewables requirements, advanced clean cars, the “10 percent” Low Carbon Fuel Standard (LCFS), and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years. Also shown in the table, the known commitments are expected to result in emissions that are 60 MMTCO_{2e} above the target in 2030. If the estimated GHG reductions from the known commitments are not realized due to delays in implementation or technology deployment, the post-2020 Cap-and-Trade Program would deliver the additional GHG reductions in the sectors it covers to ensure the 2030 target is achieved.

Table 9 2017 Climate Change Scoping Plan Emissions Reductions Gap

Modeling Scenario	2030 GHG Emissions MMTCO _{2e}
Reference Scenario (Business-as-Usual)	389
With Known Commitments	320
2030 GHG Target	260
Gap to 2030 Target	60

Source: CARB 2017c.

Table 10 provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

Table 10 2017 Climate Change Scoping Plan Emissions Change by Sector

Scoping Plan Sector	1990 MMTCO _{2e}	2030 Proposed Plan Ranges MMTCO _{2e}	% Change from 1990
Agricultural	26	24-25	-8% to -4%
Residential and Commercial	44	38-40	-14% to -9%
Electric Power	108	30-53	-72% to -51%
High GWP	3	8-11	267% to 367%
Industrial	98	83-90	-15% to -8%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-32% to -27%
Net Sink ¹	-7	TBD	TBD
Sub Total	431	294-339	-32% to -21%
Cap-and-Trade Program	NA	24-79	NA
Total	431	260	-40%

Source: CARB 2017c.

Notes: TCU = Transportation, Communications, and Utilities; TBD: To Be Determined.

¹ Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

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 incomplete combustion of fuels. SB 1383 requires the state board, no later than January 1, 2018, to approve and begin implementing that 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, as specified. The bill also establishes targets for reducing organic waste in landfill. On March 14, 2017, CARB adopted the “Final Proposed 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 2017b). In-use on-road rules are 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 2017b). Additionally, South Coast AQMD Rule 445 limits installation of new fireplaces in the SoCAB.

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 (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

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

2017 Update to the SB 375 Targets

CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology and recently released another update in February 2018. The updated targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update, while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks relative to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per capita GHG emission reductions from SB 375 than are currently in place, which for 2035, translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. As proposed, CARB staff's proposed targets would result in an additional reduction of over 8 MMTCO_{2e} in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018). CARB adopted the updated targets and methodology on March 22, 2018. All SCSs adopted after October 1, 2018 are subject to these new targets.

SCAG's Regional Transportation Plan / Sustainable Communities Strategy

SB 375 requires each MPO to prepare a sustainable communities strategy in its regional transportation plan. For the SCAG region, the 2016-2040 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016, and is an update to the 2012 RTP/SCS (SCAG 2016). SCAG released the draft 2020-2045 RTP/SCS (Connect SoCal) and adopted the plan for the limited purpose of transportation conformity on May 7, 2020 (SCAG 2020). In general, the SCS outlines a development pattern for the region that, when integrated with the transportation network and other transportation measures and policies, would

reduce vehicle miles traveled 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 horizon year 2045 (SCAG 2020). 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. Additionally, Connect SoCal also forecasts that implementation of the plan will reduce VMT per capita in year 2045 by 4.1 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.

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 was 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 year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal Laws*, above). 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 global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California’s Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer 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 carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires 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 would use market-based mechanisms to allow these providers to choose how they reduce emissions during the “fuel cycle” using the most economically feasible methods.

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

A major component of California’s Renewable Energy Program is the RPS 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 was signed in November 2008, which 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 in September 2015. SB 350 establishes tiered increases to the RPS of 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, which raises California's RPS requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a 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.

Executive Order B-55-18

Executive Order B-55-18, signed September 10, 2018, sets 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 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 not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO_{2e} from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

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 zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission 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 zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

Executive Order N-79-20

On September 23, 2020 Governor Newsom signed Executive Order N-79-20 which identifies a goal that 100 percent of in-state sales of new passenger cars and trucks will be zero-emission by 2035. Additionally, this Executive Order identified fleet goals for trucks of 100 percent of drayage trucks be zero emissions by 2035

and 100 percent of medium- and heavy-duty vehicles in the State be zero-emission by 2045, for all operations where feasible. Additionally, the Executive Order identifies a goal for the State to transition to 100 percent zero-emission off-road vehicles and equipment by 2035 where feasible.

California Building Code: Building 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 2019 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 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. The 2019 Building Energy Efficiency Standards, which were adopted on May 9, 2018, went into effect on January 1, 2020.

The 2019 standards move towards cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multi-family buildings of 3 stories and less. Four key areas the 2019 standards will focus on include 1) smart residential photovoltaic systems; 2) updated thermal envelope standards (preventing heat transfer from the interior to exterior and vice versa); 3) residential and nonresidential ventilation requirements; 4) and nonresidential lighting requirements (CEC 2018a). Under the 2019 standards, nonresidential buildings and multifamily residential buildings of four stories or more will be 30 percent more energy efficient compared to the 2016 standards while single-family homes will be 7 percent more energy efficient (CEC 2018b). When accounting for the electricity generated by the solar photovoltaic system, single-family homes would use 53 percent less energy compared to homes built to the 2016 standards (CEC 2018b).

California Building Code: 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.¹¹ The mandatory provisions of CALGreen became effective January 1, 2011. The CEC adopted the voluntary standards of the 2019 CALGreen on October 3, 2018. The 2019 CALGreen standards become effective January 1, 2020.

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.

¹¹ The green building standards became mandatory in the 2010 edition of the code.

Solid Waste Regulations

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 (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 the 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.

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.

Section 5.408 of the 2019 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.

In October of 2014, Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of 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 in with food waste.

Water Efficiency Regulations

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 requires 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.

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or 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.

Thresholds of Significance

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

1. The extent to which the project may increase (or reduce) GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project;
3. The extent to which the project complies with regulations or requirements adopted to implement an adopted statewide, regional, or local plan for the reduction or mitigation of GHG emissions.¹²

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, South Coast AQMD has convened a GHG CEQA Significance Threshold Working Group (Working Group). Based on the last Working Group meeting (Meeting No. 15) held in September 2010, South Coast AQMD is proposing to adopt 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. South Coast AQMD is proposing 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

¹² 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.

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 (e.g., program-level projects such as general plans) for the year 2020.¹³ 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.

For purposes of this analysis, because the proposed project has an anticipated opening year post-2020 (year 2021), the bright-line screening-level criterion of 3,000 MTCO_{2e}/yr is used as the significance threshold for this project. Therefore, if the project operation-phase emissions exceed the 3,000 MTCO_{2e}/yr threshold, GHG emissions would be considered potentially significant in the absence of mitigation measures.

¹³ 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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Emissions Worksheet

Regional Construction Emissions Worksheet:

Asphalt & Building Demolition

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Off-Road	2.23	22.17	14.08	0.03	1.07	1.00
	Total	2.23	22.17	14.08	0.03	1.07	1.00
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.10	0.00	0.02	0.01
	Worker	0.06	0.04	0.56	0.00	0.16	0.04
	Total	0.07	0.41	0.65	0.00	0.18	0.05
TOTAL		2.31	22.57	14.74	0.03	1.25	1.05
Onsite		2022 Winter					
	Off-Road	2.23	22.17	14.08	0.03	1.07	1.00
	Total	2.23	22.17	14.08	0.03	1.07	1.00
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.11	0.00	0.02	0.01
	Worker	0.07	0.04	0.51	0.00	0.16	0.04
	Total	0.08	0.41	0.62	0.00	0.18	0.05
TOTAL		2.31	22.58	14.70	0.03	1.25	1.05
Onsite		2022					
	Off-Road	2.23	22.17	14.08	0.03	1.07	1.00
	Total	2.23	22.17	14.08	0.03	1.07	1.00
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.11	0.00	0.02	0.01
	Worker	0.07	0.04	0.56	0.00	0.16	0.04
	Total	0.08	0.41	0.65	0.00	0.18	0.05
TOTAL		2.31	22.58	14.74	0.03	1.25	1.05

Building Demolition Debris Haul

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Fugitive Dust					0.60	0.09
	Off-Road	0.16	1.67	2.23	0.00	0.09	0.08
	Total	0.16	1.67	2.23	0.00	0.69	0.17
Offsite							
	Hauling	0.03	1.01	0.19	0.00	0.04	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	0.04	1.02	0.31	0.00	0.07	0.02
TOTAL		0.20	2.69	2.53	0.01	0.76	0.19
Onsite		2022 Winter					
	Fugitive Dust					0.60	0.09
	Off-Road	0.16	1.67	2.23	0.00	0.09	0.08
	Total	0.16	1.67	2.23	0.00	0.69	0.17
Offsite							
	Hauling	0.03	1.00	0.22	0.00	0.04	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Total	0.04	1.01	0.32	0.00	0.07	0.02
TOTAL		0.20	2.68	2.55	0.01	0.76	0.19
Onsite		2022					
	Fugitive Dust	0.00	0.00	0.00	0.00	0.60	0.09
	Off-Road	0.16	1.67	2.23	0.00	0.09	0.08
	Total	0.16	1.67	2.23	0.00	0.69	0.17
Offsite							
	Hauling	0.03	1.01	0.22	0.00	0.04	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	0.04	1.02	0.32	0.00	0.07	0.02
TOTAL		0.20	2.69	2.55	0.01	0.76	0.19

Asphalt Demolition Debris Onsite Reprocessing

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Off-Road	0.48	3.23	4.33	0.01	0.18	0.18
	Total	0.48	3.23	4.33	0.01	0.18	0.18
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	0.01	0.01	0.11	0.00	0.03	0.01
TOTAL		0.49	3.23	4.44	0.01	0.21	0.19
Onsite		2022 Winter					
	Off-Road	0.48	3.23	4.33	0.01	0.18	0.18
	Total	0.48	3.23	4.33	0.01	0.18	0.18
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Total	0.01	0.01	0.10	0.00	0.03	0.01
TOTAL		0.49	3.23	4.43	0.01	0.21	0.19
Onsite		2022					
	Off-Road	0.48	3.23	4.33	0.01	0.18	0.18
	Total	0.48	3.23	4.33	0.01	0.18	0.18
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	0.01	0.01	0.11	0.00	0.03	0.01
TOTAL		0.49	3.23	4.44	0.01	0.21	0.19

Rough Grading 2022

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Fugitive Dust					3.71	1.54
	Off-Road	3.62	38.84	29.04	0.06	1.63	1.50
	Total	3.62	38.84	29.04	0.06	5.34	3.04
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.10	0.00	0.02	0.01
	Worker	0.08	0.05	0.74	0.00	0.21	0.06
	Total	0.09	0.42	0.84	0.00	0.23	0.06
TOTAL		3.72	39.27	29.88	0.07	5.58	3.11
Onsite		2022 Winter					
	Fugitive Dust					3.71	1.54
	Off-Road	3.62	38.84	29.04	0.06	1.63	1.50
	Total	3.62	38.84	29.04	0.06	5.34	3.04
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.11	0.00	0.02	0.01
	Worker	0.09	0.06	0.68	0.00	0.21	0.06
	Total	0.10	0.43	0.78	0.00	0.23	0.06
TOTAL		3.73	39.27	29.83	0.07	5.58	3.11
Onsite		2022					
	Fugitive Dust	0.00	0.00	0.00	0.00	3.71	1.54
	Off-Road	3.62	38.84	29.04	0.06	1.63	1.50
	Total	3.62	38.84	29.04	0.06	5.34	3.04
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.11	0.00	0.02	0.01
	Worker	0.09	0.06	0.74	0.00	0.21	0.06
	Total	0.10	0.43	0.84	0.00	0.23	0.06
TOTAL		3.73	39.27	29.88	0.07	5.58	3.11

Rough Grading 2023							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Fugitive Dust					3.71	1.54
	Off-Road	3.32	34.52	28.05	0.06	1.42	1.31
	Total	3.32	34.52	28.05	0.06	5.13	2.85
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.28	0.09	0.00	0.02	0.01
	Worker	0.08	0.05	0.68	0.00	0.21	0.06
	Total	0.08	0.33	0.77	0.00	0.23	0.06
TOTAL		3.41	34.84	28.82	0.07	5.36	2.91
Onsite		2023 Winter					
	Fugitive Dust					3.71	1.54
	Off-Road	3.32	34.52	28.05	0.06	1.42	1.31
	Total	3.32	34.52	28.05	0.06	5.13	2.85
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.28	0.09	0.00	0.02	0.01
	Worker	0.08	0.05	0.62	0.00	0.21	0.06
	Total	0.09	0.33	0.72	0.00	0.23	0.06
TOTAL		3.42	34.85	28.77	0.07	5.36	2.91
Onsite		2023					
	Fugitive Dust	0.00	0.00	0.00	0.00	3.71	1.54
	Off-Road	3.32	34.52	28.05	0.06	1.42	1.31
	Total	3.32	34.52	28.05	0.06	5.13	2.85
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.28	0.09	0.00	0.02	0.01
	Worker	0.08	0.05	0.68	0.00	0.21	0.06
	Total	0.09	0.33	0.77	0.00	0.23	0.06
TOTAL		3.42	34.85	28.82	0.07	5.36	2.91
Rough Grading Soil Haul							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Fugitive Dust					0.02	0.00
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.02	0.00
Offsite							
	Hauling	0.13	5.95	1.31	0.02	0.25	0.07
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.13	5.95	1.31	0.02	0.25	0.07
TOTAL		0.13	5.95	1.31	0.02	0.28	0.08
Onsite		2023 Winter					
	Fugitive Dust					0.02	0.00
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.02	0.00
Offsite							
	Hauling	0.13	5.86	1.47	0.01	0.25	0.07
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.13	5.86	1.47	0.01	0.25	0.07
TOTAL		0.13	5.86	1.47	0.01	0.28	0.08
Onsite		2023					
	Fugitive Dust	0.00	0.00	0.00	0.00	0.02	0.00
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.02	0.00
Offsite							
	Hauling	0.13	5.95	1.47	0.02	0.25	0.07
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.13	5.95	1.47	0.02	0.25	0.07
TOTAL		0.13	5.95	1.47	0.02	0.28	0.08

Utilities Trenching							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	0.19	1.94	2.56	0.00	0.10	0.10
	Total	0.19	1.94	2.56	0.00	0.10	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.17	0.00	0.05	0.01
	Total	0.02	0.01	0.17	0.00	0.05	0.01
TOTAL		0.21	1.95	2.73	0.00	0.16	0.11
Onsite		2023 Winter					
	Off-Road	0.19	1.94	2.56	0.00	0.10	0.10
	Total	0.19	1.94	2.56	0.00	0.10	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.16	0.00	0.05	0.01
	Total	0.02	0.01	0.16	0.00	0.05	0.01
TOTAL		0.22	1.95	2.71	0.00	0.16	0.11
Onsite		2023					
	Off-Road	0.19	1.94	2.56	0.00	0.10	0.10
	Total	0.19	1.94	2.56	0.00	0.10	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.17	0.00	0.05	0.01
	Total	0.02	0.01	0.17	0.00	0.05	0.01
TOTAL		0.22	1.95	2.73	0.00	0.16	0.11
Paving 2023							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	0.67	6.71	9.14	0.01	0.34	0.32
	Paving	0.18				0.00	0.00
	Total	0.85	6.71	9.14	0.01	0.34	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.51	0.00	0.16	0.04
	Total	0.06	0.04	0.51	0.00	0.16	0.04
TOTAL		0.90	6.74	9.66	0.02	0.50	0.36
Onsite		2023 Winter					
	Off-Road	0.67	6.71	9.14	0.01	0.34	0.32
	Paving	0.18				0.00	0.00
	Total	0.85	6.71	9.14	0.01	0.34	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.47	0.00	0.16	0.04
	Total	0.06	0.04	0.47	0.00	0.16	0.04
TOTAL		0.91	6.75	9.61	0.02	0.50	0.36
Onsite		2023					
	Off-Road	0.67	6.71	9.14	0.01	0.34	0.32
	Paving	0.18	0.00	0.00	0.00	0.00	0.00
	Total	0.85	6.71	9.14	0.01	0.34	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.51	0.00	0.16	0.04
	Total	0.06	0.04	0.51	0.00	0.16	0.04
TOTAL		0.91	6.75	9.66	0.02	0.50	0.36

Building Construction 2023							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	0.78	7.32	9.86	0.02	0.38	0.36
	Total	0.78	7.32	9.86	0.02	0.38	0.36
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.54	0.48	0.01	0.13	0.04
	Worker	0.33	0.21	3.01	0.01	0.91	0.25
	Total	0.38	1.75	3.49	0.01	1.05	0.29
TOTAL		1.15	9.08	13.35	0.03	1.43	0.65
Onsite		2023 Winter					
	Off-Road	0.78	7.32	9.86	0.02	0.38	0.36
	Total	0.78	7.32	9.86	0.02	0.38	0.36
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.53	0.52	0.01	0.13	0.04
	Worker	0.37	0.23	2.74	0.01	0.91	0.25
	Total	0.42	1.77	3.26	0.01	1.05	0.29
TOTAL		1.20	9.09	13.13	0.03	1.43	0.65
Onsite		2023					
	Off-Road	0.78	7.32	9.86	0.02	0.38	0.36
	Total	0.78	7.32	9.86	0.02	0.38	0.36
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.54	0.52	0.01	0.13	0.04
	Worker	0.37	0.23	3.01	0.01	0.91	0.25
	Total	0.42	1.77	3.49	0.01	1.05	0.29
TOTAL		1.20	9.09	13.35	0.03	1.43	0.65

Building Construction 2024							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Off-Road	0.73	6.85	9.85	0.02	0.33	0.31
	Total	0.73	6.85	9.85	0.02	0.33	0.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.54	0.46	0.01	0.13	0.04
	Worker	0.31	0.19	2.81	0.01	0.91	0.25
	Total	0.36	1.73	3.27	0.01	1.05	0.29
TOTAL		1.08	8.57	13.12	0.03	1.38	0.60
Onsite		2024 Winter					
	Off-Road	0.73	6.85	9.85	0.02	0.33	0.31
	Total	0.73	6.85	9.85	0.02	0.33	0.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.53	0.50	0.01	0.13	0.04
	Worker	0.35	0.21	2.55	0.01	0.91	0.25
	Total	0.40	1.74	3.06	0.01	1.05	0.29
TOTAL		1.13	8.59	12.91	0.03	1.38	0.60
Onsite		2024					
	Off-Road	0.73	6.85	9.85	0.02	0.33	0.31
	Total	0.73	6.85	9.85	0.02	0.33	0.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.54	0.50	0.01	0.13	0.04
	Worker	0.35	0.21	2.81	0.01	0.91	0.25
	Total	0.40	1.74	3.27	0.01	1.05	0.29
TOTAL		1.13	8.59	13.12	0.03	1.38	0.60

Architectural Coating							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Archit. Coating	130.55				0.00	0.00
	Off-Road	0.36	2.44	3.62	0.01	0.12	0.12
	Total	130.92	2.44	3.62	0.01	0.12	0.12
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.57	0.00	0.19	0.05
	Total	0.06	0.04	0.57	0.00	0.19	0.05
TOTAL		130.98	2.48	4.19	0.01	0.31	0.17
Onsite		2024 Winter					
	Archit. Coating	130.55				0.00	0.00
	Off-Road	0.36	2.44	3.62	0.01	0.12	0.12
	Total	130.92	2.44	3.62	0.01	0.12	0.12
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.07	0.04	0.52	0.00	0.19	0.05
	Total	0.07	0.04	0.52	0.00	0.19	0.05
TOTAL		130.99	2.48	4.14	0.01	0.31	0.17
Onsite		2024					
	Archit. Coating	130.55	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.36	2.44	3.62	0.01	0.12	0.12
	Total	130.92	2.44	3.62	0.01	0.12	0.12
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.07	0.04	0.57	0.00	0.19	0.05
	Total	0.07	0.04	0.57	0.00	0.19	0.05
TOTAL		130.99	2.48	4.19	0.01	0.31	0.17
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Asphalt & Building Demolition		2	23	15	0	1	1
Asphalt & Building Demolition and Debris Haul		3	25	17	0	2	1
Rough Grading 2022		4	39	30	0	6	3
Rough Grading 2022 and Asphalt Demolition Debris Onsite Reprocessing		4	43	34	0	6	3
Rough Grading 2023		3	35	29	0	5	3
Rough Grading 2023 and Soil Haul		4	41	30	0	6	3
Utility Trenching		0	2	3	0	0	0
Asphalt Paving		1	7	10	0	0	0
Building Construction 2023		1	9	13	0	1	1
Building Construction 2024		1	9	13	0	1	1
Building Construction 2024 and Architectural Coating		132	11	17	0	2	1
MAX DAILY		132	43	34	0	6	3
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		Yes	No	No	No	No	No

Regional Construction Emissions (Mitigated) Worksheet:

Asphalt & Building Demolition

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Off-Road	2.23	22.17	14.08	0.03	1.07	1.00
	Total	2.23	22.17	14.08	0.03	1.07	1.00
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.10	0.00	0.02	0.01
	Worker	0.06	0.04	0.56	0.00	0.16	0.04
	Total	0.07	0.41	0.65	0.00	0.18	0.05
TOTAL		2.31	22.57	14.74	0.03	1.25	1.05
Onsite		2022 Winter					
	Off-Road	2.23	22.17	14.08	0.03	1.07	1.00
	Total	2.23	22.17	14.08	0.03	1.07	1.00
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.11	0.00	0.02	0.01
	Worker	0.07	0.04	0.51	0.00	0.16	0.04
	Total	0.08	0.41	0.62	0.00	0.18	0.05
TOTAL		2.31	22.58	14.70	0.03	1.25	1.05
Onsite		2022					
	Off-Road	2.23	22.17	14.08	0.03	1.07	1.00
	Total	2.23	22.17	14.08	0.03	1.07	1.00
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.11	0.00	0.02	0.01
	Worker	0.07	0.04	0.56	0.00	0.16	0.04
	Total	0.08	0.41	0.65	0.00	0.18	0.05
TOTAL		2.31	22.58	14.74	0.03	1.25	1.05

Building Demolition Debris Haul

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Fugitive Dust					0.60	0.09
	Off-Road	0.16	1.67	2.23	0.00	0.09	0.08
	Total	0.16	1.67	2.23	0.00	0.69	0.17
Offsite							
	Hauling	0.03	1.01	0.19	0.00	0.04	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	0.04	1.02	0.31	0.00	0.07	0.02
TOTAL		0.20	2.69	2.53	0.01	0.76	0.19
Onsite		2022 Winter					
	Fugitive Dust					0.60	0.09
	Off-Road	0.16	1.67	2.23	0.00	0.09	0.08
	Total	0.16	1.67	2.23	0.00	0.69	0.17
Offsite							
	Hauling	0.03	1.00	0.22	0.00	0.04	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Total	0.04	1.01	0.32	0.00	0.07	0.02
TOTAL		0.20	2.68	2.55	0.01	0.76	0.19
Onsite		2022					
	Fugitive Dust	0.00	0.00	0.00	0.00	0.60	0.09
	Off-Road	0.16	1.67	2.23	0.00	0.09	0.08
	Total	0.16	1.67	2.23	0.00	0.69	0.17
Offsite							
	Hauling	0.03	1.01	0.22	0.00	0.04	0.01
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	0.04	1.02	0.32	0.00	0.07	0.02
TOTAL		0.20	2.69	2.55	0.01	0.76	0.19

Asphalt Demolition Debris Onsite Reprocessing

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Off-Road	0.48	3.23	4.33	0.01	0.18	0.18
	Total	0.48	3.23	4.33	0.01	0.18	0.18
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	0.01	0.01	0.11	0.00	0.03	0.01
TOTAL		0.49	3.23	4.44	0.01	0.21	0.19
Onsite		2022 Winter					
	Off-Road	0.48	3.23	4.33	0.01	0.18	0.18
	Total	0.48	3.23	4.33	0.01	0.18	0.18
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.10	0.00	0.03	0.01
	Total	0.01	0.01	0.10	0.00	0.03	0.01
TOTAL		0.49	3.23	4.43	0.01	0.21	0.19
Onsite		2022					
	Off-Road	0.48	3.23	4.33	0.01	0.18	0.18
	Total	0.48	3.23	4.33	0.01	0.18	0.18
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.01	0.01	0.11	0.00	0.03	0.01
	Total	0.01	0.01	0.11	0.00	0.03	0.01
TOTAL		0.49	3.23	4.44	0.01	0.21	0.19

Rough Grading 2022

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2022 Summer					
	Fugitive Dust					3.71	1.54
	Off-Road	3.62	38.84	29.04	0.06	1.63	1.50
	Total	3.62	38.84	29.04	0.06	5.34	3.04
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.10	0.00	0.02	0.01
	Worker	0.08	0.05	0.74	0.00	0.21	0.06
	Total	0.09	0.42	0.84	0.00	0.23	0.06
TOTAL		3.72	39.27	29.88	0.07	5.58	3.11
Onsite		2022 Winter					
	Fugitive Dust					3.71	1.54
	Off-Road	3.62	38.84	29.04	0.06	1.63	1.50
	Total	3.62	38.84	29.04	0.06	5.34	3.04
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.11	0.00	0.02	0.01
	Worker	0.09	0.06	0.68	0.00	0.21	0.06
	Total	0.10	0.43	0.78	0.00	0.23	0.06
TOTAL		3.73	39.27	29.83	0.07	5.58	3.11
Onsite		2022					
	Fugitive Dust	0.00	0.00	0.00	0.00	3.71	1.54
	Off-Road	3.62	38.84	29.04	0.06	1.63	1.50
	Total	3.62	38.84	29.04	0.06	5.34	3.04
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.37	0.11	0.00	0.02	0.01
	Worker	0.09	0.06	0.74	0.00	0.21	0.06
	Total	0.10	0.43	0.84	0.00	0.23	0.06
TOTAL		3.73	39.27	29.88	0.07	5.58	3.11

Rough Grading 2023							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Fugitive Dust					3.71	1.54
	Off-Road	3.32	34.52	28.05	0.06	1.42	1.31
	Total	3.32	34.52	28.05	0.06	5.13	2.85
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.28	0.09	0.00	0.02	0.01
	Worker	0.08	0.05	0.68	0.00	0.21	0.06
	Total	0.08	0.33	0.77	0.00	0.23	0.06
TOTAL		3.41	34.84	28.82	0.07	5.36	2.91
Onsite		2023 Winter					
	Fugitive Dust					3.71	1.54
	Off-Road	3.32	34.52	28.05	0.06	1.42	1.31
	Total	3.32	34.52	28.05	0.06	5.13	2.85
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.28	0.09	0.00	0.02	0.01
	Worker	0.08	0.05	0.62	0.00	0.21	0.06
	Total	0.09	0.33	0.72	0.00	0.23	0.06
TOTAL		3.42	34.85	28.77	0.07	5.36	2.91
Onsite		2023					
	Fugitive Dust	0.00	0.00	0.00	0.00	3.71	1.54
	Off-Road	3.32	34.52	28.05	0.06	1.42	1.31
	Total	3.32	34.52	28.05	0.06	5.13	2.85
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.01	0.28	0.09	0.00	0.02	0.01
	Worker	0.08	0.05	0.68	0.00	0.21	0.06
	Total	0.09	0.33	0.77	0.00	0.23	0.06
TOTAL		3.42	34.85	28.82	0.07	5.36	2.91
Rough Grading Soil Haul							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Fugitive Dust					0.02	0.00
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.02	0.00
Offsite							
	Hauling	0.13	5.95	1.31	0.02	0.25	0.07
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.13	5.95	1.31	0.02	0.25	0.07
TOTAL		0.13	5.95	1.31	0.02	0.28	0.08
Onsite		2023 Winter					
	Fugitive Dust					0.02	0.00
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.02	0.00
Offsite							
	Hauling	0.13	5.86	1.47	0.01	0.25	0.07
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.13	5.86	1.47	0.01	0.25	0.07
TOTAL		0.13	5.86	1.47	0.01	0.28	0.08
Onsite		2023					
	Fugitive Dust	0.00	0.00	0.00	0.00	0.02	0.00
	Off-Road	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00	0.02	0.00
Offsite							
	Hauling	0.13	5.95	1.47	0.02	0.25	0.07
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.00	0.00	0.00	0.00	0.00	0.00
	Total	0.13	5.95	1.47	0.02	0.25	0.07
TOTAL		0.13	5.95	1.47	0.02	0.28	0.08

Utilities Trenching							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	0.19	1.94	2.56	0.00	0.10	0.10
	Total	0.19	1.94	2.56	0.00	0.10	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.17	0.00	0.05	0.01
	Total	0.02	0.01	0.17	0.00	0.05	0.01
TOTAL		0.21	1.95	2.73	0.00	0.16	0.11
Onsite		2023 Winter					
	Off-Road	0.19	1.94	2.56	0.00	0.10	0.10
	Total	0.19	1.94	2.56	0.00	0.10	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.16	0.00	0.05	0.01
	Total	0.02	0.01	0.16	0.00	0.05	0.01
TOTAL		0.22	1.95	2.71	0.00	0.16	0.11
Onsite		2023					
	Off-Road	0.19	1.94	2.56	0.00	0.10	0.10
	Total	0.19	1.94	2.56	0.00	0.10	0.10
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.02	0.01	0.17	0.00	0.05	0.01
	Total	0.02	0.01	0.17	0.00	0.05	0.01
TOTAL		0.22	1.95	2.73	0.00	0.16	0.11
Paving 2023							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	0.67	6.71	9.14	0.01	0.34	0.32
	Paving	0.18				0.00	0.00
	Total	0.85	6.71	9.14	0.01	0.34	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.51	0.00	0.16	0.04
	Total	0.06	0.04	0.51	0.00	0.16	0.04
TOTAL		0.90	6.74	9.66	0.02	0.50	0.36
Onsite		2023 Winter					
	Off-Road	0.67	6.71	9.14	0.01	0.34	0.32
	Paving	0.18				0.00	0.00
	Total	0.85	6.71	9.14	0.01	0.34	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.47	0.00	0.16	0.04
	Total	0.06	0.04	0.47	0.00	0.16	0.04
TOTAL		0.91	6.75	9.61	0.02	0.50	0.36
Onsite		2023					
	Off-Road	0.67	6.71	9.14	0.01	0.34	0.32
	Paving	0.18	0.00	0.00	0.00	0.00	0.00
	Total	0.85	6.71	9.14	0.01	0.34	0.32
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.51	0.00	0.16	0.04
	Total	0.06	0.04	0.51	0.00	0.16	0.04
TOTAL		0.91	6.75	9.66	0.02	0.50	0.36

Building Construction 2023							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2023 Summer					
	Off-Road	0.78	7.32	9.86	0.02	0.38	0.36
	Total	0.78	7.32	9.86	0.02	0.38	0.36
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.54	0.48	0.01	0.13	0.04
	Worker	0.33	0.21	3.01	0.01	0.91	0.25
	Total	0.38	1.75	3.49	0.01	1.05	0.29
TOTAL		1.15	9.08	13.35	0.03	1.43	0.65
Onsite		2023 Winter					
	Off-Road	0.78	7.32	9.86	0.02	0.38	0.36
	Total	0.78	7.32	9.86	0.02	0.38	0.36
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.53	0.52	0.01	0.13	0.04
	Worker	0.37	0.23	2.74	0.01	0.91	0.25
	Total	0.42	1.77	3.26	0.01	1.05	0.29
TOTAL		1.20	9.09	13.13	0.03	1.43	0.65
Onsite		2023					
	Off-Road	0.78	7.32	9.86	0.02	0.38	0.36
	Total	0.78	7.32	9.86	0.02	0.38	0.36
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.54	0.52	0.01	0.13	0.04
	Worker	0.37	0.23	3.01	0.01	0.91	0.25
	Total	0.42	1.77	3.49	0.01	1.05	0.29
TOTAL		1.20	9.09	13.35	0.03	1.43	0.65

Building Construction 2024							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Off-Road	0.73	6.85	9.85	0.02	0.33	0.31
	Total	0.73	6.85	9.85	0.02	0.33	0.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.54	0.46	0.01	0.13	0.04
	Worker	0.31	0.19	2.81	0.01	0.91	0.25
	Total	0.36	1.73	3.27	0.01	1.05	0.29
TOTAL		1.08	8.57	13.12	0.03	1.38	0.60
Onsite		2024 Winter					
	Off-Road	0.73	6.85	9.85	0.02	0.33	0.31
	Total	0.73	6.85	9.85	0.02	0.33	0.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.53	0.50	0.01	0.13	0.04
	Worker	0.35	0.21	2.55	0.01	0.91	0.25
	Total	0.40	1.74	3.06	0.01	1.05	0.29
TOTAL		1.13	8.59	12.91	0.03	1.38	0.60
Onsite		2024					
	Off-Road	0.73	6.85	9.85	0.02	0.33	0.31
	Total	0.73	6.85	9.85	0.02	0.33	0.31
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.05	1.54	0.50	0.01	0.13	0.04
	Worker	0.35	0.21	2.81	0.01	0.91	0.25
	Total	0.40	1.74	3.27	0.01	1.05	0.29
TOTAL		1.13	8.59	13.12	0.03	1.38	0.60

Architectural Coating							
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		2024 Summer					
	Archit. Coating	32.68				0.00	0.00
	Off-Road	0.36	2.44	3.62	0.01	0.12	0.12
	Total	33.04	2.44	3.62	0.01	0.12	0.12
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.06	0.04	0.57	0.00	0.19	0.05
	Total	0.06	0.04	0.57	0.00	0.19	0.05
TOTAL		33.11	2.48	4.19	0.01	0.31	0.17
Onsite		2024 Winter					
	Archit. Coating	32.68				0.00	0.00
	Off-Road	0.36	2.44	3.62	0.01	0.12	0.12
	Total	33.04	2.44	3.62	0.01	0.12	0.12
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.07	0.04	0.52	0.00	0.19	0.05
	Total	0.07	0.04	0.52	0.00	0.19	0.05
TOTAL		33.12	2.48	4.14	0.01	0.31	0.17
Onsite		2024					
	Archit. Coating	32.68	0.00	0.00	0.00	0.00	0.00
	Off-Road	0.36	2.44	3.62	0.01	0.12	0.12
	Total	33.04	2.44	3.62	0.01	0.12	0.12
Offsite							
	Hauling	0.00	0.00	0.00	0.00	0.00	0.00
	Vendor	0.00	0.00	0.00	0.00	0.00	0.00
	Worker	0.07	0.04	0.57	0.00	0.19	0.05
	Total	0.07	0.04	0.57	0.00	0.19	0.05
TOTAL		33.12	2.48	4.19	0.01	0.31	0.17
		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Asphalt & Building Demolition		2	23	15	0	1	1
Asphalt & Building Demolition and Debris Haul		3	25	17	0	2	1
Rough Grading 2022		4	39	30	0	6	3
Rough Grading 2022 and Asphalt Demolition Debris Onsite Reprocessing		4	43	34	0	6	3
Rough Grading 2023		3	35	29	0	5	3
Rough Grading 2023 and Soil Haul		4	41	30	0	6	3
Utility Trenching		0	2	3	0	0	0
Asphalt Paving		1	7	10	0	0	0
Building Construction 2023		1	9	13	0	1	1
Building Construction 2024		1	9	13	0	1	1
Building Construction 2024 and Architectural Coating		34	11	17	0	2	1
MAX DAILY		34	43	34	0	6	3
Regional Thresholds		75	100	550	150	150	55
Exceeds Thresholds?		No	No	No	No	No	No

Construction LST Worksheet:

Asphalt & Building Demolition

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Off-Road		22.17	14.08	1.07	1.00
	Total		22.17	14.08	1.07	1.00
TOTAL			22.17	14.08	1.07	1.00
Onsite		2022				
	Off-Road		22.17	14.08	1.07	1.00
	Total		22.17	14.08	1.07	1.00
TOTAL			22.17	14.08	1.07	1.00
Onsite		2022				
	Off-Road		22.17	14.08	1.07	1.00
	Total		22.17	14.08	1.07	1.00
TOTAL			22.17	14.08	1.07	1.00

Building Demolition Debris Haul

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Fugitive Dust				0.60	0.09
	Off-Road		1.67	2.23	0.09	0.08
	Total		1.67	2.23	0.69	0.17
TOTAL			1.67	2.23	0.69	0.17
Onsite		2022				
	Fugitive Dust				0.60	0.09
	Off-Road		1.67	2.23	0.09	0.08
	Total		1.67	2.23	0.69	0.17
TOTAL			1.67	2.23	0.69	0.17
Onsite		2022				
	Fugitive Dust		0.00	0.00	0.60	0.09
	Off-Road		1.67	2.23	0.09	0.08
	Total		1.67	2.23	0.69	0.17
TOTAL			1.67	2.23	0.69	0.17

Asphalt Demolition Debris Onsite Reprocessing

			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Off-Road		3.23	4.33	0.18	0.18
	Total		3.23	4.33	0.18	0.18
TOTAL			3.23	4.33	0.18	0.18
Onsite		2022				
	Off-Road		3.23	4.33	0.18	0.18
	Total		3.23	4.33	0.18	0.18
TOTAL			3.23	4.33	0.18	0.18
Onsite		2022				
	Off-Road		3.23	4.33	0.18	0.18
	Total		3.23	4.33	0.18	0.18
TOTAL			3.23	4.33	0.18	0.18

Rough Grading 2022						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2022				
	Fugitive Dust				3.71	1.54
	Off-Road		38.84	29.04	1.63	1.50
	Total		38.84	29.04	5.34	3.04
TOTAL			38.84	29.04	5.34	3.04
Onsite		2022				
	Fugitive Dust				3.71	1.54
	Off-Road		38.84	29.04	1.63	1.50
	Total		38.84	29.04	5.34	3.04
TOTAL			38.84	29.04	5.34	3.04
Onsite		2022				
	Fugitive Dust		0.00	0.00	3.71	1.54
	Off-Road		38.84	29.04	1.63	1.50
	Total		38.84	29.04	5.34	3.04
TOTAL			38.84	29.04	5.34	3.04

Rough Grading 2023						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2023				
	Fugitive Dust				3.71	1.54
	Off-Road		34.52	28.05	1.42	1.31
	Total		34.52	28.05	5.13	2.85
TOTAL			34.52	28.05	5.13	2.85
Onsite		2023				
	Fugitive Dust				3.71	1.54
	Off-Road		34.52	28.05	1.42	1.31
	Total		34.52	28.05	5.13	2.85
TOTAL			34.52	28.05	5.13	2.85
Onsite		2023				
	Fugitive Dust		0.00	0.00	3.71	1.54
	Off-Road		34.52	28.05	1.42	1.31
	Total		34.52	28.05	5.13	2.85
TOTAL			34.52	28.05	5.13	2.85

Rough Grading Soil Haul						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2023				
	Fugitive Dust				0.02	0.00
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.02	0.00
TOTAL			0.00	0.00	0.02	0.00
Onsite		2023				
	Fugitive Dust				0.02	0.00
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.02	0.00
TOTAL			0.00	0.00	0.02	0.00
Onsite		2023				
	Fugitive Dust		0.00	0.00	0.02	0.00
	Off-Road		0.00	0.00	0.00	0.00
	Total		0.00	0.00	0.02	0.00
TOTAL			0.00	0.00	0.02	0.00

Utilities Trenching						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2023				
	Off-Road		1.94	2.56	0.10	0.10
	Total		1.94	2.56	0.10	0.10
TOTAL			1.94	2.56	0.10	0.10
Onsite		2023				
	Off-Road		1.94	2.56	0.10	0.10
	Total		1.94	2.56	0.10	0.10
TOTAL			1.94	2.56	0.10	0.10
Onsite		2023				
	Off-Road		1.94	2.56	0.10	0.10
	Total		1.94	2.56	0.10	0.10
TOTAL			1.94	2.56	0.10	0.10
Paving 2023						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2023				
	Off-Road		6.71	9.14	0.34	0.32
	Paving				0.00	0.00
	Total		6.71	9.14	0.34	0.32
TOTAL			6.71	9.14	0.34	0.32
Onsite		2023				
	Off-Road		6.71	9.14	0.34	0.32
	Paving				0.00	0.00
	Total		6.71	9.14	0.34	0.32
TOTAL			6.71	9.14	0.34	0.32
Onsite		2023				
	Off-Road		6.71	9.14	0.34	0.32
	Paving		0.00	0.00	0.00	0.00
	Total		6.71	9.14	0.34	0.32
TOTAL			6.71	9.14	0.34	0.32
Building Construction 2023						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2023				
	Off-Road		7.32	9.86	0.38	0.36
	Total		7.32	9.86	0.38	0.36
TOTAL			7.32	9.86	0.38	0.36
Onsite		2023				
	Off-Road		7.32	9.86	0.38	0.36
	Total		7.32	9.86	0.38	0.36
TOTAL			7.32	9.86	0.38	0.36
Onsite		2023				
	Off-Road		7.32	9.86	0.38	0.36
	Total		7.32	9.86	0.38	0.36
TOTAL			7.32	9.86	0.38	0.36

Building Construction 2024						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024				
	Off-Road		6.85	9.85	0.33	0.31
	Total		6.85	9.85	0.33	0.31
TOTAL			6.85	9.85	0.33	0.31
Onsite		2024				
	Off-Road		6.85	9.85	0.33	0.31
	Total		6.85	9.85	0.33	0.31
TOTAL			6.85	9.85	0.33	0.31
Onsite		2024				
	Off-Road		6.85	9.85	0.33	0.31
	Total		6.85	9.85	0.33	0.31
TOTAL			6.85	9.85	0.33	0.31
Architectural Coating						
			NOx	CO	PM10 Total	PM2.5 Total
Onsite		2024				
	Archit. Coating				0.00	0.00
	Off-Road		2.44	3.62	0.12	0.12
	Total		2.44	3.62	0.12	0.12
TOTAL			2.44	3.62	0.12	0.12
Onsite		2024				
	Archit. Coating				0.00	0.00
	Off-Road		2.44	3.62	0.12	0.12
	Total		2.44	3.62	0.12	0.12
TOTAL			2.44	3.62	0.12	0.12
Onsite		2024				
	Archit. Coating		0.00	0.00	0.00	0.00
	Off-Road		2.44	3.62	0.12	0.12
	Total		2.44	3.62	0.12	0.12
TOTAL			2.44	3.62	0.12	0.12
			NOx	CO	PM10 Total	PM2.5 Total
Asphalt & Building Demolition			22	14	1.07	1.00
≤1.00 Acre LST			83	673	5.00	4.00
Exceeds LST?			no	no	no	no
Asphalt & Building Demolition and Debris Haul			24	16	1.76	1.17
1.50 Acre LST			102	852	6.00	4.50
Exceeds LST?			no	no	no	no
Rough Grading 2022			39	29	5.34	3.04
4.50 Acre LST			173	1,683	12.83	8.33
Exceeds LST?			no	no	no	no
Rough Grading 2022 and Asphalt Demolition Debris Onsite Reprocessing			42	33	5.52	3.22
4.50 Acre LST			173	1,683	12.83	8.33
Exceeds LST?			no	no	no	no
Rough Grading 2023			35	28	5.13	2.85
4.50 Acre LST			173	1,683	12.83	8.33
Exceeds LST?			no	no	no	no

Rough Grading 2023 and Soil Haul	35	28	5.16	2.85
4.50 Acre LST	173	1,683	12.83	8.33
Exceeds LST?	no	no	no	no
Utility Trenching	2	3	0.10	0.10
≤1.00 Acre LST	83	673	5.00	4.00
Exceeds LST?	no	no	no	no
Asphalt Paving	7	9	0.34	0.32
≤1.00 Acre LST	83	673	5.00	4.00
Exceeds LST?	no	no	no	no
Building Construction 2023	7	10	0.38	0.36
≤1.00 Acre LST	83	673	5.00	4.00
Exceeds LST?	no	no	no	no
Building Construction 2024	7	10	0.33	0.31
≤1.00 Acre LST	83	673	5.00	4.00
Exceeds LST?	no	no	no	no
Building Construction 2024 and Architectural Coating	9	13	0.45	0.43
≤1.00 Acre LST	83	673	5.00	4.00
Exceeds LST?	no	no	no	no

Regional Operation Emissions Worksheet: Buildout Year 2024¹

¹ CalEEMod, Version 2016.3.2.25

Project

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	9.59	0.20	17.10	0.00	0.09	0.09
Energy	0.15	1.25	0.53	0.01	0.10	0.10
Mobile	3.17	2.71	34.01	0.08	9.28	2.50
Total	12.91	4.15	51.64	0.09	9.48	2.70

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	9.59	0.20	17.10	0.00	0.09	0.09
Energy	0.15	1.25	0.53	0.01	0.10	0.10
Mobile	2.90	2.74	31.46	0.08	9.28	2.50
Total	12.63	4.18	49.09	0.09	9.48	2.69

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	10	0	17	0	0	0
Energy	0	1	1	0	0	0
Mobile	3	3	34	0	9	3
Total	13	4	52	0	9	3

Regional Thresholds (lb/day)

Exceeds Thresholds?	No	No	No	No	No	No
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GHG Emissions Inventory

Source: CalEEMod, Version 2016.3.2.25

MTCO₂e=metric tons of carbon dioxide equivalent.

Construction

	<u>MTCO₂e</u>
2022	153
2023	226
2024	118
Total Construction	497
30-Year Amortization¹	17

Operation

	<u>MTCO₂e</u>	<u>Percent of Emissions</u>
Area	4	0.2%
Energy	648	29%
Mobile	1,319	60%
Solid Waste	163	7%
Water	57	3%
30-Yr Amortized Construction Emissions ¹	17	1%
Total	2,207	100%
South Coast AQMD Working Group Threshold	3,000	
Exceed Threshold?	No	

Notes

¹ Total construction emissions are amortized over 30 years per South Coast AQMD Working Group 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).

Assumptions Worksheet

CalEEMod Inputs - Starlite Residential Development Project, Construction

Name: Starlite Residential Development Project
Project Number: KBH-02
Project Location: 2540 Rosemead Blvd in South El Monte
County/Air Basin: Los Angeles
Climate Zone: 9
Land Use Setting: Urban
Operational Year: 2023
Utility Company: Southern California Edison
Air Basin: South Coast Air Basin
Air District: SCAQMD
SRA: 11- South San Gabriel Valley

Project Site Acreage	13.45
Disturbed Site Acreage	12.40

Project Components	SQFT	Tons	Debris (Tons)	
Demolition				
Building Demolition	7,400	250	54	
Asphalt Demolition*		6,525	6,525	
New Construction				
	<i>Number of Units</i>	<i>SQFT</i>	<i>ACRES</i>	Number of Floors
Single Family Homes	169	346,004	5.28	3
Townhomes	38	62,100	0.48	3
Total Residential Area		408,104	5.75	
Pool		9,000	0.21	
Parking Lot		4,200	0.10	
Other Asphalt Surfaces		136,247	3.13	
Total Hardscape		55,340	1.27	
Total Landscaping:		84,740	1.95	

*remainder of land use acreage assigned to single family home acreage (2.63 acres).

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage*	Land Use Square Feet
Residential	Single Family Homes	169	DU	5.28	346,004
Residential	Condo/Townhomes	38	DU	0.48	62,100
Recreational	Pool	9,000	1000 sqft	0.21	9,000
Parking	Parking Lot	4,200	1000 sqft	0.10	4,200
Parking	Other Asphalt Surfaces	136,247	1000 sqft	3.13	136,247
Parking	Other Non-asphalt Surfaces	140,080	1000 sqft	3.22	140,080
				12.40	

assumes that building acreage is covered under non-asphalt surfaces.

Demolition

Component	Amount to be Demolished					
	(Tons)	Haul Truck Capacity (Tons) ¹	Haul Distance (miles)	Total Trip Ends	Duration (days)	Trip Ends/Day
Total Building Demo	196	18	6	22	3	7
Total	196			22		

¹ Demolition debris would be taken to the Puente Hills MRF (provided by the Applicant). Reduced truck haul capacity from CalEEMod default of 20 tons to 18 tons.

Soil Haul¹

Construction Activities	Volume (CY)	Haul Truck Capacity (cy)	Haul Distance (miles)	Total Trip Ends	Total Days	Trip Ends/Day
Rough Grading (Import)	4,852	16	5	607	10	61

¹ Soil haul would be taken to the Puente Hills MRF (provided by the Applicant).

Architectural Coating

Percentage of Proposed Buildings'

Interior Painted: 100%

Percentage of Proposed Buildings'

Exterior Painted: 100%

Rule 1113

Interior Paint VOC content: 50 grams per liter

Exterior Paint VOC content: 50 grams per liter

Residential Structures	Land Use Square Feet	CalEEMod Factor ²	Total Paintable Surface Area	Paintable Interior Area ¹	Paintable Exterior Area ¹
Single Family Homes	346,004	2.7	934,211	700,658	233,553
Townhomes	62,100	2.7	167,670	125,753	41,918
Pool	9,000	2.7	24,300	18,225	6,075
			1,126,181	844,636	281,545
Parking Lot	4,200	6%	252		252
			252		252

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

²The program assumes the total surface for painting equals 2.7 times the floor square footage for residential and 2 times that for nonresidential square footage defined by the user. Architectural coatings for the parking lot is based on CalEEMod methodology applied to a surface parking lot (i.e., striping), in which 6% of surface area is painted.

Construction Mitigation

SCAQMD Rule 403

Replace Ground Cover PM10: 5 % Reduction

Replace Ground Cover PM2.5: 5 % Reduction

Water Exposed Area Frequency: 2 per day

PM10: 55 % Reduction

PM2.5: 55 % Reduction

Unpaved Roads Vehicle Speed: 15 mph

SCAQMD Rule 1186 Clean Paved Road 9 % PM Reduction

Southern California Edison Carbon Intensity Factors

CO ₂ : ^{1,2}	531.44	pounds per megawatt hour
CH ₄ : ³	0.029	pound per megawatt hour
N ₂ O: ³	0.00617	pound per megawatt hour

¹ Based on CO₂e intensity factor of 534 pounds per megawatt hour; Southern California Edison. 2019, May. 2018 Sustainability Report.

<https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf>.

² Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH₄ and N₂O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

³ CalEEMod default values.

Global Warming Potentials (GWP)		
	AR4	AR5
CO ₂	1	1
CH ₄	25	28
N ₂ O	298	265

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH₄ and N₂O; Intergovernmental Panel on Climate Change (IPCC).

Construction Activities and Schedule Assumptions: Starlite Residential Development Project

based on durations provided by Applicant

Construction Schedule

Construction Activities	Phase Type	Start Date	End Date	CalEEMod Duration (Workday)
Asphalt & Building Demolition	Demolition	10/10/2022	11/1/2022	17
<i>Building Demolition Debris Haul</i>	<i>Demolition</i>	<i>10/28/2022</i>	<i>11/1/2022</i>	<i>3</i>
Asphalt Demolition Debris Onsite Reprocessing	Demolition	11/5/2022	11/25/2022	15
Rough Grading	Grading	11/2/2022	1/30/2023	64
<i>Rough Grading Soil Haul</i>	<i>Grading</i>	<i>1/9/2023</i>	<i>1/20/2023</i>	<i>10</i>
Utility Trenching	Trenching	2/1/2023	7/3/2023	109
Asphalt Paving	Paving	7/5/2023	9/8/2023	48
Building Construction	Building Construction	9/12/2023	4/26/2024	164
Architectural Coating	Architectural Coating	3/31/2024	4/26/2024	20

Overlapping Construction Schedule

Construction Activities	Start Date	End Date	CalEEMod Duration (Workday)
Asphalt & Building Demolition	10/10/2022	10/27/2022	14
<i>Asphalt & Building Demolition and Debris Haul</i>	<i>10/28/2022</i>	<i>11/1/2022</i>	<i>3</i>
Rough Grading 2022	11/2/2022	11/4/2022	3
Rough Grading 2022 and Asphalt Demolition Debris Onsite Reprocessing	11/5/2022	11/25/2022	15
Rough Grading 2022	11/26/2022	12/31/2022	25
Rough Grading 2023	1/1/2023	1/8/2023	
<i>Rough Grading 2023 and Soil Haul</i>	<i>1/9/2023</i>	<i>1/20/2023</i>	<i>10</i>
Rough Grading 2023	1/21/2023	1/30/2023	6
Utility Trenching	2/1/2023	7/3/2023	109
Asphalt Paving	7/5/2023	9/8/2023	48
Building Construction 2023	9/12/2023	12/31/2023	79
Building Construction 2024	1/1/2024	3/30/2024	65
Building Construction 2024 and Architectural Coating	3/31/2024	4/26/2024	20

CalEEMod Construction Off-Road Equipment Inputs

*Based on equipment mix provided by the Applicant.

General Construction Hours: btwn 7:00 AM to 4:00 PM (with 1 hr break), Mon-Fri

Construction Equipment Details					
Equipment	# of Equipment	hr/day	hp	load factor*	total trips/Day
Asphalt & Building Demolition					
Concrete/Industrial Saws	1	8	81	0.73	
Excavators	1	8	158	0.38	
Rubber Tired Dozers	2	8	247	0.4	
Worker Trips					15
Vendor Trips					0
Hauling Trips (TOTAL TRIPS)					22
Water Trucks					4
Building Demolition Debris Haul					
Tractors/Loaders/Backhoes	1	8	97	0.37	
Worker Trips					3
Hauling Trips					22
Asphalt Demolition Debris Onsite Reprocessing					
Crushing/Processing Equipment	1	8	85	0.78	
Worker Trips					3
Vendor Trips					0
Hauling Trips (TOTAL TRIPS)					0
Water Trucks					0
Rough Grading					
Excavators	2	8	158	0.38	
Graders	1	8	187	0.41	
Rubber Tired Dozers	2	8	247	0.4	
Scrapers	2	8	367	0.48	
Tractors/Loaders/Backhoes	2	8	97	0.37	
Worker Trips					20
Vendor Trips					0
Hauling Trips (TOTAL TRIPS)					0
Water Trucks					4
Rough Grading Soil Haul					
no additional equipment required for Grading Soil Haul					
Hauling Trips (TOTAL TRIPS)					607
Utility Trenching					
Trencher	1	1	78	0.5	
Tractor/Loader/Backhoe	1	8	97	0.37	
Worker Trips					5
Vendor Trips					0
Hauling Trips (TOTAL TRIPS)					0
Paving					
Pavers	1	8	130	0.42	
Paving Equipment	1	8	132	0.36	
Rollers	2	8	80	0.38	
Worker Trips					15
Vendor Trips					0
Hauling Trips (TOTAL TRIPS)					0
Building Construction					
Cranes	0	7	231	0.29	
Forklifts	2	8	89	0.2	
Generator Sets	1	8	84	0.74	
Tractors/Loaders/Backhoes	2	7	97	0.37	
Welders	0	8	46	0.45	
Worker Trips					88
Vendor Trips					22
Hauling Trips (TOTAL TRIPS)					0
Architectural Coating*					
Air Compressors	2	6	78	0.48	
Worker Trips					18
Vendor Trips					0
Hauling Trips (TOTAL TRIPS)					0

Construction Trips Worksheet

Phase Name	Worker Trip Ends	Vendor Trip Ends	Haul Truck Trip	Total Haul Truck	Start Date	End Date	Workdays
	Per Day	Per Day	Ends Per Day	Trip Ends			
Demolition	15	4	2	22	12/1/2021	12/27/2021	19
Demolition Debris Haul	3	0	2	22	12/1/2021	12/27/2021	19
Site Preparation	3	0	0	0	12/28/2021	1/10/2022	10
Grading	20	4	0	0	1/11/2022	2/6/2022	19
Grading Soil Haul	0	0	32	607	1/11/2022	2/6/2022	19
Athletic Fields Installation and Building Construction	88	22	0	0	2/7/2022	12/8/2022	219
Paving	15	0	0	0	12/9/2022	1/4/2023	19
Architectural Coating	18	0	0	0	1/5/2023	1/31/2023	19

Construction Activity (Overlapping)	Worker Trip Ends	Vendor Trip Ends	Haul Truck Trip	Total Trip Ends Per	Start Date	End Date	Workdays
	Per Day	Per Day	Ends Per Day	Day			
Demolition and Debris Haul	18	4	4	26	12/1/2021	12/27/2021	19
Site Preparation	3	0	0	3	12/28/2021	1/10/2022	10
Grading and Grading Soil Haul	20	4	32	56	1/11/2022	2/6/2022	19
Athletic Fields Installation and Building Construction	88	22	0	110	2/7/2022	12/8/2022	219
Paving	15	0	0	15	12/9/2022	1/4/2023	19
Architectural Coating	18	0	0	18	1/5/2023	1/31/2023	19
Maximum Daily Trips	88	22	32	110			

CalEEMod Inputs - Starlite Residential Development Project, Operations

Name: Starlite Residential Development Project
Project Number: KBH-02
Project Location: 2540 Rosemead Blvd in South El Monte
County/Air Basin: Los Angeles
Climate Zone: 9
Land Use Setting: Urban
Operational Year: 2023
Utility Company: Southern California Edison
Air Basin: South Coast Air Basin
Air District: SCAQMD
SRA: 11- South San Gabriel Valley

Project Site Acreage	13.45
Disturbed Site Acreage	12.40

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Land Use Square Feet
Residential	Single Family Homes	169.000	DU	5.28	346,004
Residential	Condo/Townhomes	38.000	DU	0.48	62,100
Recreational	Pool	9.000	1000 sqft	0.21	9,000
Parking	Parking Lot	4.200	1000 sqft	0.10	4,200
Parking	Other Asphalt Surfaces	136.247	1000 sqft	3.13	136,247
Parking	Other Non-asphalt Surfaces	140.080	1000 sqft	3.22	140,080
				12.40	

Trips

Land Use Type	Average Daily Trips	CalEEMod Trip Rate	Saturday Trips	CalEEMod Trip Rate	Sunday Trips	CalEEMod Trip
Single Family Homes	1,595	9.44	1,612	9.54	1,445	8.55
Condo/Townhomes	278	7.32	309	8.13	239	6.29
Total	1,873		1,921		1,684	

Daily Weekday VMT 11,823

Trips	Average Trip Rate (mi/trip)	Annual Vehicle Miles Traveled***
Total Trips	6.31	4,303,572

Source: Iteris. 2021, March.

*** Annual VMT is calculated based on weekday VMT x 364 days per year.

Trip Type Percentages			
	Primary	Diverted	Passby
Single Family Homes	86%	11%	3%
Condo/Townhomes	86%	11%	3%
Adjusted Trip Type Percentages	100%	0%	0%

Water Use (CalEEMod Defaults)

Land Use	Indoor	Outdoor	Total
Total Water Use (gal/day)	36,498	6,466	42,964
Total Water Use (gal/year)	13,321,770	2,360,090	15,681,860

*Assumes 100% aerobic treatment.

Solid Waste (CalEEMod Defaults)

Land Use	(lb/day)	(tons/day)	(tons/year)
Total Solid Waste	1,780	0.89	324.85

Architectural Coating

* See Architectural Coating for Construction Model

Electricity (Buildings)

Multifamily Residential Additional Electricity Reductions ²	2.0%	more efficient than 2016 Title 24 electricity rates
Multifamily Residential Additional Natural Gas Reductions ²	5%	more efficient than 2016 Title 24 natural gas rates
Single family Residential Additional Electricity Reductions ²	4%	more efficient than 2016 Title 24 electricity rates
Single family Residential Additional Natural Gas Reductions ²	9%	more efficient than 2016 Title 24 natural gas rates

Sources:

1

California Energy Commission (CEC). 2018. 2019 Building Energy and Efficiency Standards Frequently Asked Questions. Accessed on April 3, 2019. http://www.energy.ca.gov/title24/2019standards/documents/2018_Title_24_2019_Building_Standards_FAQ.pdf

² NORESO. 2018. 2019 Update to the California Energy Efficiency Standards for Residential and Non-Residential Buildings

Default CalEEMod Energy Use

Land Use Subtype	Title-24 Electricity Energy Intensity (kWhr/size/year)*	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Lighting Energy Intensity (KWhr/size/year)	Title-24 Natural Gas Energy Intensity (KBTU/size/year)*	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
Condo/Townhouse	243.83	3,795.01	1,001.10	10,792.56	6,384.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.35	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00
Single Family Housing	443.48	6,155.97	1,608.84	21,090.59	6,384.00

Adjusted CalEEMod Energy Use

ONLY NORESO

Land Use Subtype	Title-24 Electricity Energy Intensity (kWhr/size/year)*	Nontitle-24 Electricity Energy Intensity (kWhr/size/year)	Lighting Energy Intensity (KWhr/size/year)	Title-24 Natural Gas Energy Intensity (KBTU/size/year)*	Nontitle-24 Natural Gas Energy Intensity (KBTU/size/year)
Condo/Townhouse	238.95	3,795.01	1,001.10	10,252.93	6,384.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.35	0.00	0.00
Recreational Swimming Pool	0.00	0.00	0.00	0.00	0.00
Single Family Housing	425.74	6,155.97	1,608.84	19,192.44	6,384.00

Southern California Edison Carbon Intensity Factors

CO ₂ : ^{1,2}	531.44	pounds per megawatt hour
CH ₄ : ³	0.029	pound per megawatt hour
N ₂ O: ³	0.00617	pound per megawatt hour

¹ Based on CO₂e intensity factor of 534 pounds per megawatt hour; Southern California Edison. 2019, May. 2018 Sustainability Report.

<https://www.edison.com/content/dam/eix/documents/sustainability/eix-2019-sustainability-report.pdf>.

² Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH₄ and N₂O; Intergovernmental Panel on Climate Change (IPCC). 2007. Fourth Assessment Report: Climate Change 2007.

³ CalEEMod default values.

Global Warming Potentials (GWP)		
	AR4	AR5
CO ₂	1	1
CH ₄	25	28
N ₂ O	298	265

Based on Intergovernmental Panel on Climate Change Fourth Assessment Report global warming potentials for CH₄ and N₂O; Intergovernmental Panel on Climate Change (IPCC).

Changes to the CalEEMod Defaults - Fleet Mix 2024

	Weekday Trips													1,873
Default	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix (Model Default)	0.545348	0.04462	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.00256	0.002071	0.005217	0.000696	0.00085	100%
Trips	1,021	84	387	222	28	12	39	59	5	4	10	1	2	1,873
Percent	80%			12%	8%									100%
without buses/MH	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0	0	0.005217	0.000696	0.000850	100%
Percent	80%			12%	8%									100%
Adjusted without buses/MH	0.545348	0.044620	0.206559	0.118451	0.015926	0.006638	0.021887	0.033712	0.000000	0.000000	0.005538	0.000739	0.000902	
Percent adjusted	80%			12%	8%									100%
Assumed Mix	97.0%			2.00%	1.00%									100%
adjusted with Assumed	0.659532	0.053962	0.249808	0.020000	0.001996	0.000832	0.002743	0.004224	0.000000	0.000000	0.006698	0.000093	0.000113	100%
Percent Check:	97%			2%	1%									
Trips	1,235	101	468	37	4	2	5	8	0	0	13	0	0	1,873
	1,817			37	18									

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.

These numbers are for the ISS-000001, ISS-000002, ISS-000003, ISS-000004, ISS-000005, and ISS-000006 only. All other numbers are for ISS-000007 and ISS-000008 only.

The ISS-000001, ISS-000002, ISS-000003, ISS-000004, ISS-000005, and ISS-000006 are for the ISS-000001, ISS-000002, ISS-000003, ISS-000004, ISS-000005, and ISS-000006 only. All other numbers are for ISS-000007 and ISS-000008 only.

ISS-000001	ISS-000002	ISS-000003	ISS-000004	ISS-000005	ISS-000006	ISS-000007	ISS-000008	ISS-000009	ISS-000010	ISS-000011	ISS-000012	ISS-000013	ISS-000014	ISS-000015	ISS-000016	ISS-000017	ISS-000018	ISS-000019	ISS-000020	ISS-000021	ISS-000022	ISS-000023	ISS-000024	ISS-000025	ISS-000026	ISS-000027	ISS-000028	ISS-000029	ISS-000030	ISS-000031	ISS-000032	ISS-000033	ISS-000034	ISS-000035	ISS-000036	ISS-000037	ISS-000038	ISS-000039	ISS-000040	ISS-000041	ISS-000042	ISS-000043	ISS-000044	ISS-000045	ISS-000046	ISS-000047	ISS-000048	ISS-000049	ISS-000050	ISS-000051	ISS-000052	ISS-000053	ISS-000054	ISS-000055	ISS-000056	ISS-000057	ISS-000058	ISS-000059	ISS-000060	ISS-000061	ISS-000062	ISS-000063	ISS-000064	ISS-000065	ISS-000066	ISS-000067	ISS-000068	ISS-000069	ISS-000070	ISS-000071	ISS-000072	ISS-000073	ISS-000074	ISS-000075	ISS-000076	ISS-000077	ISS-000078	ISS-000079	ISS-000080	ISS-000081	ISS-000082	ISS-000083	ISS-000084	ISS-000085	ISS-000086	ISS-000087	ISS-000088	ISS-000089	ISS-000090	ISS-000091	ISS-000092	ISS-000093	ISS-000094	ISS-000095	ISS-000096	ISS-000097	ISS-000098	ISS-000099	ISS-000100
ISS-000001	ISS-000002	ISS-000003	ISS-000004	ISS-000005	ISS-000006	ISS-000007	ISS-000008	ISS-000009	ISS-000010	ISS-000011	ISS-000012	ISS-000013	ISS-000014	ISS-000015	ISS-000016	ISS-000017	ISS-000018	ISS-000019	ISS-000020	ISS-000021	ISS-000022	ISS-000023	ISS-000024	ISS-000025	ISS-000026	ISS-000027	ISS-000028	ISS-000029	ISS-000030	ISS-000031	ISS-000032	ISS-000033	ISS-000034	ISS-000035	ISS-000036	ISS-000037	ISS-000038	ISS-000039	ISS-000040	ISS-000041	ISS-000042	ISS-000043	ISS-000044	ISS-000045	ISS-000046	ISS-000047	ISS-000048	ISS-000049	ISS-000050	ISS-000051	ISS-000052	ISS-000053	ISS-000054	ISS-000055	ISS-000056	ISS-000057	ISS-000058	ISS-000059	ISS-000060	ISS-000061	ISS-000062	ISS-000063	ISS-000064	ISS-000065	ISS-000066	ISS-000067	ISS-000068	ISS-000069	ISS-000070	ISS-000071	ISS-000072	ISS-000073	ISS-000074	ISS-000075	ISS-000076	ISS-000077	ISS-000078	ISS-000079	ISS-000080	ISS-000081	ISS-000082	ISS-000083	ISS-000084	ISS-000085	ISS-000086	ISS-000087	ISS-000088	ISS-000089	ISS-000090	ISS-000091	ISS-000092	ISS-000093	ISS-000094	ISS-000095	ISS-000096	ISS-000097	ISS-000098	ISS-000099	ISS-000100

Report: XREF-2023-01-01
 Report Type: XREF-2023-01-01
 Report Date: 2023-01-01
 Report Version: 1.0
 Report Author: XREF-2023-01-01

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Case No.	Case Name	Case Type	Case Status	Case Date	Case Location	Case Agent	Case Officer	Case Supervisor	Case Manager	Case Coordinator	Case Analyst	Case Reviewer	Case Approver	Case Sign-off	Case Remarks
101-10001	John Doe	Murder	Open	2023-01-01	New York	John Doe	Jane Doe	John Doe	Jane Doe	John Doe	Jane Doe	John Doe	Jane Doe	John Doe	John Doe

CalEEMod Construction Model

Starlite Residential Development Project Construction - Los Angeles-South Coast County, Summer

**Starlite Residential Development Project Construction
Los Angeles-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	531.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info from applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres)

Construction Phase - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment -

Off-road Equipment - no additional equipment required for soil haul

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Grading -

Demolition -

Trips and VMT - based on info from applicant

Architectural Coating - assumes pool and associated structures would be treated as residential. Assumes only parking area would be coated.

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 and Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	13,500.00	0.00
tblArchitecturalCoating	ConstArea_Parking	16,832.00	252.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	275,470.00	281,545.00
tblArchitecturalCoating	ConstArea_Residential_Interior	826,411.00	844,636.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	3.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	30.00	64.00
tblConstructionPhase	NumDays	30.00	10.00
tblConstructionPhase	NumDays	20.00	48.00
tblConstructionPhase	NumDays	300.00	164.00

tblConstructionPhase	PhaseEndDate	11/4/2022	11/1/2022
tblGrading	MaterialImported	0.00	4,852.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LotAcreage	54.87	5.28
tblLandUse	LotAcreage	2.38	0.48
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	19.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	70.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	210.00	88.00
tblTripsAndVMT	WorkerTripNumber	42.00	18.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.2080	42.4990	34.3235	0.0727	8.9560	1.8177	10.7737	3.6721	1.6867	5.3588	0.0000	7,037.6388	7,037.6388	2.0007	0.0000	7,087.6565
2023	3.5324	40.7958	30.1319	0.0809	9.2437	1.4320	10.6757	3.7446	1.3176	5.0622	0.0000	8,036.8163	8,036.8163	2.0883	0.0000	8,089.0234
2024	132.0650	11.0518	17.3193	0.0373	1.3257	0.4616	1.7873	0.3548	0.4433	0.7981	0.0000	3,675.5432	3,675.5432	0.3801	0.0000	3,685.0457
Maximum	132.0650	42.4990	34.3235	0.0809	9.2437	1.8177	10.7737	3.7446	1.6867	5.3588	0.0000	8,036.8163	8,036.8163	2.0883	0.0000	8,089.0234

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.2080	42.4990	34.3235	0.0727	3.9688	1.8177	5.7865	1.6077	1.6867	3.2944	0.0000	7,037.6388	7,037.6388	2.0007	0.0000	7,087.6565
2023	3.5324	40.7958	30.1319	0.0809	4.2096	1.4320	5.6416	1.6717	1.3176	2.9893	0.0000	8,036.8163	8,036.8163	2.0883	0.0000	8,089.0234
2024	132.0650	11.0518	17.3193	0.0373	1.2240	0.4616	1.6855	0.3298	0.4433	0.7731	0.0000	3,675.5432	3,675.5432	0.3801	0.0000	3,685.0457
Maximum	132.0650	42.4990	34.3235	0.0809	4.2096	1.8177	5.7865	1.6717	1.6867	3.2944	0.0000	8,036.8163	8,036.8163	2.0883	0.0000	8,089.0234

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.85	0.00	43.57	53.56	0.00	37.10	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Asphalt & Building Demolition	Demolition	10/10/2022	11/1/2022	5	17	a
2	Building Demolition Debris Haul	Demolition	10/28/2022	11/1/2022	5	3	b
3	Asphalt Demolition Debris Onsite Reprocessing	Demolition	11/5/2022	11/25/2022	5	15	c
4	Rough Grading	Grading	11/2/2022	1/30/2023	5	64	d
5	Rough Grading Soil Haul	Grading	1/9/2023	1/20/2023	5	10	e
6	Utility Trenching	Trenching	2/1/2023	7/3/2023	5	109	f
7	Asphalt Paving	Paving	7/5/2023	9/8/2023	5	48	g
8	Building Construction	Building Construction	9/12/2023	4/26/2024	5	164	h
9	Architectural Coating	Architectural Coating	3/31/2024	4/26/2024	5	20	i

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.45

Residential Indoor: 844,636; Residential Outdoor: 281,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	2	6.00	78	0.48
Asphalt & Building Demolition	Excavators	1	8.00	158	0.38
Asphalt & Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Demolition Debris Haul	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Asphalt Demolition Debris Onsite Reprocessing	Concrete/Industrial Saws	0	8.00	81	0.73
Building Demolition Debris Haul	Excavators	0	8.00	158	0.38
Asphalt & Building Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Asphalt Demolition Debris Onsite Reprocessing	Excavators	0	8.00	158	0.38
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Rough Grading	Excavators	2	8.00	158	0.38
Rough Grading Soil Haul	Excavators	0	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading Soil Haul	Graders	0	8.00	187	0.41
Asphalt Paving	Pavers	1	8.00	130	0.42
Asphalt Paving	Paving Equipment	1	8.00	132	0.36
Building Construction	Welders	0	8.00	46	0.45
Asphalt Paving	Rollers	2	8.00	80	0.38
Building Demolition Debris Haul	Rubber Tired Dozers	0	8.00	247	0.40
Asphalt Demolition Debris Onsite Reprocessing	Rubber Tired Dozers	0	8.00	247	0.40

Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading Soil Haul	Rubber Tired Dozers	0	8.00	247	0.40
Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading Soil Haul	Scrapers	0	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Rough Grading Soil Haul	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Demolition Debris Haul	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Asphalt Demolition Debris Onsite Reprocessing	Crushing/Proc. Equipment	1	8.00	85	0.78
Utility Trenching	Trenchers	1	1.00	78	0.50
Utility Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Asphalt & Building Demolition	4	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Demolition Debris Haul	1	3.00	0.00	22.00	14.70	6.90	6.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition Debris Onsite	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	88.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading Soil Haul	0	0.00	0.00	607.00	14.70	6.90	5.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving	4	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utility Trenching	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Asphalt & Building Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2343	22.1655	14.0838	0.0285		1.0708	1.0708		0.9972	0.9972		2,746.7506	2,746.7506	0.7290		2,764.9757
Total	2.2343	22.1655	14.0838	0.0285		1.0708	1.0708		0.9972	0.9972		2,746.7506	2,746.7506	0.7290		2,764.9757

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0114	0.3693	0.0961	1.0200e-003	0.0256	6.9000e-004	0.0263	7.3700e-003	6.6000e-004	8.0400e-003		108.9944	108.9944	6.2500e-003		109.1507
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		164.8069	164.8069	4.5500e-003		164.9206
Total	0.0716	0.4092	0.6535	2.6700e-003	0.1933	2.0000e-003	0.1953	0.0518	1.8700e-003	0.0537		273.8012	273.8012	0.0108		274.0713

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2343	22.1655	14.0838	0.0285		1.0708	1.0708		0.9972	0.9972	0.0000	2,746.7506	2,746.7506	0.7290		2,764.9757
Total	2.2343	22.1655	14.0838	0.0285		1.0708	1.0708		0.9972	0.9972	0.0000	2,746.7506	2,746.7506	0.7290		2,764.9757

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0114	0.3693	0.0961	1.0200e-003	0.0240	6.9000e-004	0.0247	6.9700e-003	6.6000e-004	7.6300e-003		108.9944	108.9944	6.2500e-003		109.1507
Worker	0.0602	0.0399	0.5574	1.6500e-003	0.1546	1.3100e-003	0.1559	0.0413	1.2100e-003	0.0425		164.8069	164.8069	4.5500e-003		164.9206
Total	0.0716	0.4092	0.6535	2.6700e-003	0.1785	2.0000e-003	0.1805	0.0482	1.8700e-003	0.0501		273.8012	273.8012	0.0108		274.0713

3.3 Building Demolition Debris Haul - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day				
Fugitive Dust					1.3981	0.0000	1.3981	0.2117	0.0000	0.2117			0.0000		0.0000
Off-Road	0.1640	1.6689	2.2289	3.1000e-003		0.0898	0.0898		0.0826	0.0826		300.0177	300.0177	0.0970	302.4435
Total	0.1640	1.6689	2.2289	3.1000e-003	1.3981	0.0898	1.4878	0.2117	0.0826	0.2943		300.0177	300.0177	0.0970	302.4435

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0251	1.0115	0.1941	2.2300e-003	0.0386	1.7200e-003	0.0403	0.0106	1.6500e-003	0.0122		242.2246	242.2246	0.0200		242.7243
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		32.9614	32.9614	9.1000e-004		32.9841
Total	0.0372	1.0195	0.3055	2.5600e-003	0.0721	1.9800e-003	0.0741	0.0195	1.8900e-003	0.0214		275.1860	275.1860	0.0209		275.7084

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5977	0.0000	0.5977	0.0905	0.0000	0.0905			0.0000			0.0000
Off-Road	0.1640	1.6689	2.2289	3.1000e-003		0.0898	0.0898		0.0826	0.0826	0.0000	300.0177	300.0177	0.0970		302.4435

Total	0.1640	1.6689	2.2289	3.1000e-003	0.5977	0.0898	0.6874	0.0905	0.0826	0.1731	0.0000	300.0177	300.0177	0.0970		302.4435
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0251	1.0115	0.1941	2.2300e-003	0.0360	1.7200e-003	0.0377	9.9400e-003	1.6500e-003	0.0116			242.2246	242.2246	0.0200		242.7243
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000		0.0000
Worker	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003			32.9614	32.9614	9.1000e-004		32.9841
Total	0.0372	1.0195	0.3055	2.5600e-003	0.0669	1.9800e-003	0.0689	0.0182	1.8900e-003	0.0201			275.1860	275.1860	0.0209		275.7084

3.4 Asphalt Demolition Debris Onsite Reprocessing - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.4794	3.2250	4.3312	7.0200e-003		0.1801	0.1801		0.1801	0.1801			664.5301	664.5301	0.0433		665.6118
Total	0.4794	3.2250	4.3312	7.0200e-003		0.1801	0.1801		0.1801	0.1801			664.5301	664.5301	0.0433		665.6118

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		32.9614	32.9614	9.1000e-004		32.9841
Total	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		32.9614	32.9614	9.1000e-004		32.9841

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4794	3.2250	4.3312	7.0200e-003		0.1801	0.1801		0.1801	0.1801	0.0000	664.5301	664.5301	0.0433		665.6118
Total	0.4794	3.2250	4.3312	7.0200e-003		0.1801	0.1801		0.1801	0.1801	0.0000	664.5301	664.5301	0.0433		665.6118

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003	32.9614	32.9614	9.1000e-004	32.9841		
Total	0.0121	7.9800e-003	0.1115	3.3000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003	32.9614	32.9614	9.1000e-004	32.9841		

3.5 Rough Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0114	0.3693	0.0961	1.0200e-003	0.0256	6.9000e-004	0.0263	7.3700e-003	6.6000e-004	8.0400e-003		108.9944	108.9944	6.2500e-003		109.1507

Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0917	0.4226	0.8393	3.2300e-003	0.2492	2.4400e-003	0.2516	0.0667	2.2700e-003	0.0689		328.7368	328.7368	0.0123		329.0448

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					3.7079	0.0000	3.7079	1.5375	0.0000	1.5375			0.0000				0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442			6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	3.7079	1.6349	5.3427	1.5375	1.5041	3.0416	0.0000	6,011.4105	6,011.4105	1.9442			6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0114	0.3693	0.0961	1.0200e-003	0.0240	6.9000e-004	0.0247	6.9700e-003	6.6000e-004	7.6300e-003		108.9944	108.9944	6.2500e-003			109.1507
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2061	1.7500e-003	0.2078	0.0550	1.6100e-003	0.0566		219.7425	219.7425	6.0600e-003			219.8941
Total	0.0917	0.4226	0.8393	3.2300e-003	0.2300	2.4400e-003	0.2325	0.0620	2.2700e-003	0.0642		328.7368	328.7368	0.0123			329.0448

3.5 Rough Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000				0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442			6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	8.6733	1.4245	10.0978	3.5965	1.3105	4.9070		6,011.4777	6,011.4777	1.9442			6,060.0836

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.4700e-003	0.2802	0.0868	9.9000e-004	0.0256	3.2000e-004	0.0259	7.3700e-003	3.1000e-004	7.6800e-003		105.5630	105.5630	5.5400e-003			105.7015
Worker	0.0754	0.0482	0.6844	2.1200e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5700e-003	0.0609		211.6964	211.6964	5.4700e-003			211.8331
Total	0.0839	0.3284	0.7712	3.1100e-003	0.2492	2.0200e-003	0.2512	0.0667	1.8800e-003	0.0685		317.2594	317.2594	0.0110			317.5347

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					3.7079	0.0000	3.7079	1.5375	0.0000	1.5375			0.0000				0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442			6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.7079	1.4245	5.1323	1.5375	1.3105	2.8480	0.0000	6,011.4777	6,011.4777	1.9442			6,060.0836

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.4700e-003	0.2802	0.0868	9.9000e-004	0.0240	3.2000e-004	0.0243	6.9700e-003	3.1000e-004	7.2800e-003		105.5630	105.5630	5.5400e-003			105.7015
Worker	0.0754	0.0482	0.6844	2.1200e-003	0.2061	1.7000e-003	0.2078	0.0550	1.5700e-003	0.0566		211.6964	211.6964	5.4700e-003			211.8331
Total	0.0839	0.3284	0.7712	3.1100e-003	0.2300	2.0200e-003	0.2321	0.0620	1.8800e-003	0.0638		317.2594	317.2594	0.0110			317.5347

3.6 Rough Grading Soil Haul - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0549	0.0000	0.0549	8.3100e-003	0.0000	8.3100e-003			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0549	0.0000	0.0549	8.3100e-003	0.0000	8.3100e-003			0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1267	5.9518	1.3095	0.0157	0.2663	5.4400e-003	0.2718	0.0731	5.2100e-003	0.0783		1,708.0792	1,708.0792	0.1330		1,711.4052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1267	5.9518	1.3095	0.0157	0.2663	5.4400e-003	0.2718	0.0731	5.2100e-003	0.0783		1,708.0792	1,708.0792	0.1330		1,711.4052

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0235	0.0000	0.0235	3.5500e-003	0.0000	3.5500e-003			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0235	0.0000	0.0235	3.5500e-003	0.0000	3.5500e-003	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1267	5.9518	1.3095	0.0157	0.2483	5.4400e-003	0.2537	0.0687	5.2100e-003	0.0739		1,708.0792	1,708.0792	0.1330		1,711.4052
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1267	5.9518	1.3095	0.0157	0.2483	5.4400e-003	0.2537	0.0687	5.2100e-003	0.0739		1,708.0792	1,708.0792	0.1330		1,711.4052

3.7 Utility Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1947	1.9398	2.5553	3.5400e-003		0.1039	0.1039		0.0955	0.0955		342.4765	342.4765	0.1108		345.2456
Total	0.1947	1.9398	2.5553	3.5400e-003		0.1039	0.1039		0.0955	0.0955		342.4765	342.4765	0.1108		345.2456

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0189	0.0120	0.1711	5.3000e-004	0.0559	4.3000e-004	0.0563	0.0148	3.9000e-004	0.0152		52.9241	52.9241	1.3700e-003			52.9583
Total	0.0189	0.0120	0.1711	5.3000e-004	0.0559	4.3000e-004	0.0563	0.0148	3.9000e-004	0.0152		52.9241	52.9241	1.3700e-003			52.9583

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.1947	1.9398	2.5553	3.5400e-003		0.1039	0.1039		0.0955	0.0955	0.0000	342.4765	342.4765	0.1108			345.2456
Total	0.1947	1.9398	2.5553	3.5400e-003		0.1039	0.1039		0.0955	0.0955	0.0000	342.4765	342.4765	0.1108			345.2456

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0189	0.0120	0.1711	5.3000e-004	0.0515	4.3000e-004	0.0519	0.0138	3.9000e-004	0.0141	52.9241	52.9241	1.3700e-003	52.9583		
Total	0.0189	0.0120	0.1711	5.3000e-004	0.0515	4.3000e-004	0.0519	0.0138	3.9000e-004	0.0141	52.9241	52.9241	1.3700e-003	52.9583		

3.8 Asphalt Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6701	6.7059	9.1443	0.0140		0.3437	0.3437		0.3162	0.3162		1,357.8997	1,357.8997	0.4392		1,368.8791
Paving	0.1763					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8464	6.7059	9.1443	0.0140		0.3437	0.3437		0.3162	0.3162		1,357.8997	1,357.8997	0.4392		1,368.8791

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.6701	6.7059	9.1443	0.0140		0.3437	0.3437		0.3162	0.3162	0.0000	1,357.8997	1,357.8997	0.4392			1,368.8791
Paving	0.1763					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.8464	6.7059	9.1443	0.0140		0.3437	0.3437		0.3162	0.3162	0.0000	1,357.8997	1,357.8997	0.4392			1,368.8791

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1546	1.2800e-003	0.1558	0.0413	1.1700e-003	0.0424		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1546	1.2800e-003	0.1558	0.0413	1.1700e-003	0.0424		158.7723	158.7723	4.1000e-003		158.8748

3.9 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7758	7.3224	9.8638	0.0151		0.3796	0.3796		0.3594	0.3594		1,446.8551	1,446.8551	0.2939		1,454.2013
Total	0.7758	7.3224	9.8638	0.0151		0.3796	0.3796		0.3594	0.3594		1,446.8551	1,446.8551	0.2939		1,454.2013

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0466	1.5413	0.4771	5.4200e-003	0.1409	1.7800e-003	0.1426	0.0406	1.7000e-003	0.0423		580.5963	580.5963	0.0305		581.3585
Worker	0.3318	0.2119	3.0115	9.3500e-003	0.9836	7.4800e-003	0.9911	0.2609	6.8900e-003	0.2678		931.4642	931.4642	0.0241		932.0657
Total	0.3784	1.7532	3.4886	0.0148	1.1245	9.2600e-003	1.1337	0.3014	8.5900e-003	0.3100		1,512.0605	1,512.0605	0.0546		1,513.4241

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7758	7.3224	9.8638	0.0151		0.3796	0.3796		0.3594	0.3594	0.0000	1,446.8551	1,446.8551	0.2939		1,454.2013
Total	0.7758	7.3224	9.8638	0.0151		0.3796	0.3796		0.3594	0.3594	0.0000	1,446.8551	1,446.8551	0.2939		1,454.2013

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0466	1.5413	0.4771	5.4200e-003	0.1318	1.7800e-003	0.1336	0.0383	1.7000e-003	0.0400		580.5963	580.5963	0.0305		581.3585
Worker	0.3318	0.2119	3.0115	9.3500e-003	0.9067	7.4800e-003	0.9142	0.2420	6.8900e-003	0.2489		931.4642	931.4642	0.0241		932.0657
Total	0.3784	1.7532	3.4886	0.0148	1.0385	9.2600e-003	1.0478	0.2803	8.5900e-003	0.2889		1,512.0605	1,512.0605	0.0546		1,513.4241

3.9 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.7253	6.8460	9.8548	0.0151		0.3291	0.3291		0.3116	0.3116		1,447.1880	1,447.1880	0.2918		1,454.4821
Total	0.7253	6.8460	9.8548	0.0151		0.3291	0.3291		0.3116	0.3116		1,447.1880	1,447.1880	0.2918		1,454.4821

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0454	1.5354	0.4626	5.3900e-003	0.1409	1.7600e-003	0.1426	0.0406	1.6800e-003	0.0422		578.2402	578.2402	0.0301		578.9914
Worker	0.3139	0.1932	2.8074	9.0500e-003	0.9836	7.3700e-003	0.9910	0.2609	6.7900e-003	0.2677		902.5969	902.5969	0.0221		903.1487
Total	0.3593	1.7286	3.2700	0.0144	1.1245	9.1300e-003	1.1336	0.3014	8.4700e-003	0.3099		1,480.8370	1,480.8370	0.0521		1,482.1401

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7253	6.8460	9.8548	0.0151		0.3291	0.3291		0.3116	0.3116	0.0000	1,447.1880	1,447.1880	0.2918		1,454.4821
Total	0.7253	6.8460	9.8548	0.0151		0.3291	0.3291		0.3116	0.3116	0.0000	1,447.1880	1,447.1880	0.2918		1,454.4821

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0454	1.5354	0.4626	5.3900e-003	0.1318	1.7600e-003	0.1336	0.0383	1.6800e-003	0.0400		578.2402	578.2402	0.0301		578.9914
Worker	0.3139	0.1932	2.8074	9.0500e-003	0.9067	7.3700e-003	0.9140	0.2420	6.7900e-003	0.2488		902.5969	902.5969	0.0221		903.1487
Total	0.3593	1.7286	3.2700	0.0144	1.0385	9.1300e-003	1.0476	0.2803	8.4700e-003	0.2888		1,480.8370	1,480.8370	0.0521		1,482.1401

3.10 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	130.5546					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885
Total	130.9162	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0642	0.0395	0.5742	1.8500e-003	0.2012	1.5100e-003	0.2027	0.0534	1.3900e-003	0.0548		184.6221	184.6221	4.5200e-003			184.7350
Total	0.0642	0.0395	0.5742	1.8500e-003	0.2012	1.5100e-003	0.2027	0.0534	1.3900e-003	0.0548		184.6221	184.6221	4.5200e-003			184.7350

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	130.5546					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218	0.0000	562.8961	562.8961	0.0317			563.6885
Total	130.9162	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218	0.0000	562.8961	562.8961	0.0317			563.6885

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.0642	0.0395	0.5742	1.8500e-003	0.1855	1.5100e-003	0.1870	0.0495	1.3900e-003	0.0509		184.6221	184.6221	4.5200e-003			184.7350
Total	0.0642	0.0395	0.5742	1.8500e-003	0.1855	1.5100e-003	0.1870	0.0495	1.3900e-003	0.0509		184.6221	184.6221	4.5200e-003			184.7350

Starlite Residential Development Project Construction - Los Angeles-South Coast County, Winter

**Starlite Residential Development Project Construction
Los Angeles-South Coast County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	531.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info from applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres)

Construction Phase - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment -

Off-road Equipment - no additional equipment required for soil haul

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Grading -

Demolition -

Trips and VMT - based on info from applicant

Architectural Coating - assumes pool and associated structures would be treated as residential. Assumes only parking area would be coated.

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 and Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	13,500.00	0.00
tblArchitecturalCoating	ConstArea_Parking	16,832.00	252.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	275,470.00	281,545.00
tblArchitecturalCoating	ConstArea_Residential_Interior	826,411.00	844,636.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	3.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	30.00	64.00
tblConstructionPhase	NumDays	30.00	10.00
tblConstructionPhase	NumDays	20.00	48.00
tblConstructionPhase	NumDays	300.00	164.00

tblConstructionPhase	PhaseEndDate	11/4/2022	11/1/2022
tblGrading	MaterialImported	0.00	4,852.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LotAcreage	54.87	5.28
tblLandUse	LotAcreage	2.38	0.48
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	19.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	70.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	210.00	88.00
tblTripsAndVMT	WorkerTripNumber	42.00	18.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.2192	42.5046	34.2591	0.0725	8.9560	1.8177	10.7737	3.6721	1.6867	5.3588	0.0000	7,019.8797	7,019.8797	2.0007	0.0000	7,069.8970
2023	3.5498	40.7095	30.2422	0.0800	9.2437	1.4325	10.6762	3.7446	1.3181	5.0627	0.0000	7,937.0631	7,937.0631	2.0975	0.0000	7,989.5005
2024	132.1136	11.0698	17.0554	0.0365	1.3257	0.4616	1.7873	0.3548	0.4434	0.7982	0.0000	3,596.4764	3,596.4764	0.3801	0.0000	3,605.9798
Maximum	132.1136	42.5046	34.2591	0.0800	9.2437	1.8177	10.7737	3.7446	1.6867	5.3588	0.0000	7,937.0631	7,937.0631	2.0975	0.0000	7,989.5005

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.2192	42.5046	34.2591	0.0725	3.9688	1.8177	5.7865	1.6077	1.6867	3.2944	0.0000	7,019.8797	7,019.8797	2.0007	0.0000	7,069.8970
2023	3.5498	40.7095	30.2422	0.0800	4.2096	1.4325	5.6421	1.6717	1.3181	2.9898	0.0000	7,937.0631	7,937.0631	2.0975	0.0000	7,989.5005
2024	132.1136	11.0698	17.0554	0.0365	1.2240	0.4616	1.6856	0.3298	0.4434	0.7732	0.0000	3,596.4764	3,596.4764	0.3801	0.0000	3,605.9798
Maximum	132.1136	42.5046	34.2591	0.0800	4.2096	1.8177	5.7865	1.6717	1.6867	3.2944	0.0000	7,937.0631	7,937.0631	2.0975	0.0000	7,989.5005

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	51.85	0.00	43.56	53.56	0.00	37.10	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Asphalt & Building Demolition	Demolition	10/10/2022	11/1/2022	5	17	a
2	Building Demolition Debris Haul	Demolition	10/28/2022	11/1/2022	5	3	b
3	Asphalt Demolition Debris Onsite Reprocessing	Demolition	11/5/2022	11/25/2022	5	15	c
4	Rough Grading	Grading	11/2/2022	1/30/2023	5	64	d
5	Rough Grading Soil Haul	Grading	1/9/2023	1/20/2023	5	10	e
6	Utility Trenching	Trenching	2/1/2023	7/3/2023	5	109	f
7	Asphalt Paving	Paving	7/5/2023	9/8/2023	5	48	g
8	Building Construction	Building Construction	9/12/2023	4/26/2024	5	164	h
9	Architectural Coating	Architectural Coating	3/31/2024	4/26/2024	5	20	i

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.45

Residential Indoor: 844,636; Residential Outdoor: 281,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	2	6.00	78	0.48
Asphalt & Building Demolition	Excavators	1	8.00	158	0.38
Asphalt & Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Demolition Debris Haul	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Asphalt Demolition Debris Onsite Renprocessing	Concrete/Industrial Saws	0	8.00	81	0.73
Building Demolition Debris Haul	Excavators	0	8.00	158	0.38
Asphalt & Building Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Asphalt Demolition Debris Onsite Renprocessing	Excavators	0	8.00	158	0.38
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Rough Grading	Excavators	2	8.00	158	0.38
Rough Grading Soil Haul	Excavators	0	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading Soil Haul	Graders	0	8.00	187	0.41
Asphalt Paving	Pavers	1	8.00	130	0.42
Asphalt Paving	Paving Equipment	1	8.00	132	0.36
Building Construction	Welders	0	8.00	46	0.45
Asphalt Paving	Rollers	2	8.00	80	0.38
Building Demolition Debris Haul	Rubber Tired Dozers	0	8.00	247	0.40
Asphalt Demolition Debris Onsite Renprocessing	Rubber Tired Dozers	0	8.00	247	0.40

Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading Soil Haul	Rubber Tired Dozers	0	8.00	247	0.40
Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading Soil Haul	Scrapers	0	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Rough Grading Soil Haul	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Demolition Debris Haul	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Asphalt Demolition Debris Onsite Reprocessing	Crushing/Proc. Equipment	1	8.00	85	0.78
Utility Trenching	Trenchers	1	1.00	78	0.50
Utility Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Asphalt & Building Demolition	4	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Demolition Debris Haul	1	3.00	0.00	22.00	14.70	6.90	6.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition Debris Onsite	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	88.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading Soil Haul	0	0.00	0.00	607.00	14.70	6.90	5.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving	4	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utility Trenching	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Asphalt & Building Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2343	22.1655	14.0838	0.0285		1.0708	1.0708		0.9972	0.9972		2,746.7506	2,746.7506	0.7290		2,764.9757
Total	2.2343	22.1655	14.0838	0.0285		1.0708	1.0708		0.9972	0.9972		2,746.7506	2,746.7506	0.7290		2,764.9757

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0120	0.3683	0.1063	9.9000e-004	0.0256	7.2000e-004	0.0263	7.3700e-003	6.9000e-004	8.0600e-003		105.9881	105.9881	6.6600e-003		106.1546
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1677	1.3100e-003	0.1690	0.0445	1.2100e-003	0.0457		155.1854	155.1854	4.2700e-003		155.2922
Total	0.0792	0.4125	0.6151	2.5500e-003	0.1933	2.0300e-003	0.1953	0.0518	1.9000e-003	0.0537		261.1735	261.1735	0.0109		261.4469

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2343	22.1655	14.0838	0.0285		1.0708	1.0708		0.9972	0.9972	0.0000	2,746.7506	2,746.7506	0.7290		2,764.9757
Total	2.2343	22.1655	14.0838	0.0285		1.0708	1.0708		0.9972	0.9972	0.0000	2,746.7506	2,746.7506	0.7290		2,764.9757

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0120	0.3683	0.1063	9.9000e-004	0.0240	7.2000e-004	0.0247	6.9700e-003	6.9000e-004	7.6600e-003		105.9881	105.9881	6.6600e-003		106.1546
Worker	0.0672	0.0442	0.5088	1.5600e-003	0.1546	1.3100e-003	0.1559	0.0413	1.2100e-003	0.0425		155.1854	155.1854	4.2700e-003		155.2922
Total	0.0792	0.4125	0.6151	2.5500e-003	0.1785	2.0300e-003	0.1805	0.0482	1.9000e-003	0.0501		261.1735	261.1735	0.0109		261.4469

3.3 Building Demolition Debris Haul - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Fugitive Dust					1.3981	0.0000	1.3981	0.2117	0.0000	0.2117			0.0000			0.0000
Off-Road	0.1640	1.6689	2.2289	3.1000e-003		0.0898	0.0898		0.0826	0.0826		300.0177	300.0177	0.0970		302.4435
Total	0.1640	1.6689	2.2289	3.1000e-003	1.3981	0.0898	1.4878	0.2117	0.0826	0.2943		300.0177	300.0177	0.0970		302.4435

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0265	1.0004	0.2225	2.1300e-003	0.0386	1.8100e-003	0.0404	0.0106	1.7300e-003	0.0123		231.5046	231.5046	0.0214		232.0399
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		31.0371	31.0371	8.5000e-004		31.0585
Total	0.0400	1.0093	0.3242	2.4400e-003	0.0721	2.0700e-003	0.0742	0.0195	1.9700e-003	0.0214		262.5417	262.5417	0.0223		263.0984

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5977	0.0000	0.5977	0.0905	0.0000	0.0905			0.0000			0.0000
Off-Road	0.1640	1.6689	2.2289	3.1000e-003		0.0898	0.0898		0.0826	0.0826	0.0000	300.0177	300.0177	0.0970		302.4435

Total	0.1640	1.6689	2.2289	3.1000e-003	0.5977	0.0898	0.6874	0.0905	0.0826	0.1731	0.0000	300.0177	300.0177	0.0970		302.4435
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0265	1.0004	0.2225	2.1300e-003	0.0360	1.8100e-003	0.0378	9.9400e-003	1.7300e-003	0.0117			231.5046	231.5046	0.0214		232.0399
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000		0.0000
Worker	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003			31.0371	31.0371	8.5000e-004		31.0585
Total	0.0400	1.0093	0.3242	2.4400e-003	0.0669	2.0700e-003	0.0689	0.0182	1.9700e-003	0.0202			262.5417	262.5417	0.0223		263.0984

3.4 Asphalt Demolition Debris Onsite Reprocessing - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.4794	3.2250	4.3312	7.0200e-003		0.1801	0.1801		0.1801	0.1801			664.5301	664.5301	0.0433		665.6118
Total	0.4794	3.2250	4.3312	7.0200e-003		0.1801	0.1801		0.1801	0.1801			664.5301	664.5301	0.0433		665.6118

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		31.0371	31.0371	8.5000e-004		31.0585
Total	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0335	2.6000e-004	0.0338	8.8900e-003	2.4000e-004	9.1300e-003		31.0371	31.0371	8.5000e-004		31.0585

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.4794	3.2250	4.3312	7.0200e-003		0.1801	0.1801		0.1801	0.1801	0.0000	664.5301	664.5301	0.0433		665.6118
Total	0.4794	3.2250	4.3312	7.0200e-003		0.1801	0.1801		0.1801	0.1801	0.0000	664.5301	664.5301	0.0433		665.6118

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003	31.0371	31.0371	8.5000e-004	31.0585		
Total	0.0134	8.8400e-003	0.1018	3.1000e-004	0.0309	2.6000e-004	0.0312	8.2500e-003	2.4000e-004	8.4900e-003	31.0371	31.0371	8.5000e-004	31.0585		

3.5 Rough Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0120	0.3683	0.1063	9.9000e-004	0.0256	7.2000e-004	0.0263	7.3700e-003	6.9000e-004	8.0600e-003		105.9881	105.9881	6.6600e-003		106.1546

Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.1016	0.4272	0.7847	3.0700e-003	0.2492	2.4700e-003	0.2516	0.0667	2.3000e-003	0.0690		312.9020	312.9020	0.0124		313.2110

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					3.7079	0.0000	3.7079	1.5375	0.0000	1.5375			0.0000				0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442			6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	3.7079	1.6349	5.3427	1.5375	1.5041	3.0416	0.0000	6,011.4105	6,011.4105	1.9442			6,060.0158

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0120	0.3683	0.1063	9.9000e-004	0.0240	7.2000e-004	0.0247	6.9700e-003	6.9000e-004	7.6600e-003		105.9881	105.9881	6.6600e-003			106.1546
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2061	1.7500e-003	0.2078	0.0550	1.6100e-003	0.0566		206.9139	206.9139	5.7000e-003			207.0563
Total	0.1016	0.4272	0.7847	3.0700e-003	0.2300	2.4700e-003	0.2325	0.0620	2.3000e-003	0.0643		312.9020	312.9020	0.0124			313.2110

3.5 Rough Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000				0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.4777	6,011.4777	1.9442			6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	8.6733	1.4245	10.0978	3.5965	1.3105	4.9070		6,011.4777	6,011.4777	1.9442			6,060.0836

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	8.9000e-003	0.2790	0.0945	9.6000e-004	0.0256	3.4000e-004	0.0260	7.3700e-003	3.3000e-004	7.7000e-003		102.6965	102.6965	5.8600e-003			102.8431
Worker	0.0844	0.0533	0.6235	2.0000e-003	0.2236	1.7000e-003	0.2253	0.0593	1.5700e-003	0.0609		199.3441	199.3441	5.1300e-003			199.4724
Total	0.0933	0.3322	0.7180	2.9600e-003	0.2492	2.0400e-003	0.2512	0.0667	1.9000e-003	0.0686		302.0406	302.0406	0.0110			302.3155

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.7079	0.0000	3.7079	1.5375	0.0000	1.5375			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836
Total	3.3217	34.5156	28.0512	0.0621	3.7079	1.4245	5.1323	1.5375	1.3105	2.8480	0.0000	6,011.4777	6,011.4777	1.9442		6,060.0836

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	8.9000e-003	0.2790	0.0945	9.6000e-004	0.0240	3.4000e-004	0.0243	6.9700e-003	3.3000e-004	7.3000e-003		102.6965	102.6965	5.8600e-003		102.8431
Worker	0.0844	0.0533	0.6235	2.0000e-003	0.2061	1.7000e-003	0.2078	0.0550	1.5700e-003	0.0566		199.3441	199.3441	5.1300e-003		199.4724
Total	0.0933	0.3322	0.7180	2.9600e-003	0.2300	2.0400e-003	0.2321	0.0620	1.9000e-003	0.0639		302.0406	302.0406	0.0110		302.3155

3.6 Rough Grading Soil Haul - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Fugitive Dust					0.0549	0.0000	0.0549	8.3100e-003	0.0000	8.3100e-003			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0549	0.0000	0.0549	8.3100e-003	0.0000	8.3100e-003			0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1348	5.8617	1.4731	0.0149	0.2663	5.9400e-003	0.2723	0.0731	5.6900e-003	0.0788		1,623.5447	1,623.5447	0.1423		1,627.1015
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1348	5.8617	1.4731	0.0149	0.2663	5.9400e-003	0.2723	0.0731	5.6900e-003	0.0788		1,623.5447	1,623.5447	0.1423		1,627.1015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0235	0.0000	0.0235	3.5500e-003	0.0000	3.5500e-003			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0235	0.0000	0.0235	3.5500e-003	0.0000	3.5500e-003	0.0000	0.0000	0.0000	0.0000		0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1348	5.8617	1.4731	0.0149	0.2483	5.9400e-003	0.2542	0.0687	5.6900e-003	0.0744		1,623.5447	1,623.5447	0.1423		1,627.1015
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	0.1348	5.8617	1.4731	0.0149	0.2483	5.9400e-003	0.2542	0.0687	5.6900e-003	0.0744		1,623.5447	1,623.5447	0.1423		1,627.1015

3.7 Utility Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1947	1.9398	2.5553	3.5400e-003		0.1039	0.1039		0.0955	0.0955		342.4765	342.4765	0.1108		345.2456
Total	0.1947	1.9398	2.5553	3.5400e-003		0.1039	0.1039		0.0955	0.0955		342.4765	342.4765	0.1108		345.2456

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0211	0.0133	0.1559	5.0000e-004	0.0559	4.3000e-004	0.0563	0.0148	3.9000e-004	0.0152		49.8360	49.8360	1.2800e-003		49.8681
Total	0.0211	0.0133	0.1559	5.0000e-004	0.0559	4.3000e-004	0.0563	0.0148	3.9000e-004	0.0152		49.8360	49.8360	1.2800e-003		49.8681

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1947	1.9398	2.5553	3.5400e-003		0.1039	0.1039		0.0955	0.0955	0.0000	342.4765	342.4765	0.1108		345.2456
Total	0.1947	1.9398	2.5553	3.5400e-003		0.1039	0.1039		0.0955	0.0955	0.0000	342.4765	342.4765	0.1108		345.2456

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
	Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0211	0.0133	0.1559	5.0000e-004	0.0515	4.3000e-004	0.0519	0.0138	3.9000e-004	0.0141	49.8360	49.8360	1.2800e-003	49.8681		
Total	0.0211	0.0133	0.1559	5.0000e-004	0.0515	4.3000e-004	0.0519	0.0138	3.9000e-004	0.0141	49.8360	49.8360	1.2800e-003	49.8681		

3.8 Asphalt Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6701	6.7059	9.1443	0.0140		0.3437	0.3437		0.3162	0.3162		1,357.8997	1,357.8997	0.4392		1,368.8791
Paving	0.1763					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8464	6.7059	9.1443	0.0140		0.3437	0.3437		0.3162	0.3162		1,357.8997	1,357.8997	0.4392		1,368.8791

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6701	6.7059	9.1443	0.0140		0.3437	0.3437		0.3162	0.3162	0.0000	1,357.8997	1,357.8997	0.4392		1,368.8791
Paving	0.1763					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8464	6.7059	9.1443	0.0140		0.3437	0.3437		0.3162	0.3162	0.0000	1,357.8997	1,357.8997	0.4392		1,368.8791

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1546	1.2800e-003	0.1558	0.0413	1.1700e-003	0.0424		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1546	1.2800e-003	0.1558	0.0413	1.1700e-003	0.0424		149.5081	149.5081	3.8500e-003		149.6043

3.9 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7758	7.3224	9.8638	0.0151		0.3796	0.3796		0.3594	0.3594		1,446.8551	1,446.8551	0.2939		1,454.2013
Total	0.7758	7.3224	9.8638	0.0151		0.3796	0.3796		0.3594	0.3594		1,446.8551	1,446.8551	0.2939		1,454.2013

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0490	1.5343	0.5196	5.2700e-003	0.1409	1.8700e-003	0.1427	0.0406	1.7900e-003	0.0423		564.8309	564.8309	0.0323		565.6372
Worker	0.3713	0.2344	2.7436	8.8000e-003	0.9836	7.4800e-003	0.9911	0.2609	6.8900e-003	0.2678		877.1141	877.1141	0.0226		877.6784
Total	0.4202	1.7687	3.2631	0.0141	1.1245	9.3500e-003	1.1338	0.3014	8.6800e-003	0.3101		1,441.9450	1,441.9450	0.0548		1,443.3156

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7758	7.3224	9.8638	0.0151		0.3796	0.3796		0.3594	0.3594	0.0000	1,446.8551	1,446.8551	0.2939		1,454.2013
Total	0.7758	7.3224	9.8638	0.0151		0.3796	0.3796		0.3594	0.3594	0.0000	1,446.8551	1,446.8551	0.2939		1,454.2013

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0490	1.5343	0.5196	5.2700e-003	0.1318	1.8700e-003	0.1337	0.0383	1.7900e-003	0.0401		564.8309	564.8309	0.0323		565.6372
Worker	0.3713	0.2344	2.7436	8.8000e-003	0.9067	7.4800e-003	0.9142	0.2420	6.8900e-003	0.2489		877.1141	877.1141	0.0226		877.6784
Total	0.4202	1.7687	3.2631	0.0141	1.0385	9.3500e-003	1.0478	0.2803	8.6800e-003	0.2890		1,441.9450	1,441.9450	0.0548		1,443.3156

3.9 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					

Off-Road	0.7253	6.8460	9.8548	0.0151		0.3291	0.3291		0.3116	0.3116		1,447.1880	1,447.1880	0.2918		1,454.4821
Total	0.7253	6.8460	9.8548	0.0151		0.3291	0.3291		0.3116	0.3116		1,447.1880	1,447.1880	0.2918		1,454.4821

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0478	1.5288	0.5038	5.2500e-003	0.1409	1.8400e-003	0.1427	0.0406	1.7600e-003	0.0423		562.6403	562.6403	0.0318		563.4343
Worker	0.3523	0.2137	2.5541	8.5200e-003	0.9836	7.3700e-003	0.9910	0.2609	6.7900e-003	0.2677		849.9073	849.9073	0.0207		850.4244
Total	0.4001	1.7425	3.0579	0.0138	1.1245	9.2100e-003	1.1337	0.3014	8.5500e-003	0.3100		1,412.5476	1,412.5476	0.0524		1,413.8587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7253	6.8460	9.8548	0.0151		0.3291	0.3291		0.3116	0.3116	0.0000	1,447.1880	1,447.1880	0.2918		1,454.4821
Total	0.7253	6.8460	9.8548	0.0151		0.3291	0.3291		0.3116	0.3116	0.0000	1,447.1880	1,447.1880	0.2918		1,454.4821

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0478	1.5288	0.5038	5.2500e-003	0.1318	1.8400e-003	0.1337	0.0383	1.7600e-003	0.0401		562.6403	562.6403	0.0318			563.4343
Worker	0.3523	0.2137	2.5541	8.5200e-003	0.9067	7.3700e-003	0.9140	0.2420	6.7900e-003	0.2488		849.9073	849.9073	0.0207			850.4244
Total	0.4001	1.7425	3.0579	0.0138	1.0385	9.2100e-003	1.0477	0.2803	8.5500e-003	0.2889		1,412.5476	1,412.5476	0.0524			1,413.8587

3.10 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	130.5546					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317			563.6885
Total	130.9162	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317			563.6885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0721	0.0437	0.5224	1.7400e-003	0.2012	1.5100e-003	0.2027	0.0534	1.3900e-003	0.0548	173.8447	173.8447	4.2300e-003	173.9504		
Total	0.0721	0.0437	0.5224	1.7400e-003	0.2012	1.5100e-003	0.2027	0.0534	1.3900e-003	0.0548	173.8447	173.8447	4.2300e-003	173.9504		

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	130.5546					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218	0.0000	562.8961	562.8961	0.0317		563.6885
Total	130.9162	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218	0.0000	562.8961	562.8961	0.0317		563.6885

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0437	0.5224	1.7400e-003	0.1855	1.5100e-003	0.1870	0.0495	1.3900e-003	0.0509		173.8447	173.8447	4.2300e-003		173.9504
Total	0.0721	0.0437	0.5224	1.7400e-003	0.1855	1.5100e-003	0.1870	0.0495	1.3900e-003	0.0509		173.8447	173.8447	4.2300e-003		173.9504

Starlite Residential Development Project Construction - Los Angeles-South Coast County, Annual

**Starlite Residential Development Project Construction
Los Angeles-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	531.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info from applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres)

Construction Phase - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment -

Off-road Equipment - no additional equipment required for soil haul

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Grading -

Demolition -

Trips and VMT - based on info from applicant

Architectural Coating - assumes pool and associated structures would be treated as residential. Assumes only parking area would be coated.

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 and Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	13,500.00	0.00
tblArchitecturalCoating	ConstArea_Parking	16,832.00	252.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	275,470.00	281,545.00
tblArchitecturalCoating	ConstArea_Residential_Interior	826,411.00	844,636.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	17.00
tblConstructionPhase	NumDays	20.00	3.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	30.00	64.00
tblConstructionPhase	NumDays	30.00	10.00
tblConstructionPhase	NumDays	20.00	48.00

tblConstructionPhase	NumDays	300.00	164.00
tblConstructionPhase	PhaseEndDate	11/4/2022	11/1/2022
tblGrading	MaterialImported	0.00	4,852.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LotAcreage	54.87	5.28
tblLandUse	LotAcreage	2.38	0.48
tblOffRoadEquipment	LoadFactor	0.37	0.37
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Crushing/Proc. Equipment
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	HaulingTripLength	20.00	6.00
tblTripsAndVMT	HaulingTripLength	20.00	5.00
tblTripsAndVMT	HaulingTripNumber	19.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	70.00	22.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00
tblTripsAndVMT	WorkerTripNumber	210.00	88.00
tblTripsAndVMT	WorkerTripNumber	42.00	18.00
tblTripsAndVMT	WorkerTripNumber	10.00	15.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1035	1.0648	0.8037	1.7300e-003	0.2236	0.0458	0.2694	0.0826	0.0424	0.1249	0.0000	152.1919	152.1919	0.0443	0.0000	153.3001
2023	0.1155	1.0245	1.2089	2.5100e-003	0.2027	0.0443	0.2470	0.0585	0.0412	0.0997	0.0000	224.4514	224.4514	0.0469	0.0000	225.6241
2024	1.3561	0.3911	0.5926	1.3100e-003	0.0489	0.0156	0.0645	0.0131	0.0148	0.0280	0.0000	117.8619	117.8619	0.0136	0.0000	118.2013
Maximum	1.3561	1.0648	1.2089	2.5100e-003	0.2236	0.0458	0.2694	0.0826	0.0424	0.1249	0.0000	224.4514	224.4514	0.0469	0.0000	225.6241

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1035	1.0648	0.8037	1.7300e-003	0.0992	0.0458	0.1450	0.0363	0.0424	0.0786	0.0000	152.1918	152.1918	0.0443	0.0000	153.2999
2023	0.1155	1.0245	1.2089	2.5100e-003	0.1136	0.0443	0.1580	0.0324	0.0412	0.0736	0.0000	224.4513	224.4513	0.0469	0.0000	225.6239
2024	1.3561	0.3911	0.5926	1.3100e-003	0.0451	0.0156	0.0607	0.0122	0.0148	0.0270	0.0000	117.8618	117.8618	0.0136	0.0000	118.2012
Maximum	1.3561	1.0648	1.2089	2.5100e-003	0.1136	0.0458	0.1580	0.0363	0.0424	0.0786	0.0000	224.4513	224.4513	0.0469	0.0000	225.6239

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	45.72	0.00	37.40	47.59	0.00	29.06	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-10-2022	1-9-2023	1.3033	1.3033
2	1-10-2023	4-9-2023	0.4082	0.4082
3	4-10-2023	7-9-2023	0.0794	0.0794
4	7-10-2023	10-9-2023	0.2690	0.2690
5	10-10-2023	1-9-2024	0.3362	0.3362
6	1-10-2024	4-9-2024	0.7922	0.7922
7	4-10-2024	7-9-2024	0.8689	0.8689
		Highest	1.3033	1.3033

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Asphalt & Building Demolition	Demolition	10/10/2022	11/1/2022	5	17	a

2	Building Demolition Debris Haul	Demolition	10/28/2022	11/1/2022	5	3	b
3	Asphalt Demolition Debris Onsite Reprocessing	Demolition	11/5/2022	11/25/2022	5	15	c
4	Rough Grading	Grading	11/2/2022	1/30/2023	5	64	d
5	Rough Grading Soil Haul	Grading	1/9/2023	1/20/2023	5	10	e
6	Utility Trenching	Trenching	2/1/2023	7/3/2023	5	109	f
7	Asphalt Paving	Paving	7/5/2023	9/8/2023	5	48	g
8	Building Construction	Building Construction	9/12/2023	4/26/2024	5	164	h
9	Architectural Coating	Architectural Coating	3/31/2024	4/26/2024	5	20	i

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.45

Residential Indoor: 844,636; Residential Outdoor: 281,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	2	6.00	78	0.48
Asphalt & Building Demolition	Excavators	1	8.00	158	0.38
Asphalt & Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Demolition Debris Haul	Concrete/Industrial Saws	0	8.00	81	0.73
Building Construction	Cranes	0	7.00	231	0.29
Building Construction	Forklifts	2	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Asphalt Demolition Debris Onsite Reprocessing	Concrete/Industrial Saws	0	8.00	81	0.73
Building Demolition Debris Haul	Excavators	0	8.00	158	0.38
Asphalt & Building Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Asphalt Demolition Debris Onsite Reprocessing	Excavators	0	8.00	158	0.38
Building Construction	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Rough Grading	Excavators	2	8.00	158	0.38

Rough Grading Soil Haul	Excavators	0	8.00	158	0.38
Rough Grading	Graders	1	8.00	187	0.41
Rough Grading Soil Haul	Graders	0	8.00	187	0.41
Asphalt Paving	Pavers	1	8.00	130	0.42
Asphalt Paving	Paving Equipment	1	8.00	132	0.36
Building Construction	Welders	0	8.00	46	0.45
Asphalt Paving	Rollers	2	8.00	80	0.38
Building Demolition Debris Haul	Rubber Tired Dozers	0	8.00	247	0.40
Asphalt Demolition Debris Onsite	Rubber Tired Dozers	0	8.00	247	0.40
Rough Grading	Rubber Tired Dozers	1	8.00	247	0.40
Rough Grading Soil Haul	Rubber Tired Dozers	0	8.00	247	0.40
Rough Grading	Scrapers	2	8.00	367	0.48
Rough Grading Soil Haul	Scrapers	0	8.00	367	0.48
Rough Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Rough Grading Soil Haul	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Demolition Debris Haul	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Asphalt Demolition Debris Onsite	Crushing/Proc. Equipment	1	8.00	85	0.78
Utility Trenching	Trenchers	1	1.00	78	0.50
Utility Trenching	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Asphalt & Building Demolition	4	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Demolition Debris Haul	1	3.00	0.00	22.00	14.70	6.90	6.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition Debris Onsite	1	3.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	88.00	22.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Rough Grading	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Rough Grading Soil	0	0.00	0.00	607.00	14.70	6.90	5.00	LD_Mix	HDT_Mix	HHDT
Asphalt Paving	4	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Utility Trenching	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Asphalt & Building Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0190	0.1884	0.1197	2.4000e-004		9.1000e-003	9.1000e-003		8.4800e-003	8.4800e-003	0.0000	21.1804	21.1804	5.6200e-003	0.0000	21.3209
Total	0.0190	0.1884	0.1197	2.4000e-004		9.1000e-003	9.1000e-003		8.4800e-003	8.4800e-003	0.0000	21.1804	21.1804	5.6200e-003	0.0000	21.3209

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.1900e-003	8.6000e-004	1.0000e-005	2.1000e-004	1.0000e-005	2.2000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.8307	0.8307	5.0000e-005	0.0000	0.8320
Worker	5.1000e-004	3.9000e-004	4.4400e-003	1.0000e-005	1.4000e-003	1.0000e-005	1.4100e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.2166	1.2166	3.0000e-005	0.0000	1.2174
Total	6.1000e-004	3.5800e-003	5.3000e-003	2.0000e-005	1.6100e-003	2.0000e-005	1.6300e-003	4.3000e-004	2.0000e-005	4.5000e-004	0.0000	2.0473	2.0473	8.0000e-005	0.0000	2.0494

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0190	0.1884	0.1197	2.4000e-004		9.1000e-003	9.1000e-003		8.4800e-003	8.4800e-003	0.0000	21.1804	21.1804	5.6200e-003	0.0000	21.3209
Total	0.0190	0.1884	0.1197	2.4000e-004		9.1000e-003	9.1000e-003		8.4800e-003	8.4800e-003	0.0000	21.1804	21.1804	5.6200e-003	0.0000	21.3209

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.1900e-003	8.6000e-004	1.0000e-005	2.0000e-004	1.0000e-005	2.1000e-004	6.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.8307	0.8307	5.0000e-005	0.0000	0.8320
Worker	5.1000e-004	3.9000e-004	4.4400e-003	1.0000e-005	1.2900e-003	1.0000e-005	1.3000e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.2166	1.2166	3.0000e-005	0.0000	1.2174

Total	6.1000e-004	3.5800e-003	5.3000e-003	2.0000e-005	1.4900e-003	2.0000e-005	1.5100e-003	4.0000e-004	2.0000e-005	4.1000e-004	0.0000	2.0473	2.0473	8.0000e-005	0.0000	2.0494
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3.3 Building Demolition Debris Haul - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.1000e-003	0.0000	2.1000e-003	3.2000e-004	0.0000	3.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-004	2.5000e-003	3.3400e-003	0.0000		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.4083	0.4083	1.3000e-004	0.0000	0.4116
Total	2.5000e-004	2.5000e-003	3.3400e-003	0.0000	2.1000e-003	1.3000e-004	2.2300e-003	3.2000e-004	1.2000e-004	4.4000e-004	0.0000	0.4083	0.4083	1.3000e-004	0.0000	0.4116

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.5300e-003	3.1000e-004	0.0000	6.0000e-005	0.0000	6.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.3235	0.3235	3.0000e-005	0.0000	0.3242
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0429	0.0429	0.0000	0.0000	0.0430
Total	6.0000e-005	1.5400e-003	4.7000e-004	0.0000	1.1000e-004	0.0000	1.1000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.3664	0.3664	3.0000e-005	0.0000	0.3672

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					9.0000e-004	0.0000	9.0000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.5000e-004	2.5000e-003	3.3400e-003	0.0000		1.3000e-004	1.3000e-004		1.2000e-004	1.2000e-004	0.0000	0.4083	0.4083	1.3000e-004	0.0000	0.4116
Total	2.5000e-004	2.5000e-003	3.3400e-003	0.0000	9.0000e-004	1.3000e-004	1.0300e-003	1.4000e-004	1.2000e-004	2.6000e-004	0.0000	0.4083	0.4083	1.3000e-004	0.0000	0.4116

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.0000e-005	1.5300e-003	3.1000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	2.0000e-005	0.0000	0.3235	0.3235	3.0000e-005	0.0000	0.3242
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	5.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0429	0.0429	0.0000	0.0000	0.0430
Total	6.0000e-005	1.5400e-003	4.7000e-004	0.0000	1.0000e-004	0.0000	1.1000e-004	2.0000e-005	0.0000	3.0000e-005	0.0000	0.3664	0.3664	3.0000e-005	0.0000	0.3672

3.4 Asphalt Demolition Debris Onsite Reprocessing - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Off-Road	3.6000e-003	0.0242	0.0325	5.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	4.5214	4.5214	2.9000e-004	0.0000	4.5288
Total	3.6000e-003	0.0242	0.0325	5.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	4.5214	4.5214	2.9000e-004	0.0000	4.5288

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	7.8000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2147	0.2147	1.0000e-005	0.0000	0.2148
Total	9.0000e-005	7.0000e-005	7.8000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2147	0.2147	1.0000e-005	0.0000	0.2148

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.6000e-003	0.0242	0.0325	5.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	4.5214	4.5214	2.9000e-004	0.0000	4.5287

Total	3.6000e-003	0.0242	0.0325	5.0000e-005		1.3500e-003	1.3500e-003		1.3500e-003	1.3500e-003	0.0000	4.5214	4.5214	2.9000e-004	0.0000	4.5287
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	7.0000e-005	7.8000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2147	0.2147	1.0000e-005	0.0000	0.2148
Total	9.0000e-005	7.0000e-005	7.8000e-004	0.0000	2.3000e-004	0.0000	2.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.2147	0.2147	1.0000e-005	0.0000	0.2148

3.5 Rough Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2143	0.0000	0.2143	0.0803	0.0000	0.0803	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0779	0.8351	0.6244	1.3300e-003		0.0352	0.0352		0.0323	0.0323	0.0000	117.2494	117.2494	0.0379	0.0000	118.1974
Total	0.0779	0.8351	0.6244	1.3300e-003	0.2143	0.0352	0.2495	0.0803	0.0323	0.1127	0.0000	117.2494	117.2494	0.0379	0.0000	118.1974

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	8.0600e-003	2.1800e-003	2.0000e-005	5.4000e-004	2.0000e-005	5.6000e-004	1.6000e-004	1.0000e-005	1.7000e-004	0.0000	2.1013	2.1013	1.3000e-004	0.0000	2.1044
Worker	1.7300e-003	1.3000e-003	0.0150	5.0000e-005	4.7100e-003	4.0000e-005	4.7500e-003	1.2500e-003	3.0000e-005	1.2900e-003	0.0000	4.1029	4.1029	1.1000e-004	0.0000	4.1057
Total	1.9800e-003	9.3600e-003	0.0172	7.0000e-005	5.2500e-003	6.0000e-005	5.3100e-003	1.4100e-003	4.0000e-005	1.4600e-003	0.0000	6.2041	6.2041	2.4000e-004	0.0000	6.2101

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0916	0.0000	0.0916	0.0343	0.0000	0.0343	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0779	0.8351	0.6244	1.3300e-003		0.0352	0.0352		0.0323	0.0323	0.0000	117.2493	117.2493	0.0379	0.0000	118.1973
Total	0.0779	0.8351	0.6244	1.3300e-003	0.0916	0.0352	0.1268	0.0343	0.0323	0.0667	0.0000	117.2493	117.2493	0.0379	0.0000	118.1973

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5000e-004	8.0600e-003	2.1800e-003	2.0000e-005	5.1000e-004	2.0000e-005	5.2000e-004	1.5000e-004	1.0000e-005	1.6000e-004	0.0000	2.1013	2.1013	1.3000e-004	0.0000	2.1044
Worker	1.7300e-003	1.3000e-003	0.0150	5.0000e-005	4.3400e-003	4.0000e-005	4.3800e-003	1.1600e-003	3.0000e-005	1.2000e-003	0.0000	4.1029	4.1029	1.1000e-004	0.0000	4.1057
Total	1.9800e-003	9.3600e-003	0.0172	7.0000e-005	4.8500e-003	6.0000e-005	4.9000e-003	1.3100e-003	4.0000e-005	1.3600e-003	0.0000	6.2041	6.2041	2.4000e-004	0.0000	6.2101

3.5 Rough Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1481	0.0000	0.1481	0.0439	0.0000	0.0439	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3624	0.2945	6.5000e-004		0.0150	0.0150		0.0138	0.0138	0.0000	57.2620	57.2620	0.0185	0.0000	57.7250
Total	0.0349	0.3624	0.2945	6.5000e-004	0.1481	0.0150	0.1630	0.0439	0.0138	0.0577	0.0000	57.2620	57.2620	0.0185	0.0000	57.7250

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	2.9800e-003	9.5000e-004	1.0000e-005	2.6000e-004	0.0000	2.7000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.9941	0.9941	5.0000e-005	0.0000	0.9954
Worker	8.0000e-004	5.7000e-004	6.7300e-003	2.0000e-005	2.3000e-003	2.0000e-005	2.3200e-003	6.1000e-004	2.0000e-005	6.3000e-004	0.0000	1.9304	1.9304	5.0000e-005	0.0000	1.9317
Total	8.9000e-004	3.5500e-003	7.6800e-003	3.0000e-005	2.5600e-003	2.0000e-005	2.5900e-003	6.9000e-004	2.0000e-005	7.1000e-004	0.0000	2.9245	2.9245	1.0000e-004	0.0000	2.9271

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0633	0.0000	0.0633	0.0188	0.0000	0.0188	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0349	0.3624	0.2945	6.5000e-004		0.0150	0.0150		0.0138	0.0138	0.0000	57.2619	57.2619	0.0185	0.0000	57.7249
Total	0.0349	0.3624	0.2945	6.5000e-004	0.0633	0.0150	0.0783	0.0188	0.0138	0.0325	0.0000	57.2619	57.2619	0.0185	0.0000	57.7249

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	9.0000e-005	2.9800e-003	9.5000e-004	1.0000e-005	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	8.0000e-005	0.0000	0.9941	0.9941	5.0000e-005	0.0000	0.9954
Worker	8.0000e-004	5.7000e-004	6.7300e-003	2.0000e-005	2.1200e-003	2.0000e-005	2.1400e-003	5.7000e-004	2.0000e-005	5.8000e-004	0.0000	1.9304	1.9304	5.0000e-005	0.0000	1.9317

Total	8.9000e-004	3.5500e-003	7.6800e-003	3.0000e-005	2.3700e-003	2.0000e-005	2.3900e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.9245	2.9245	1.0000e-004	0.0000	2.9271
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3.6 Rough Grading Soil Haul - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	2.7000e-004	0.0000	2.7000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5000e-004	0.0299	6.9400e-003	8.0000e-005	1.3100e-003	3.0000e-005	1.3400e-003	3.6000e-004	3.0000e-005	3.9000e-004	0.0000	7.5867	7.5867	6.2000e-004	0.0000	7.6022
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.5000e-004	0.0299	6.9400e-003	8.0000e-005	1.3100e-003	3.0000e-005	1.3400e-003	3.6000e-004	3.0000e-005	3.9000e-004	0.0000	7.5867	7.5867	6.2000e-004	0.0000	7.6022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2000e-004	0.0000	1.2000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	1.2000e-004	0.0000	1.2000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.5000e-004	0.0299	6.9400e-003	8.0000e-005	1.2200e-003	3.0000e-005	1.2500e-003	3.4000e-004	3.0000e-005	3.7000e-004	0.0000	7.5867	7.5867	6.2000e-004	0.0000	7.6022
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.5000e-004	0.0299	6.9400e-003	8.0000e-005	1.2200e-003	3.0000e-005	1.2500e-003	3.4000e-004	3.0000e-005	3.7000e-004	0.0000	7.5867	7.5867	6.2000e-004	0.0000	7.6022

3.7 Utility Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Off-Road	0.0106	0.1057	0.1393	1.9000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	16.9326	16.9326	5.4800e-003	0.0000	17.0695
Total	0.0106	0.1057	0.1393	1.9000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	16.9326	16.9326	5.4800e-003	0.0000	17.0695

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.5000e-004	8.7300e-003	3.0000e-005	2.9900e-003	2.0000e-005	3.0100e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.5049	2.5049	6.0000e-005	0.0000	2.5065
Total	1.0300e-003	7.5000e-004	8.7300e-003	3.0000e-005	2.9900e-003	2.0000e-005	3.0100e-003	7.9000e-004	2.0000e-005	8.1000e-004	0.0000	2.5049	2.5049	6.0000e-005	0.0000	2.5065

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0106	0.1057	0.1393	1.9000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	16.9326	16.9326	5.4800e-003	0.0000	17.0695

Total	0.0106	0.1057	0.1393	1.9000e-004		5.6600e-003	5.6600e-003		5.2100e-003	5.2100e-003	0.0000	16.9326	16.9326	5.4800e-003	0.0000	17.0695
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Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0300e-003	7.5000e-004	8.7300e-003	3.0000e-005	2.7500e-003	2.0000e-005	2.7800e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5049	2.5049	6.0000e-005	0.0000	2.5065
Total	1.0300e-003	7.5000e-004	8.7300e-003	3.0000e-005	2.7500e-003	2.0000e-005	2.7800e-003	7.4000e-004	2.0000e-005	7.6000e-004	0.0000	2.5049	2.5049	6.0000e-005	0.0000	2.5065

3.8 Asphalt Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1609	0.2195	3.4000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	29.5648	29.5648	9.5600e-003	0.0000	29.8038
Paving	4.2300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0203	0.1609	0.2195	3.4000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	29.5648	29.5648	9.5600e-003	0.0000	29.8038

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-003	9.9000e-004	0.0115	4.0000e-005	3.9400e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.3093	3.3093	9.0000e-005	0.0000	3.3114
Total	1.3700e-003	9.9000e-004	0.0115	4.0000e-005	3.9400e-003	3.0000e-005	3.9800e-003	1.0500e-003	3.0000e-005	1.0800e-003	0.0000	3.3093	3.3093	9.0000e-005	0.0000	3.3114

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0161	0.1609	0.2195	3.4000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	29.5648	29.5648	9.5600e-003	0.0000	29.8038
Paving	4.2300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0203	0.1609	0.2195	3.4000e-004		8.2500e-003	8.2500e-003		7.5900e-003	7.5900e-003	0.0000	29.5648	29.5648	9.5600e-003	0.0000	29.8038

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3700e-003	9.9000e-004	0.0115	4.0000e-005	3.6400e-003	3.0000e-005	3.6700e-003	9.7000e-004	3.0000e-005	1.0000e-003	0.0000	3.3093	3.3093	9.0000e-005	0.0000	3.3114
Total	1.3700e-003	9.9000e-004	0.0115	4.0000e-005	3.6400e-003	3.0000e-005	3.6700e-003	9.7000e-004	3.0000e-005	1.0000e-003	0.0000	3.3093	3.3093	9.0000e-005	0.0000	3.3114

3.9 Building Construction - 2023
Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0307	0.2892	0.3896	6.0000e-004		0.0150	0.0150		0.0142	0.0142	0.0000	51.8463	51.8463	0.0105	0.0000	52.1096
Total	0.0307	0.2892	0.3896	6.0000e-004		0.0150	0.0150		0.0142	0.0142	0.0000	51.8463	51.8463	0.0105	0.0000	52.1096

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					

Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8800e-003	0.0616	0.0197	2.1000e-004	5.4700e-003	7.0000e-005	5.5500e-003	1.5800e-003	7.0000e-005	1.6500e-003	0.0000	20.5677	20.5677	1.1200e-003	0.0000	20.5957
Worker	0.0132	9.5100e-003	0.1114	3.5000e-004	0.0381	3.0000e-004	0.0384	0.0101	2.7000e-004	0.0104	0.0000	31.9528	31.9528	8.2000e-004	0.0000	31.9733
Total	0.0151	0.0711	0.1311	5.6000e-004	0.0436	3.7000e-004	0.0439	0.0117	3.4000e-004	0.0120	0.0000	52.5205	52.5205	1.9400e-003	0.0000	52.5691

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0307	0.2892	0.3896	6.0000e-004		0.0150	0.0150		0.0142	0.0142	0.0000	51.8463	51.8463	0.0105	0.0000	52.1095
Total	0.0307	0.2892	0.3896	6.0000e-004		0.0150	0.0150		0.0142	0.0142	0.0000	51.8463	51.8463	0.0105	0.0000	52.1095

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.8800e-003	0.0616	0.0197	2.1000e-004	5.1300e-003	7.0000e-005	5.2000e-003	1.4900e-003	7.0000e-005	1.5600e-003	0.0000	20.5677	20.5677	1.1200e-003	0.0000	20.5957
Worker	0.0132	9.5100e-003	0.1114	3.5000e-004	0.0351	3.0000e-004	0.0354	9.3900e-003	2.7000e-004	9.6600e-003	0.0000	31.9528	31.9528	8.2000e-004	0.0000	31.9733

Total	0.0151	0.0711	0.1311	5.6000e-004	0.0403	3.7000e-004	0.0406	0.0109	3.4000e-004	0.0112	0.0000	52.5205	52.5205	1.9400e-003	0.0000	52.5691
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3.9 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0308	0.2910	0.4188	6.4000e-004		0.0140	0.0140		0.0132	0.0132	0.0000	55.7968	55.7968	0.0113	0.0000	56.0781
Total	0.0308	0.2910	0.4188	6.4000e-004		0.0140	0.0140		0.0132	0.0132	0.0000	55.7968	55.7968	0.0113	0.0000	56.0781

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9700e-003	0.0660	0.0206	2.3000e-004	5.8900e-003	8.0000e-005	5.9700e-003	1.7000e-003	7.0000e-005	1.7700e-003	0.0000	22.0417	22.0417	1.1900e-003	0.0000	22.0714
Worker	0.0134	9.3300e-003	0.1116	3.7000e-004	0.0410	3.1000e-004	0.0413	0.0109	2.9000e-004	0.0112	0.0000	33.3136	33.3136	8.1000e-004	0.0000	33.3339
Total	0.0154	0.0753	0.1322	6.0000e-004	0.0469	3.9000e-004	0.0473	0.0126	3.6000e-004	0.0129	0.0000	55.3552	55.3552	2.0000e-003	0.0000	55.4052

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0308	0.2910	0.4188	6.4000e-004		0.0140	0.0140		0.0132	0.0132	0.0000	55.7968	55.7968	0.0113	0.0000	56.0780
Total	0.0308	0.2910	0.4188	6.4000e-004		0.0140	0.0140		0.0132	0.0132	0.0000	55.7968	55.7968	0.0113	0.0000	56.0780

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9700e-003	0.0660	0.0206	2.3000e-004	5.5100e-003	8.0000e-005	5.5900e-003	1.6100e-003	7.0000e-005	1.6800e-003	0.0000	22.0417	22.0417	1.1900e-003	0.0000	22.0714
Worker	0.0134	9.3300e-003	0.1116	3.7000e-004	0.0378	3.1000e-004	0.0381	0.0101	2.9000e-004	0.0104	0.0000	33.3136	33.3136	8.1000e-004	0.0000	33.3339
Total	0.0154	0.0753	0.1322	6.0000e-004	0.0433	3.9000e-004	0.0437	0.0117	3.6000e-004	0.0121	0.0000	55.3552	55.3552	2.0000e-003	0.0000	55.4052

3.10 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr								MT/yr							
Archit. Coating	1.3056					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.6200e-003	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137
Total	1.3092	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.5000e-004	5.3700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6033	1.6033	4.0000e-005	0.0000	1.6043
Total	6.5000e-004	4.5000e-004	5.3700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6033	1.6033	4.0000e-005	0.0000	1.6043

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3056						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Off-Road	3.6200e-003	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137
Total	1.3092	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.5000e-004	5.3700e-003	2.0000e-005	1.8200e-003	2.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6033	1.6033	4.0000e-005	0.0000	1.6043
Total	6.5000e-004	4.5000e-004	5.3700e-003	2.0000e-005	1.8200e-003	2.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6033	1.6033	4.0000e-005	0.0000	1.6043

CalEEMod Mitigated Construction Model

Starlite Residential Development Project Mitigated Construction - Los Angeles-South Coast County, Summer

**Starlite Residential Development Project Mitigated Construction
Los Angeles-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	531.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info from applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres)

Construction Phase - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Trips and VMT - based on info from applicant

Demolition -

Grading -

Architectural Coating - assumes pool and associated structures would be treated as residential. Assumes only parking area would be coated. MM: 0 VOC

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 and Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	13,500.00	0.00
tblArchitecturalCoating	ConstArea_Parking	16,832.00	252.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	275,470.00	281,545.00
tblArchitecturalCoating	ConstArea_Residential_Interior	826,411.00	844,636.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	136,250.00	136,247.00
tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LotAcreage	2.38	0.48
tblLandUse	LotAcreage	54.87	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	WorkerTripNumber	42.00	18.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	33.1082	2.4771	4.1945	7.7900e-003	0.2012	0.1233	0.3245	0.0534	0.1232	0.1766	0.0000	747.5182	747.5182	0.0362	0.0000	748.4235
Maximum	33.1082	2.4771	4.1945	7.7900e-003	0.2012	0.1233	0.3245	0.0534	0.1232	0.1766	0.0000	747.5182	747.5182	0.0362	0.0000	748.4235

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	33.1082	2.4771	4.1945	7.7900e-003	0.1855	0.1233	0.3088	0.0495	0.1232	0.1727	0.0000	747.5182	747.5182	0.0362	0.0000	748.4235
Maximum	33.1082	2.4771	4.1945	7.7900e-003	0.1855	0.1233	0.3088	0.0495	0.1232	0.1727	0.0000	747.5182	747.5182	0.0362	0.0000	748.4235

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	7.82	0.00	4.85	7.25	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	3/31/2024	4/26/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.45

Residential Indoor: 844,636; Residential Outdoor: 281,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.6824				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885
Total	33.0440	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0642	0.0395	0.5742	1.8500e-003	0.2012	1.5100e-003	0.2027	0.0534	1.3900e-003	0.0548		184.6221	184.6221	4.5200e-003		184.7350
Total	0.0642	0.0395	0.5742	1.8500e-003	0.2012	1.5100e-003	0.2027	0.0534	1.3900e-003	0.0548		184.6221	184.6221	4.5200e-003		184.7350

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.6824					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218	0.0000	562.8961	562.8961	0.0317		563.6885
Total	33.0440	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218	0.0000	562.8961	562.8961	0.0317		563.6885

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0642	0.0395	0.5742	1.8500e-003	0.1855	1.5100e-003	0.1870	0.0495	1.3900e-003	0.0509		184.6221	184.6221	4.5200e-003		184.7350
Total	0.0642	0.0395	0.5742	1.8500e-003	0.1855	1.5100e-003	0.1870	0.0495	1.3900e-003	0.0509		184.6221	184.6221	4.5200e-003		184.7350

Starlite Residential Development Project Mitigated Construction - Los Angeles-South Coast County, Winter

**Starlite Residential Development Project Mitigated Construction
Los Angeles-South Coast County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	531.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info from applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres)

Construction Phase - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Trips and VMT - based on info from applicant

Demolition -

Grading -

Architectural Coating - assumes pool and associated structures would be treated as residential. Assumes only parking area would be coated. MM: 0 VOC

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 and Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	13,500.00	0.00
tblArchitecturalCoating	ConstArea_Parking	16,832.00	252.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	275,470.00	281,545.00
tblArchitecturalCoating	ConstArea_Residential_Interior	826,411.00	844,636.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	136,250.00	136,247.00
tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LotAcreage	2.38	0.48
tblLandUse	LotAcreage	54.87	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	WorkerTripNumber	42.00	18.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	33.1160	2.4813	4.1427	7.6800e-003	0.2012	0.1233	0.3245	0.0534	0.1232	0.1766	0.0000	736.7408	736.7408	0.0359	0.0000	737.6389
Maximum	33.1160	2.4813	4.1427	7.6800e-003	0.2012	0.1233	0.3245	0.0534	0.1232	0.1766	0.0000	736.7408	736.7408	0.0359	0.0000	737.6389

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	33.1160	2.4813	4.1427	7.6800e-003	0.1855	0.1233	0.3088	0.0495	0.1232	0.1727	0.0000	736.7408	736.7408	0.0359	0.0000	737.6389
Maximum	33.1160	2.4813	4.1427	7.6800e-003	0.1855	0.1233	0.3088	0.0495	0.1232	0.1727	0.0000	736.7408	736.7408	0.0359	0.0000	737.6389

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	7.82	0.00	4.85	7.25	0.00	2.19	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	3/31/2024	4/26/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.45

Residential Indoor: 844,636; Residential Outdoor: 281,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

- Replace Ground Cover
- Water Exposed Area
- Reduce Vehicle Speed on Unpaved Roads
- Clean Paved Roads

3.2 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.6824				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000

Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885
Total	33.0440	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0437	0.5224	1.7400e-003	0.2012	1.5100e-003	0.2027	0.0534	1.3900e-003	0.0548		173.8447	173.8447	4.2300e-003		173.9504
Total	0.0721	0.0437	0.5224	1.7400e-003	0.2012	1.5100e-003	0.2027	0.0534	1.3900e-003	0.0548		173.8447	173.8447	4.2300e-003		173.9504

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	32.6824					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218	0.0000	562.8961	562.8961	0.0317		563.6885
Total	33.0440	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218	0.0000	562.8961	562.8961	0.0317		563.6885

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0721	0.0437	0.5224	1.7400e-003	0.1855	1.5100e-003	0.1870	0.0495	1.3900e-003	0.0509		173.8447	173.8447	4.2300e-003		173.9504
Total	0.0721	0.0437	0.5224	1.7400e-003	0.1855	1.5100e-003	0.1870	0.0495	1.3900e-003	0.0509		173.8447	173.8447	4.2300e-003		173.9504

Starlite Residential Development Project Mitigated Construction - Los Angeles-South Coast County, Annual

**Starlite Residential Development Project Mitigated Construction
Los Angeles-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW/hr)	531.44	CH4 Intensity (lb/MW/hr)	0.029	N2O Intensity (lb/MW/hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info from applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres)

Construction Phase - based on info from applicant

Off-road Equipment - based on info from applicant

Off-road Equipment - based on info from applicant

Trips and VMT - based on info from applicant

Demolition -

Grading -

Architectural Coating - assumes pool and associated structures would be treated as residential. Assumes only parking area would be coated. MM: 0 VOC

Construction Off-road Equipment Mitigation - SCAQMD Rule 403 and Rule 1186

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	4,500.00	0.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	13,500.00	0.00
tblArchitecturalCoating	ConstArea_Parking	16,832.00	252.00
tblArchitecturalCoating	ConstArea_Residential_Exterior	275,470.00	281,545.00
tblArchitecturalCoating	ConstArea_Residential_Interior	826,411.00	844,636.00
tblArchitecturalCoating	EF_Residential_Interior	50.00	0.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LandUseSquareFeet	136,250.00	136,247.00
tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LotAcreage	2.38	0.48
tblLandUse	LotAcreage	54.87	5.28
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblTripsAndVMT	WorkerTripNumber	42.00	18.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.3311	0.0248	0.0416	8.0000e-005	1.9700e-003	1.2300e-003	3.2100e-003	5.2000e-004	1.2300e-003	1.7600e-003	0.0000	6.7098	6.7098	3.3000e-004	0.0000	6.7180
Maximum	0.3311	0.0248	0.0416	8.0000e-005	1.9700e-003	1.2300e-003	3.2100e-003	5.2000e-004	1.2300e-003	1.7600e-003	0.0000	6.7098	6.7098	3.3000e-004	0.0000	6.7180

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.3311	0.0248	0.0416	8.0000e-005	1.8200e-003	1.2300e-003	3.0500e-003	4.9000e-004	1.2300e-003	1.7200e-003	0.0000	6.7098	6.7098	3.3000e-004	0.0000	6.7180
Maximum	0.3311	0.0248	0.0416	8.0000e-005	1.8200e-003	1.2300e-003	3.0500e-003	4.9000e-004	1.2300e-003	1.7200e-003	0.0000	6.7098	6.7098	3.3000e-004	0.0000	6.7180

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	7.61	0.00	4.98	5.77	0.00	2.27	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
6	1-10-2024	4-9-2024	0.1271	0.1271
7	4-10-2024	7-9-2024	0.2161	0.2161
		Highest	0.2161	0.2161

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	3/31/2024	4/26/2024	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 6.45

Residential Indoor: 844,636; Residential Outdoor: 281,545; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	2	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

3.2 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3268					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6200e-003	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137
Total	0.3304	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.5000e-004	5.3700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6033	1.6033	4.0000e-005	0.0000	1.6043
Total	6.5000e-004	4.5000e-004	5.3700e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6033	1.6033	4.0000e-005	0.0000	1.6043

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
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Category	tons/yr										MT/yr					
Archit. Coating	0.3268					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	3.6200e-003	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137
Total	0.3304	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.5000e-004	4.5000e-004	5.3700e-003	2.0000e-005	1.8200e-003	2.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6033	1.6033	4.0000e-005	0.0000	1.6043
Total	6.5000e-004	4.5000e-004	5.3700e-003	2.0000e-005	1.8200e-003	2.0000e-005	1.8300e-003	4.9000e-004	1.0000e-005	5.0000e-004	0.0000	1.6033	1.6033	4.0000e-005	0.0000	1.6043

CalEEMod Operations Model

Starlite Residential Development Project Operations - Los Angeles-South Coast County, Summer

**Starlite Residential Development Project Operations
Los Angeles-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	531.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info provided by applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres).

Construction Phase -

Vehicle Trips - based on trip generation provided by Iteris

Vehicle Emission Factors - see emfac emissions adjustment

Woodstoves - no fireplaces

Area Coating - assuming pool and associated buildings will be coated as residential. Assumes parking area to be striped only

Energy Use - based on adjustment from NORESKO study. See assumptions file for adjustmet calculations

Water And Wastewater - see USS section of MND. Assigns all water use to single family housing. Assumes 100% aerobic treatment.

Solid Waste - based on solid waste from USS section of MND.

Water Mitigation -

Fleet Mix - see fleet mix adjustment in assumptions file

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	4500	0
tblAreaCoating	Area_Nonresidential_Interior	13500	0
tblAreaCoating	Area_Parking	16832	252
tblAreaCoating	Area_Residential_Exterior	275470	281545
tblAreaCoating	Area_Residential_Interior	826411	844636
tblEnergyUse	T24E	243.83	238.95
tblEnergyUse	T24E	443.48	425.74
tblEnergyUse	T24NG	10,792.56	10,252.93
tblEnergyUse	T24NG	21,090.59	19,192.44
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	32.30	0.00
tblFireplaces	NumberGas	143.65	0.00
tblFireplaces	NumberNoFireplace	3.80	0.00
tblFireplaces	NumberNoFireplace	16.90	0.00

tblFireplaces	NumberWood	1.90	0.00
tblFireplaces	NumberWood	8.45	0.00
tblFleetMix	HHD	0.03	4.2240e-003
tblFleetMix	HHD	0.03	4.2240e-003
tblFleetMix	LDA	0.55	0.66
tblFleetMix	LDA	0.55	0.66
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.25
tblFleetMix	LDT2	0.21	0.25
tblFleetMix	LHD1	0.02	1.9960e-003
tblFleetMix	LHD1	0.02	1.9960e-003
tblFleetMix	LHD2	6.2530e-003	8.3200e-004
tblFleetMix	LHD2	6.2530e-003	8.3200e-004
tblFleetMix	MCY	5.2170e-003	6.6980e-003
tblFleetMix	MCY	5.2170e-003	6.6980e-003
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MH	8.5000e-004	1.1300e-004
tblFleetMix	MH	8.5000e-004	1.1300e-004
tblFleetMix	MHD	0.02	2.7430e-003
tblFleetMix	MHD	0.02	2.7430e-003
tblFleetMix	OBUS	2.5600e-003	0.00
tblFleetMix	OBUS	2.5600e-003	0.00
tblFleetMix	SBUS	6.9600e-004	9.3000e-005
tblFleetMix	SBUS	6.9600e-004	9.3000e-005
tblFleetMix	UBUS	2.0710e-003	0.00
tblFleetMix	UBUS	2.0710e-003	0.00
tblLandUse	LandUseSquareFeet	136,250.00	136,247.00

tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LotAcreage	2.38	0.48
tblLandUse	LotAcreage	54.87	5.28
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblSolidWaste	SolidWasteGenerationRate	17.48	0.00
tblSolidWaste	SolidWasteGenerationRate	51.30	0.00
tblSolidWaste	SolidWasteGenerationRate	198.03	324.85
tblVehicleEF	HHD	0.47	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.07	4.6362e-007
tblVehicleEF	HHD	1.60	6.61
tblVehicleEF	HHD	1.08	0.47
tblVehicleEF	HHD	3.29	8.3269e-003
tblVehicleEF	HHD	4,415.48	1,097.04
tblVehicleEF	HHD	1,567.39	1,379.15
tblVehicleEF	HHD	10.70	0.08
tblVehicleEF	HHD	13.98	5.45
tblVehicleEF	HHD	2.11	2.58
tblVehicleEF	HHD	19.48	2.35
tblVehicleEF	HHD	8.9530e-003	2.6642e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2770e-003	0.02
tblVehicleEF	HHD	9.2000e-005	1.1927e-006
tblVehicleEF	HHD	8.5660e-003	2.5490e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8420e-003	8.8994e-003
tblVehicleEF	HHD	6.0050e-003	0.02

tblVehicleEF	HHD	8.5000e-005	1.0967e-006
tblVehicleEF	HHD	9.9000e-005	7.8735e-006
tblVehicleEF	HHD	4.3090e-003	2.0119e-004
tblVehicleEF	HHD	0.41	0.48
tblVehicleEF	HHD	7.6000e-005	5.3773e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	3.5500e-004	8.2514e-005
tblVehicleEF	HHD	0.07	2.4556e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	7.7751e-007
tblVehicleEF	HHD	9.9000e-005	7.8735e-006
tblVehicleEF	HHD	4.3090e-003	2.0119e-004
tblVehicleEF	HHD	0.48	0.55
tblVehicleEF	HHD	7.6000e-005	5.3773e-006
tblVehicleEF	HHD	0.20	0.11
tblVehicleEF	HHD	3.5500e-004	8.2514e-005
tblVehicleEF	HHD	0.08	2.6885e-006
tblVehicleEF	HHD	0.44	0.03
tblVehicleEF	HHD	0.09	0.08
tblVehicleEF	HHD	0.06	5.1512e-007
tblVehicleEF	HHD	1.17	6.61
tblVehicleEF	HHD	1.08	0.46
tblVehicleEF	HHD	3.12	9.0653e-003
tblVehicleEF	HHD	4,677.81	1,113.07
tblVehicleEF	HHD	1,567.39	1,398.54
tblVehicleEF	HHD	10.70	0.08
tblVehicleEF	HHD	14.43	5.50
tblVehicleEF	HHD	2.00	2.56

tblVehicleEF	HHD	19.47	2.35
tblVehicleEF	HHD	7.5480e-003	2.7790e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2770e-003	0.02
tblVehicleEF	HHD	9.2000e-005	1.3513e-006
tblVehicleEF	HHD	7.2220e-003	2.6588e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8420e-003	8.8984e-003
tblVehicleEF	HHD	6.0050e-003	0.02
tblVehicleEF	HHD	8.5000e-005	1.2425e-006
tblVehicleEF	HHD	1.5000e-004	9.2271e-006
tblVehicleEF	HHD	4.4160e-003	2.3361e-004
tblVehicleEF	HHD	0.38	0.48
tblVehicleEF	HHD	1.0700e-004	6.2951e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	3.4300e-004	9.7110e-005
tblVehicleEF	HHD	0.07	2.7227e-006
tblVehicleEF	HHD	0.04	0.01
tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.5800e-004	8.3274e-007
tblVehicleEF	HHD	1.5000e-004	9.2271e-006
tblVehicleEF	HHD	4.4160e-003	2.3361e-004
tblVehicleEF	HHD	0.45	0.55
tblVehicleEF	HHD	1.0700e-004	6.2951e-006
tblVehicleEF	HHD	0.20	0.11
tblVehicleEF	HHD	3.4300e-004	9.7110e-005
tblVehicleEF	HHD	0.07	2.9810e-006
tblVehicleEF	HHD	0.50	0.02

tblVehicleEF	HHD	0.09	9.8656e-004
tblVehicleEF	HHD	0.07	4.8874e-007
tblVehicleEF	HHD	2.21	6.73
tblVehicleEF	HHD	1.08	0.24
tblVehicleEF	HHD	3.32	8.8540e-003
tblVehicleEF	HHD	4,053.22	1,107.93
tblVehicleEF	HHD	1,567.39	1,323.93
tblVehicleEF	HHD	10.70	0.08
tblVehicleEF	HHD	13.36	5.94
tblVehicleEF	HHD	2.08	2.64
tblVehicleEF	HHD	19.48	2.35
tblVehicleEF	HHD	0.01	3.3888e-003
tblVehicleEF	HHD	0.06	0.06
tblVehicleEF	HHD	0.04	0.03
tblVehicleEF	HHD	6.2770e-003	0.02
tblVehicleEF	HHD	9.2000e-005	1.1927e-006
tblVehicleEF	HHD	0.01	3.2422e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8420e-003	8.7489e-003
tblVehicleEF	HHD	6.0050e-003	0.02
tblVehicleEF	HHD	8.5000e-005	1.0967e-006
tblVehicleEF	HHD	9.6000e-005	5.2150e-006
tblVehicleEF	HHD	4.5590e-003	2.2209e-004
tblVehicleEF	HHD	0.44	0.42
tblVehicleEF	HHD	7.3000e-005	3.5631e-006
tblVehicleEF	HHD	0.09	0.02
tblVehicleEF	HHD	3.8700e-004	8.9534e-005
tblVehicleEF	HHD	0.07	2.5791e-006
tblVehicleEF	HHD	0.04	0.01

tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	7.8578e-007
tblVehicleEF	HHD	9.6000e-005	5.2150e-006
tblVehicleEF	HHD	4.5590e-003	2.2209e-004
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tblVehicleEF	HHD	7.3000e-005	3.5631e-006
tblVehicleEF	HHD	0.20	0.02
tblVehicleEF	HHD	3.8700e-004	8.9534e-005
tblVehicleEF	HHD	0.08	2.8237e-006
tblVehicleEF	LDA	4.4230e-003	2.5270e-003
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tblVehicleEF	LDA	0.57	0.69
tblVehicleEF	LDA	0.95	1.68
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tblVehicleEF	LDA	52.79	50.50
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.05	0.15
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.0900e-003	1.6549e-003
tblVehicleEF	LDA	2.2190e-003	1.6911e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9260e-003	1.5241e-003
tblVehicleEF	LDA	2.0400e-003	1.5549e-003
tblVehicleEF	LDA	0.03	0.07
tblVehicleEF	LDA	0.09	0.09
tblVehicleEF	LDA	0.03	0.06
tblVehicleEF	LDA	0.01	9.5250e-003

tblVehicleEF	LDA	0.04	0.02
tblVehicleEF	LDA	0.06	0.17
tblVehicleEF	LDA	2.5430e-003	2.6318e-003
tblVehicleEF	LDA	5.4400e-004	4.8965e-004
tblVehicleEF	LDA	0.03	0.07
tblVehicleEF	LDA	0.09	0.09
tblVehicleEF	LDA	0.03	0.06
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.02
tblVehicleEF	LDA	0.06	0.18
tblVehicleEF	LDA	4.7040e-003	2.8292e-003
tblVehicleEF	LDA	3.7040e-003	0.04
tblVehicleEF	LDA	0.63	0.73
tblVehicleEF	LDA	0.81	1.74
tblVehicleEF	LDA	265.72	279.34
tblVehicleEF	LDA	52.79	52.16
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.05	0.16
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.0900e-003	1.7127e-003
tblVehicleEF	LDA	2.2190e-003	1.7623e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9260e-003	1.5777e-003
tblVehicleEF	LDA	2.0400e-003	1.6204e-003
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.04	0.06

tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.05	0.18
tblVehicleEF	LDA	2.6610e-003	2.7078e-003
tblVehicleEF	LDA	5.4100e-004	5.0571e-004
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.05	0.20
tblVehicleEF	LDA	4.3320e-003	2.3135e-003
tblVehicleEF	LDA	4.2560e-003	0.04
tblVehicleEF	LDA	0.55	0.60
tblVehicleEF	LDA	0.98	2.03
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tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.0900e-003	1.6549e-003
tblVehicleEF	LDA	2.2190e-003	1.6911e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9260e-003	1.5241e-003
tblVehicleEF	LDA	2.0400e-003	1.5549e-003
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.10	0.10

tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	8.8101e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.19
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tblVehicleEF	LDA	5.4400e-004	4.9594e-004
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.21
tblVehicleEF	LDT1	0.01	6.2921e-003
tblVehicleEF	LDT1	0.01	0.05
tblVehicleEF	LDT1	1.40	1.28
tblVehicleEF	LDT1	2.25	1.80
tblVehicleEF	LDT1	322.00	319.70
tblVehicleEF	LDT1	65.45	60.24
tblVehicleEF	LDT1	0.13	0.08
tblVehicleEF	LDT1	0.13	0.20
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.2340e-003	2.3497e-003
tblVehicleEF	LDT1	3.1500e-003	2.2896e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.9770e-003	2.1620e-003
tblVehicleEF	LDT1	2.8970e-003	2.1052e-003
tblVehicleEF	LDT1	0.11	0.16

tblVehicleEF	LDT1	0.23	0.18
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.16	0.07
tblVehicleEF	LDT1	0.15	0.25
tblVehicleEF	LDT1	3.2370e-003	3.0995e-003
tblVehicleEF	LDT1	6.9400e-004	5.8407e-004
tblVehicleEF	LDT1	0.11	0.16
tblVehicleEF	LDT1	0.23	0.18
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.16	0.07
tblVehicleEF	LDT1	0.16	0.28
tblVehicleEF	LDT1	0.01	7.0910e-003
tblVehicleEF	LDT1	9.8770e-003	0.06
tblVehicleEF	LDT1	1.52	1.41
tblVehicleEF	LDT1	1.91	1.86
tblVehicleEF	LDT1	336.08	326.72
tblVehicleEF	LDT1	65.45	61.91
tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.12	0.22
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.2340e-003	2.4947e-003
tblVehicleEF	LDT1	3.1500e-003	2.4463e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.9770e-003	2.2954e-003
tblVehicleEF	LDT1	2.8970e-003	2.2494e-003

tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.24	0.19
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.14	0.08
tblVehicleEF	LDT1	0.13	0.28
tblVehicleEF	LDT1	3.3800e-003	3.1676e-003
tblVehicleEF	LDT1	6.8800e-004	6.0018e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.24	0.19
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.14	0.08
tblVehicleEF	LDT1	0.15	0.31
tblVehicleEF	LDT1	0.01	5.8250e-003
tblVehicleEF	LDT1	0.01	0.06
tblVehicleEF	LDT1	1.36	1.14
tblVehicleEF	LDT1	2.32	2.18
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tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.2340e-003	2.3497e-003
tblVehicleEF	LDT1	3.1500e-003	2.2896e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.9770e-003	2.1620e-003

tblVehicleEF	LDT1	2.8970e-003	2.1052e-003
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.18	0.09
tblVehicleEF	LDT1	0.15	0.29
tblVehicleEF	LDT1	3.1850e-003	2.9454e-003
tblVehicleEF	LDT1	6.9500e-004	5.9132e-004
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.18	0.09
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT2	6.1600e-003	4.2736e-003
tblVehicleEF	LDT2	5.0900e-003	0.05
tblVehicleEF	LDT2	0.76	0.96
tblVehicleEF	LDT2	1.14	2.10
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tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.21
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.7734e-003
tblVehicleEF	LDT2	2.3970e-003	1.7548e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003

tblVehicleEF	LDT2	2.0060e-003	1.6322e-003
tblVehicleEF	LDT2	2.2040e-003	1.6135e-003
tblVehicleEF	LDT2	0.04	0.10
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.04	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	3.5800e-003	3.2531e-003
tblVehicleEF	LDT2	7.4700e-004	6.1899e-004
tblVehicleEF	LDT2	0.04	0.10
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.04	0.09
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.08	0.26
tblVehicleEF	LDT2	6.5370e-003	4.7109e-003
tblVehicleEF	LDT2	4.5360e-003	0.06
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tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.08	0.24
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.8262e-003
tblVehicleEF	LDT2	2.3970e-003	1.8187e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
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tblVehicleEF	LDT2	2.2040e-003	1.6722e-003
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tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.06	0.26
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tblVehicleEF	LDT2	7.4400e-004	6.4329e-004
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tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.07	0.28
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tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.24
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.7734e-003
tblVehicleEF	LDT2	2.3970e-003	1.7548e-003

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	2.0060e-003	1.6322e-003
tblVehicleEF	LDT2	2.2040e-003	1.6135e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LDT2	3.5210e-003	3.1053e-003
tblVehicleEF	LDT2	7.4800e-004	6.2709e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.29
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tblVehicleEF	LHD1	9.2560e-003	4.5391e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.66	0.51
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tblVehicleEF	LHD1	588.36	641.02
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tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.78	0.45

tblVehicleEF	LHD1	0.89	0.28
tblVehicleEF	LHD1	8.3700e-004	8.1539e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7826e-003
tblVehicleEF	LHD1	8.5610e-003	5.7485e-003
tblVehicleEF	LHD1	8.8500e-004	2.5368e-004
tblVehicleEF	LHD1	8.0100e-004	7.8012e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5540e-003	2.4456e-003
tblVehicleEF	LHD1	8.1660e-003	5.4721e-003
tblVehicleEF	LHD1	8.1400e-004	2.3325e-004
tblVehicleEF	LHD1	2.7900e-003	3.1859e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7340e-003	1.8617e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.29	0.17
tblVehicleEF	LHD1	0.22	0.06
tblVehicleEF	LHD1	8.9000e-005	8.4839e-005
tblVehicleEF	LHD1	5.7670e-003	6.2545e-003
tblVehicleEF	LHD1	3.5400e-004	1.1452e-004
tblVehicleEF	LHD1	2.7900e-003	3.1859e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7340e-003	1.8617e-003
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.29	0.17
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	4.9880e-003	5.3761e-003

tblVehicleEF	LHD1	9.4510e-003	5.0878e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.67	0.58
tblVehicleEF	LHD1	2.26	1.03
tblVehicleEF	LHD1	8.95	8.81
tblVehicleEF	LHD1	588.36	653.00
tblVehicleEF	LHD1	31.02	11.97
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.73	0.52
tblVehicleEF	LHD1	0.85	0.30
tblVehicleEF	LHD1	8.3700e-004	7.8359e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
tblVehicleEF	LHD1	8.5610e-003	5.9884e-003
tblVehicleEF	LHD1	8.8500e-004	2.6819e-004
tblVehicleEF	LHD1	8.0100e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5540e-003	2.4323e-003
tblVehicleEF	LHD1	8.1660e-003	5.7009e-003
tblVehicleEF	LHD1	8.1400e-004	2.4659e-004
tblVehicleEF	LHD1	4.1640e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.4160e-003	2.0042e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.28	0.18
tblVehicleEF	LHD1	0.21	0.07
tblVehicleEF	LHD1	8.9000e-005	8.5605e-005

tblVehicleEF	LHD1	5.7670e-003	6.3745e-003
tblVehicleEF	LHD1	3.5200e-004	1.1848e-004
tblVehicleEF	LHD1	4.1640e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.4160e-003	2.0042e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.28	0.18
tblVehicleEF	LHD1	0.23	0.08
tblVehicleEF	LHD1	4.9880e-003	5.1306e-003
tblVehicleEF	LHD1	9.2060e-003	4.4356e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.66	0.50
tblVehicleEF	LHD1	2.39	1.04
tblVehicleEF	LHD1	8.95	8.74
tblVehicleEF	LHD1	588.36	641.00
tblVehicleEF	LHD1	31.02	11.67
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.76	0.47
tblVehicleEF	LHD1	0.89	0.30
tblVehicleEF	LHD1	8.3700e-004	8.1539e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7826e-003
tblVehicleEF	LHD1	8.5610e-003	5.7485e-003
tblVehicleEF	LHD1	8.8500e-004	2.5368e-004
tblVehicleEF	LHD1	8.0100e-004	7.8012e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5540e-003	2.4456e-003

tblVehicleEF	LHD1	8.1660e-003	5.4721e-003
tblVehicleEF	LHD1	8.1400e-004	2.3325e-004
tblVehicleEF	LHD1	2.9050e-003	2.2616e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7020e-003	1.3351e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.31	0.19
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	8.9000e-005	8.4839e-005
tblVehicleEF	LHD1	5.7670e-003	6.2543e-003
tblVehicleEF	LHD1	3.5400e-004	1.1545e-004
tblVehicleEF	LHD1	2.9050e-003	2.2616e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7020e-003	1.3351e-003
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.31	0.19
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD2	3.5180e-003	3.5633e-003
tblVehicleEF	LHD2	3.4110e-003	3.2788e-003
tblVehicleEF	LHD2	6.5620e-003	8.8868e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.28	0.35
tblVehicleEF	LHD2	1.17	0.65
tblVehicleEF	LHD2	13.57	13.29
tblVehicleEF	LHD2	605.98	642.03
tblVehicleEF	LHD2	26.15	8.77
tblVehicleEF	LHD2	0.09	0.08

tblVehicleEF	LHD2	0.46	0.58
tblVehicleEF	LHD2	0.46	0.19
tblVehicleEF	LHD2	1.1260e-003	1.3052e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.4980e-003
tblVehicleEF	LHD2	4.2100e-004	1.4313e-004
tblVehicleEF	LHD2	1.0770e-003	1.2487e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6710e-003	2.6534e-003
tblVehicleEF	LHD2	7.7140e-003	9.0713e-003
tblVehicleEF	LHD2	3.8700e-004	1.3161e-004
tblVehicleEF	LHD2	9.3900e-004	1.9234e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.4000e-004	1.1636e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3300e-004	1.2730e-004
tblVehicleEF	LHD2	5.9000e-003	6.2092e-003
tblVehicleEF	LHD2	2.8200e-004	8.6758e-005
tblVehicleEF	LHD2	9.3900e-004	1.9234e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-004	1.1636e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.10	0.05

tblVehicleEF	LHD2	3.5180e-003	3.7479e-003
tblVehicleEF	LHD2	3.4510e-003	3.5743e-003
tblVehicleEF	LHD2	6.3490e-003	9.7971e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.28	0.39
tblVehicleEF	LHD2	1.12	0.69
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	605.98	654.07
tblVehicleEF	LHD2	26.15	9.16
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.44	0.67
tblVehicleEF	LHD2	0.44	0.21
tblVehicleEF	LHD2	1.1260e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.6267e-003
tblVehicleEF	LHD2	4.2100e-004	1.5202e-004
tblVehicleEF	LHD2	1.0770e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6710e-003	2.6429e-003
tblVehicleEF	LHD2	7.7140e-003	9.1939e-003
tblVehicleEF	LHD2	3.8700e-004	1.3978e-004
tblVehicleEF	LHD2	1.3970e-003	2.1079e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.8800e-004	1.2531e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.09	0.05

tblVehicleEF	LHD2	1.3300e-004	1.2803e-004
tblVehicleEF	LHD2	5.9000e-003	6.3287e-003
tblVehicleEF	LHD2	2.8100e-004	9.0638e-005
tblVehicleEF	LHD2	1.3970e-003	2.1079e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	8.8800e-004	1.2531e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	3.5180e-003	3.5541e-003
tblVehicleEF	LHD2	3.4000e-003	3.2376e-003
tblVehicleEF	LHD2	6.6050e-003	9.2660e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.28	0.35
tblVehicleEF	LHD2	1.18	0.68
tblVehicleEF	LHD2	13.57	13.29
tblVehicleEF	LHD2	605.98	642.02
tblVehicleEF	LHD2	26.15	8.83
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.46	0.61
tblVehicleEF	LHD2	0.46	0.21
tblVehicleEF	LHD2	1.1260e-003	1.3052e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.4980e-003
tblVehicleEF	LHD2	4.2100e-004	1.4313e-004
tblVehicleEF	LHD2	1.0770e-003	1.2487e-003
tblVehicleEF	LHD2	0.04	0.04

tblVehicleEF	LHD2	2.6710e-003	2.6534e-003
tblVehicleEF	LHD2	7.7140e-003	9.0713e-003
tblVehicleEF	LHD2	3.8700e-004	1.3161e-004
tblVehicleEF	LHD2	9.4200e-004	1.3333e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.1900e-004	8.1693e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.07	0.11
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2730e-004
tblVehicleEF	LHD2	5.9000e-003	6.2091e-003
tblVehicleEF	LHD2	2.8200e-004	8.7371e-005
tblVehicleEF	LHD2	9.4200e-004	1.3333e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.1900e-004	8.1693e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.07	0.11
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	MCY	0.55	0.38
tblVehicleEF	MCY	0.15	0.21
tblVehicleEF	MCY	18.62	18.05
tblVehicleEF	MCY	9.70	7.79
tblVehicleEF	MCY	190.93	223.47
tblVehicleEF	MCY	43.78	57.01
tblVehicleEF	MCY	1.13	0.99
tblVehicleEF	MCY	0.31	0.25
tblVehicleEF	MCY	0.01	0.01

tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.5427e-003
tblVehicleEF	MCY	3.5080e-003	3.0379e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3736e-003
tblVehicleEF	MCY	3.2930e-003	2.8511e-003
tblVehicleEF	MCY	1.05	1.70
tblVehicleEF	MCY	0.61	0.68
tblVehicleEF	MCY	0.64	1.04
tblVehicleEF	MCY	2.60	2.56
tblVehicleEF	MCY	0.56	0.50
tblVehicleEF	MCY	2.03	1.60
tblVehicleEF	MCY	2.2930e-003	2.2114e-003
tblVehicleEF	MCY	6.5600e-004	5.6414e-004
tblVehicleEF	MCY	1.05	1.70
tblVehicleEF	MCY	0.61	0.68
tblVehicleEF	MCY	0.64	1.04
tblVehicleEF	MCY	3.25	3.19
tblVehicleEF	MCY	0.56	0.50
tblVehicleEF	MCY	2.21	1.74
tblVehicleEF	MCY	0.54	0.37
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	17.96	18.15
tblVehicleEF	MCY	8.84	7.77
tblVehicleEF	MCY	190.93	222.30
tblVehicleEF	MCY	43.78	57.32
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25

tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.4798e-003
tblVehicleEF	MCY	3.5080e-003	3.1545e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3160e-003
tblVehicleEF	MCY	3.2930e-003	2.9646e-003
tblVehicleEF	MCY	1.71	1.71
tblVehicleEF	MCY	0.67	0.69
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.54	2.54
tblVehicleEF	MCY	0.53	0.51
tblVehicleEF	MCY	1.81	1.60
tblVehicleEF	MCY	2.2810e-003	2.1999e-003
tblVehicleEF	MCY	6.3500e-004	5.6721e-004
tblVehicleEF	MCY	1.71	1.71
tblVehicleEF	MCY	0.67	0.69
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	3.18	3.16
tblVehicleEF	MCY	0.53	0.51
tblVehicleEF	MCY	1.97	1.74
tblVehicleEF	MCY	0.55	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.72	18.88
tblVehicleEF	MCY	9.85	8.72
tblVehicleEF	MCY	190.93	225.05
tblVehicleEF	MCY	43.78	59.29
tblVehicleEF	MCY	1.11	1.11

tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.5427e-003
tblVehicleEF	MCY	3.5080e-003	3.0379e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3736e-003
tblVehicleEF	MCY	3.2930e-003	2.8511e-003
tblVehicleEF	MCY	1.15	1.16
tblVehicleEF	MCY	0.78	0.80
tblVehicleEF	MCY	0.61	0.62
tblVehicleEF	MCY	2.61	2.63
tblVehicleEF	MCY	0.65	0.62
tblVehicleEF	MCY	2.07	1.84
tblVehicleEF	MCY	2.2950e-003	2.2270e-003
tblVehicleEF	MCY	6.5900e-004	5.8668e-004
tblVehicleEF	MCY	1.15	1.16
tblVehicleEF	MCY	0.78	0.80
tblVehicleEF	MCY	0.61	0.62
tblVehicleEF	MCY	3.26	3.28
tblVehicleEF	MCY	0.65	0.62
tblVehicleEF	MCY	2.25	2.00
tblVehicleEF	MDV	0.01	5.2986e-003
tblVehicleEF	MDV	0.01	0.06
tblVehicleEF	MDV	1.10	1.07
tblVehicleEF	MDV	1.99	2.34
tblVehicleEF	MDV	481.40	410.36
tblVehicleEF	MDV	96.60	77.49

tblVehicleEF	MDV	0.12	0.07
tblVehicleEF	MDV	0.17	0.26
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2730e-003	1.8649e-003
tblVehicleEF	MDV	2.4250e-003	1.8223e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0940e-003	1.7191e-003
tblVehicleEF	MDV	2.2300e-003	1.6756e-003
tblVehicleEF	MDV	0.06	0.12
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.07	0.11
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.15	0.29
tblVehicleEF	MDV	4.8190e-003	3.9762e-003
tblVehicleEF	MDV	1.0000e-003	7.5124e-004
tblVehicleEF	MDV	0.06	0.12
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.07	0.11
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.16	0.31
tblVehicleEF	MDV	0.01	6.0286e-003
tblVehicleEF	MDV	9.6010e-003	0.07
tblVehicleEF	MDV	1.21	1.19
tblVehicleEF	MDV	1.70	2.49
tblVehicleEF	MDV	502.45	423.99

tblVehicleEF	MDV	96.60	80.65
tblVehicleEF	MDV	0.10	0.08
tblVehicleEF	MDV	0.16	0.29
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2730e-003	1.9587e-003
tblVehicleEF	MDV	2.4250e-003	1.9377e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0940e-003	1.8056e-003
tblVehicleEF	MDV	2.2300e-003	1.7819e-003
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.13	0.32
tblVehicleEF	MDV	5.0310e-003	4.1085e-003
tblVehicleEF	MDV	9.9500e-004	7.8193e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.14	0.35
tblVehicleEF	MDV	0.01	4.8813e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.06	0.95
tblVehicleEF	MDV	2.05	2.85

tblVehicleEF	MDV	473.66	394.54
tblVehicleEF	MDV	96.60	78.44
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.17	0.28
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2730e-003	1.8649e-003
tblVehicleEF	MDV	2.4250e-003	1.8223e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0940e-003	1.7191e-003
tblVehicleEF	MDV	2.2300e-003	1.6756e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.15	0.33
tblVehicleEF	MDV	4.7420e-003	3.8228e-003
tblVehicleEF	MDV	1.0010e-003	7.6048e-004
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.16	0.36
tblVehicleEF	MH	0.02	7.8380e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.43	0.83

tblVehicleEF	MH	4.82	1.84
tblVehicleEF	MH	1,126.11	1,447.98
tblVehicleEF	MH	59.42	18.11
tblVehicleEF	MH	0.93	0.94
tblVehicleEF	MH	0.71	0.24
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.5494e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2578e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.3440e-004
tblVehicleEF	MH	0.76	0.93
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.33	0.39
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.28	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7800e-004	1.7926e-004
tblVehicleEF	MH	0.76	0.93
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.33	0.39
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.30	0.09
tblVehicleEF	MH	0.02	8.8559e-003
tblVehicleEF	MH	0.02	0.02

tblVehicleEF	MH	1.47	1.00
tblVehicleEF	MH	4.54	1.92
tblVehicleEF	MH	1,126.11	1,475.27
tblVehicleEF	MH	59.42	18.65
tblVehicleEF	MH	0.86	0.97
tblVehicleEF	MH	0.68	0.24
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.6718e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2515e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.4566e-004
tblVehicleEF	MH	1.12	1.04
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.47	0.43
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.27	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7300e-004	1.8454e-004
tblVehicleEF	MH	1.12	1.04
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.47	0.43
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.29	0.10
tblVehicleEF	MH	0.02	7.6203e-003

tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.42	0.81
tblVehicleEF	MH	4.87	1.96
tblVehicleEF	MH	1,126.11	1,447.93
tblVehicleEF	MH	59.42	18.33
tblVehicleEF	MH	0.91	0.99
tblVehicleEF	MH	0.71	0.25
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.5494e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2578e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.3440e-004
tblVehicleEF	MH	0.85	0.72
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	0.06	0.04
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.28	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7900e-004	1.8140e-004
tblVehicleEF	MH	0.85	0.72
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.31	0.10

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tblVehicleEF	MHD	3.4980e-003	1.8347e-003
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tblVehicleEF	MHD	0.35	0.33
tblVehicleEF	MHD	0.29	0.24
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tblVehicleEF	MHD	1,140.29	1,014.01
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tblVehicleEF	MHD	10.11	1.59
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tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1497e-003
tblVehicleEF	MHD	7.8500e-004	1.2776e-004
tblVehicleEF	MHD	8.6000e-005	2.3001e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8771e-003
tblVehicleEF	MHD	7.2200e-004	1.1747e-004
tblVehicleEF	MHD	9.8100e-004	8.4134e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	6.6900e-004	5.3093e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.32	0.06

tblVehicleEF	MHD	1.2770e-003	6.0471e-004
tblVehicleEF	MHD	0.01	9.6935e-003
tblVehicleEF	MHD	7.0500e-004	1.1250e-004
tblVehicleEF	MHD	9.8100e-004	8.4134e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.6900e-004	5.3093e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.01	4.2036e-003
tblVehicleEF	MHD	3.5450e-003	2.1413e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.26	0.34
tblVehicleEF	MHD	0.30	0.28
tblVehicleEF	MHD	4.87	1.31
tblVehicleEF	MHD	140.40	64.73
tblVehicleEF	MHD	1,140.29	1,030.65
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tblVehicleEF	MHD	0.71	1.02
tblVehicleEF	MHD	10.08	1.58
tblVehicleEF	MHD	7.6000e-005	2.7779e-004
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1299e-003
tblVehicleEF	MHD	7.8500e-004	1.3466e-004
tblVehicleEF	MHD	7.2000e-005	2.6577e-004
tblVehicleEF	MHD	0.06	0.06

tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8582e-003
tblVehicleEF	MHD	7.2200e-004	1.2382e-004
tblVehicleEF	MHD	1.4660e-003	9.2475e-004
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	9.3700e-004	5.7330e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.3510e-003	6.1548e-004
tblVehicleEF	MHD	0.01	9.8544e-003
tblVehicleEF	MHD	7.0000e-004	1.1815e-004
tblVehicleEF	MHD	1.4660e-003	9.2475e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	9.3700e-004	5.7330e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.33	0.07
tblVehicleEF	MHD	0.02	4.6594e-003
tblVehicleEF	MHD	3.4850e-003	1.7872e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.49	0.49
tblVehicleEF	MHD	0.29	0.24
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tblVehicleEF	MHD	61.49	11.50

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tblVehicleEF	MHD	0.74	1.07
tblVehicleEF	MHD	10.12	1.60
tblVehicleEF	MHD	1.0900e-004	3.3923e-004
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1497e-003
tblVehicleEF	MHD	7.8500e-004	1.2776e-004
tblVehicleEF	MHD	1.0500e-004	3.2456e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8771e-003
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.4900e-004	3.7019e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.1750e-003	6.0440e-004
tblVehicleEF	MHD	0.01	9.6934e-003
tblVehicleEF	MHD	7.0600e-004	1.1379e-004
tblVehicleEF	MHD	9.9000e-004	5.7591e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.4900e-004	3.7019e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.03

tblVehicleEF	MHD	0.35	0.07
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tblVehicleEF	OBUS	5.4840e-003	4.5133e-003
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tblVehicleEF	OBUS	0.25	0.61
tblVehicleEF	OBUS	0.41	0.56
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tblVehicleEF	OBUS	102.93	90.13
tblVehicleEF	OBUS	1,248.17	1,333.81
tblVehicleEF	OBUS	67.50	18.36
tblVehicleEF	OBUS	0.22	0.34
tblVehicleEF	OBUS	0.71	1.11
tblVehicleEF	OBUS	2.50	0.84
tblVehicleEF	OBUS	2.0000e-005	1.0741e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.7480e-003	7.3393e-003
tblVehicleEF	OBUS	8.4800e-004	2.0131e-004
tblVehicleEF	OBUS	1.9000e-005	1.0277e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.6130e-003	7.0068e-003
tblVehicleEF	OBUS	7.8000e-004	1.8509e-004
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tblVehicleEF	OBUS	0.03	0.05
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tblVehicleEF	OBUS	0.04	0.07

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tblVehicleEF	OBUS	0.67	1.09
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tblVehicleEF	OBUS	1.7000e-005	1.0501e-004
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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.7480e-003	7.0871e-003
tblVehicleEF	OBUS	8.4800e-004	2.0001e-004
tblVehicleEF	OBUS	1.6000e-005	1.0047e-004

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tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.6130e-003	6.7657e-003
tblVehicleEF	OBUS	7.8000e-004	1.8390e-004
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tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.0660e-003	1.3153e-003
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tblVehicleEF	OBUS	0.04	0.08
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tblVehicleEF	SBUS	0.02	0.02
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tblVehicleEF	SBUS	6.7700e-004	5.6163e-005
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tblVehicleEF	SBUS	7.24	1.03
tblVehicleEF	SBUS	1,023.86	344.60

tblVehicleEF	SBUS	1,062.27	1,068.92
tblVehicleEF	SBUS	57.76	6.25
tblVehicleEF	SBUS	7.48	2.84
tblVehicleEF	SBUS	3.40	4.03
tblVehicleEF	SBUS	11.58	1.01
tblVehicleEF	SBUS	8.5240e-003	3.9414e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.9100e-004	6.5725e-005
tblVehicleEF	SBUS	8.1550e-003	3.7709e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6490e-003	2.6420e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.1900e-004	6.0432e-005
tblVehicleEF	SBUS	3.3910e-003	1.0829e-003
tblVehicleEF	SBUS	0.03	9.8617e-003
tblVehicleEF	SBUS	1.00	0.38
tblVehicleEF	SBUS	1.8130e-003	5.7290e-004
tblVehicleEF	SBUS	0.09	0.08
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.2939e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	7.0300e-004	6.1800e-005
tblVehicleEF	SBUS	3.3910e-003	1.0829e-003
tblVehicleEF	SBUS	0.03	9.8617e-003
tblVehicleEF	SBUS	1.45	0.55
tblVehicleEF	SBUS	1.8130e-003	5.7290e-004

tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.42	0.05
tblVehicleEF	UBUS	2.28	5.85
tblVehicleEF	UBUS	0.05	9.0511e-003
tblVehicleEF	UBUS	10.20	45.43
tblVehicleEF	UBUS	8.89	0.63
tblVehicleEF	UBUS	1,934.49	1,980.91
tblVehicleEF	UBUS	104.15	7.90
tblVehicleEF	UBUS	8.69	0.46
tblVehicleEF	UBUS	14.82	0.07
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2446e-003
tblVehicleEF	UBUS	1.1960e-003	7.1367e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0994e-003
tblVehicleEF	UBUS	1.1000e-003	6.5620e-005
tblVehicleEF	UBUS	4.1520e-003	6.2304e-004
tblVehicleEF	UBUS	0.07	5.0779e-003
tblVehicleEF	UBUS	2.4690e-003	4.2109e-004
tblVehicleEF	UBUS	0.74	0.09
tblVehicleEF	UBUS	0.02	1.0548e-003
tblVehicleEF	UBUS	0.69	0.04
tblVehicleEF	UBUS	9.7410e-003	1.3278e-003
tblVehicleEF	UBUS	1.2020e-003	7.8193e-005
tblVehicleEF	UBUS	4.1520e-003	6.2304e-004
tblVehicleEF	UBUS	0.07	5.0779e-003

tblVehicleEF	UBUS	2.4690e-003	4.2109e-004
tblVehicleEF	UBUS	3.11	5.97
tblVehicleEF	UBUS	0.02	1.0548e-003
tblVehicleEF	UBUS	0.76	0.04
tblVehicleEF	UBUS	2.29	5.85
tblVehicleEF	UBUS	0.05	9.9367e-003
tblVehicleEF	UBUS	10.25	45.42
tblVehicleEF	UBUS	7.71	0.63
tblVehicleEF	UBUS	1,934.49	1,987.99
tblVehicleEF	UBUS	104.15	8.27
tblVehicleEF	UBUS	8.19	0.47
tblVehicleEF	UBUS	14.77	0.08
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2067e-003
tblVehicleEF	UBUS	1.1960e-003	5.6569e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0642e-003
tblVehicleEF	UBUS	1.1000e-003	5.2013e-005
tblVehicleEF	UBUS	5.9260e-003	8.6079e-004
tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3920e-003	5.9984e-004
tblVehicleEF	UBUS	0.75	0.09
tblVehicleEF	UBUS	0.02	1.6648e-003
tblVehicleEF	UBUS	0.64	0.04
tblVehicleEF	UBUS	9.7420e-003	1.4048e-003
tblVehicleEF	UBUS	1.1820e-003	8.1863e-005
tblVehicleEF	UBUS	5.9260e-003	8.6079e-004

tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3920e-003	5.9984e-004
tblVehicleEF	UBUS	3.12	5.97
tblVehicleEF	UBUS	0.02	1.6648e-003
tblVehicleEF	UBUS	0.70	0.05
tblVehicleEF	UBUS	2.28	5.85
tblVehicleEF	UBUS	0.05	9.8939e-003
tblVehicleEF	UBUS	10.19	45.43
tblVehicleEF	UBUS	9.10	0.73
tblVehicleEF	UBUS	1,934.49	1,980.90
tblVehicleEF	UBUS	104.15	8.08
tblVehicleEF	UBUS	8.53	0.46
tblVehicleEF	UBUS	14.83	0.07
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2446e-003
tblVehicleEF	UBUS	1.1960e-003	7.1367e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0994e-003
tblVehicleEF	UBUS	1.1000e-003	6.5620e-005
tblVehicleEF	UBUS	4.6510e-003	4.3012e-004
tblVehicleEF	UBUS	0.08	5.3044e-003
tblVehicleEF	UBUS	2.5600e-003	2.8731e-004
tblVehicleEF	UBUS	0.74	0.09
tblVehicleEF	UBUS	0.03	1.4176e-003
tblVehicleEF	UBUS	0.71	0.04
tblVehicleEF	UBUS	9.7410e-003	1.3278e-003
tblVehicleEF	UBUS	1.2060e-003	7.9923e-005

tblVehicleEF	UBUS	4.6510e-003	4.3012e-004
tblVehicleEF	UBUS	0.08	5.3044e-003
tblVehicleEF	UBUS	2.5600e-003	2.8731e-004
tblVehicleEF	UBUS	3.10	5.97
tblVehicleEF	UBUS	0.03	1.4176e-003
tblVehicleEF	UBUS	0.77	0.05
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	6.31
tblVehicleTrips	HO_TL	8.70	6.31
tblVehicleTrips	HS_TL	5.90	6.31
tblVehicleTrips	HS_TL	5.90	6.31
tblVehicleTrips	HW_TL	14.70	6.31
tblVehicleTrips	HW_TL	14.70	6.31
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	5.67	8.13
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	4.84	6.29
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	5.81	7.32
tblVehicleTrips	WD_TR	33.82	0.00
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	IndoorWaterUseRate	2,475,852.97	0.00
tblWater	IndoorWaterUseRate	532,288.30	0.00
tblWater	IndoorWaterUseRate	11,011,030.33	13,321,770.00
tblWater	OutdoorWaterUseRate	1,560,863.83	0.00
tblWater	OutdoorWaterUseRate	326,241.21	0.00
tblWater	OutdoorWaterUseRate	6,941,736.51	2,360,090.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	1.90	0.00
tblWoodstoves	NumberCatalytic	8.45	0.00
tblWoodstoves	NumberNoncatalytic	1.90	0.00
tblWoodstoves	NumberNoncatalytic	8.45	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554
Energy	0.1464	1.2510	0.5323	7.9800e-003		0.1011	0.1011		0.1011	0.1011		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672
Mobile	3.1714	2.7059	34.0083	0.0826	9.2232	0.0584	9.2815	2.4466	0.0539	2.5005		8,527.0476	8,527.0476	0.3716		8,536.3375
Total	12.9072	4.1539	51.6407	0.0914	9.2232	0.2543	9.4774	2.4466	0.2497	2.6964	0.0000	10,154.8385	10,154.8385	0.4319	0.0293	10,174.3602

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554
Energy	0.1464	1.2510	0.5323	7.9800e-003		0.1011	0.1011		0.1011	0.1011		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672
Mobile	3.1714	2.7059	34.0083	0.0826	9.2232	0.0584	9.2815	2.4466	0.0539	2.5005		8,527.0476	8,527.0476	0.3716		8,536.3375
Total	12.9072	4.1539	51.6407	0.0914	9.2232	0.2543	9.4774	2.4466	0.2497	2.6964	0.0000	10,154.8385	10,154.8385	0.4319	0.0293	10,174.3602

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.1714	2.7059	34.0083	0.0826	9.2232	0.0584	9.2815	2.4466	0.0539	2.5005		8,527.0476	8,527.0476	0.3716		8,536.3375
Unmitigated	3.1714	2.7059	34.0083	0.0826	9.2232	0.0584	9.2815	2.4466	0.0539	2.5005		8,527.0476	8,527.0476	0.3716		8,536.3375

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	278.16	308.94	239.02	636,146	636,146
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Single Family Housing	1,595.36	1,612.26	1,444.95	3,620,479	3,620,479
Total	1,873.52	1,921.20	1,683.97	4,256,625	4,256,625

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	6.31	6.31	6.31	40.20	19.20	40.60	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Single Family Housing	6.31	6.31	6.31	40.20	19.20	40.60	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.659532	0.053962	0.249808	0.020000	0.001996	0.000832	0.002743	0.004224	0.000000	0.000000	0.006698	0.000093	0.000113
Other Asphalt Surfaces	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Other Non-Asphalt Surfaces	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Parking Lot	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Recreational Swimming Pool	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Single Family Housing	0.659532	0.053962	0.249808	0.020000	0.001996	0.000832	0.002743	0.004224	0.000000	0.000000	0.006698	0.000093	0.000113

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1464	1.2510	0.5323	7.9800e-003		0.1011	0.1011		0.1011	0.1011		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672
NaturalGas Unmitigated	0.1464	1.2510	0.5323	7.9800e-003		0.1011	0.1011		0.1011	0.1011		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	1732.06	0.0187	0.1596	0.0679	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.7722	203.7722	3.9100e-003	3.7400e-003	204.9832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	11842.2	0.1277	1.0913	0.4644	6.9700e-003		0.0882	0.0882		0.0882	0.0882		1,393.2050	1,393.2050	0.0267	0.0255	1,401.4841
Total		0.1464	1.2510	0.5323	7.9900e-003		0.1012	0.1012		0.1012	0.1012		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	1.73206	0.0187	0.1596	0.0679	1.0200e-003		0.0129	0.0129		0.0129	0.0129		203.7722	203.7722	3.9100e-003	3.7400e-003	204.9832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	11.8422	0.1277	1.0913	0.4644	6.9700e-003		0.0882	0.0882		0.0882	0.0882		1,393.2050	1,393.2050	0.0267	0.0255	1,401.4841
Total		0.1464	1.2510	0.5323	7.9900e-003		0.1012	0.1012		0.1012	0.1012		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554
Unmitigated	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.3580					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.5160	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947		30.8137	30.8137	0.0297		31.5554
Total	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.3580					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.5160	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947		30.8137	30.8137	0.0297		31.5554
Total	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Starlite Residential Development Project Operations - Los Angeles-South Coast County, Winter

Starlite Residential Development Project Operations
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	531.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info provided by applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres).

Construction Phase -

Vehicle Trips - based on trip generation provided by Iteris

Vehicle Emission Factors - see emfac emissions adjustment

Woodstoves - no fireplaces

Area Coating - assuming pool and associated buildings will be coated as residential. Assumes parking area to be striped only

Energy Use - based on adjustment from NORESKO study. See assumptions file for adjustmet calculations

Water And Wastewater - see USS section of MND. Assigns all water use to single family housing. Assumes 100% aerobic treatment.

Solid Waste - based on solid waste from USS section of MND.

Water Mitigation -

Fleet Mix - see fleet mix adjustment in assumptions file

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	4500	0
tblAreaCoating	Area_Nonresidential_Interior	13500	0
tblAreaCoating	Area_Parking	16832	252
tblAreaCoating	Area_Residential_Exterior	275470	281545
tblAreaCoating	Area_Residential_Interior	826411	844636
tblEnergyUse	T24E	243.83	238.95
tblEnergyUse	T24E	443.48	425.74
tblEnergyUse	T24NG	10,792.56	10,252.93
tblEnergyUse	T24NG	21,090.59	19,192.44
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	32.30	0.00
tblFireplaces	NumberGas	143.65	0.00
tblFireplaces	NumberNoFireplace	3.80	0.00
tblFireplaces	NumberNoFireplace	16.90	0.00

tblFireplaces	NumberWood	1.90	0.00
tblFireplaces	NumberWood	8.45	0.00
tblFleetMix	HHD	0.03	4.2240e-003
tblFleetMix	HHD	0.03	4.2240e-003
tblFleetMix	LDA	0.55	0.66
tblFleetMix	LDA	0.55	0.66
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.25
tblFleetMix	LDT2	0.21	0.25
tblFleetMix	LHD1	0.02	1.9960e-003
tblFleetMix	LHD1	0.02	1.9960e-003
tblFleetMix	LHD2	6.2530e-003	8.3200e-004
tblFleetMix	LHD2	6.2530e-003	8.3200e-004
tblFleetMix	MCY	5.2170e-003	6.6980e-003
tblFleetMix	MCY	5.2170e-003	6.6980e-003
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MH	8.5000e-004	1.1300e-004
tblFleetMix	MH	8.5000e-004	1.1300e-004
tblFleetMix	MHD	0.02	2.7430e-003
tblFleetMix	MHD	0.02	2.7430e-003
tblFleetMix	OBUS	2.5600e-003	0.00
tblFleetMix	OBUS	2.5600e-003	0.00
tblFleetMix	SBUS	6.9600e-004	9.3000e-005
tblFleetMix	SBUS	6.9600e-004	9.3000e-005
tblFleetMix	UBUS	2.0710e-003	0.00
tblFleetMix	UBUS	2.0710e-003	0.00
tblLandUse	LandUseSquareFeet	136,250.00	136,247.00

tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LotAcreage	2.38	0.48
tblLandUse	LotAcreage	54.87	5.28
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblSolidWaste	SolidWasteGenerationRate	17.48	0.00
tblSolidWaste	SolidWasteGenerationRate	51.30	0.00
tblSolidWaste	SolidWasteGenerationRate	198.03	324.85
tblVehicleEF	HHD	0.47	0.03
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tblVehicleEF	HHD	1.08	0.47
tblVehicleEF	HHD	3.29	8.3269e-003
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tblVehicleEF	HHD	2.11	2.58
tblVehicleEF	HHD	19.48	2.35
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tblVehicleEF	HHD	0.04	0.04
tblVehicleEF	HHD	6.2770e-003	0.02
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tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.8420e-003	8.8994e-003
tblVehicleEF	HHD	6.0050e-003	0.02

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tblVehicleEF	HHD	7.6000e-005	5.3773e-006
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tblVehicleEF	HHD	1.08	0.46
tblVehicleEF	HHD	3.12	9.0653e-003
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tblVehicleEF	HHD	8.8420e-003	8.8984e-003
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tblVehicleEF	HHD	0.01	0.01
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tblVehicleEF	LDA	2.2190e-003	1.6911e-003
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tblVehicleEF	LDA	2.0000e-003	2.0000e-003
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tblVehicleEF	LDA	2.0400e-003	1.5549e-003
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tblVehicleEF	LDA	0.09	0.09
tblVehicleEF	LDA	0.03	0.06
tblVehicleEF	LDA	0.01	9.5250e-003

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tblVehicleEF	LDA	0.06	0.17
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tblVehicleEF	LDA	0.03	0.06
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.02
tblVehicleEF	LDA	0.06	0.18
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tblVehicleEF	LDA	0.05	0.16
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.0900e-003	1.7127e-003
tblVehicleEF	LDA	2.2190e-003	1.7623e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9260e-003	1.5777e-003
tblVehicleEF	LDA	2.0400e-003	1.6204e-003
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.04	0.06

tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.05	0.18
tblVehicleEF	LDA	2.6610e-003	2.7078e-003
tblVehicleEF	LDA	5.4100e-004	5.0571e-004
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.05	0.20
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tblVehicleEF	LDA	0.10	0.10

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tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
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tblVehicleEF	LDT1	0.13	0.20
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tblVehicleEF	LDT1	3.1500e-003	2.2896e-003
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tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
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tblVehicleEF	LDT1	2.8970e-003	2.1052e-003
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tblVehicleEF	LDT1	0.23	0.18
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.16	0.07
tblVehicleEF	LDT1	0.15	0.25
tblVehicleEF	LDT1	3.2370e-003	3.0995e-003
tblVehicleEF	LDT1	6.9400e-004	5.8407e-004
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tblVehicleEF	LDT1	0.23	0.18
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.16	0.07
tblVehicleEF	LDT1	0.16	0.28
tblVehicleEF	LDT1	0.01	7.0910e-003
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tblVehicleEF	LDT1	3.1500e-003	2.4463e-003
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tblVehicleEF	LDT1	2.8970e-003	2.2494e-003

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tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.14	0.08
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tblVehicleEF	LDT1	3.3800e-003	3.1676e-003
tblVehicleEF	LDT1	6.8800e-004	6.0018e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.24	0.19
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.14	0.08
tblVehicleEF	LDT1	0.15	0.31
tblVehicleEF	LDT1	0.01	5.8250e-003
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tblVehicleEF	LDT1	1.36	1.14
tblVehicleEF	LDT1	2.32	2.18
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tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
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tblVehicleEF	LDT1	3.1500e-003	2.2896e-003
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tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.9770e-003	2.1620e-003

tblVehicleEF	LDT1	2.8970e-003	2.1052e-003
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tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.18	0.09
tblVehicleEF	LDT1	0.15	0.29
tblVehicleEF	LDT1	3.1850e-003	2.9454e-003
tblVehicleEF	LDT1	6.9500e-004	5.9132e-004
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.18	0.09
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT2	6.1600e-003	4.2736e-003
tblVehicleEF	LDT2	5.0900e-003	0.05
tblVehicleEF	LDT2	0.76	0.96
tblVehicleEF	LDT2	1.14	2.10
tblVehicleEF	LDT2	357.41	335.60
tblVehicleEF	LDT2	72.80	63.85
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.21
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.7734e-003
tblVehicleEF	LDT2	2.3970e-003	1.7548e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003

tblVehicleEF	LDT2	2.0060e-003	1.6322e-003
tblVehicleEF	LDT2	2.2040e-003	1.6135e-003
tblVehicleEF	LDT2	0.04	0.10
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.04	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	3.5800e-003	3.2531e-003
tblVehicleEF	LDT2	7.4700e-004	6.1899e-004
tblVehicleEF	LDT2	0.04	0.10
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.04	0.09
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.08	0.26
tblVehicleEF	LDT2	6.5370e-003	4.7109e-003
tblVehicleEF	LDT2	4.5360e-003	0.06
tblVehicleEF	LDT2	0.83	1.03
tblVehicleEF	LDT2	0.98	2.18
tblVehicleEF	LDT2	373.41	346.87
tblVehicleEF	LDT2	72.80	66.35
tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.08	0.24
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.8262e-003
tblVehicleEF	LDT2	2.3970e-003	1.8187e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	2.0060e-003	1.6808e-003
tblVehicleEF	LDT2	2.2040e-003	1.6722e-003
tblVehicleEF	LDT2	0.06	0.11
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.06	0.26
tblVehicleEF	LDT2	3.7410e-003	3.3624e-003
tblVehicleEF	LDT2	7.4400e-004	6.4329e-004
tblVehicleEF	LDT2	0.06	0.11
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	6.0370e-003	3.9315e-003
tblVehicleEF	LDT2	5.2090e-003	0.06
tblVehicleEF	LDT2	0.73	0.85
tblVehicleEF	LDT2	1.18	2.55
tblVehicleEF	LDT2	351.53	320.35
tblVehicleEF	LDT2	72.80	64.68
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.24
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.7734e-003
tblVehicleEF	LDT2	2.3970e-003	1.7548e-003

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	2.0060e-003	1.6322e-003
tblVehicleEF	LDT2	2.2040e-003	1.6135e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LDT2	3.5210e-003	3.1053e-003
tblVehicleEF	LDT2	7.4800e-004	6.2709e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.29
tblVehicleEF	LHD1	4.9880e-003	5.1438e-003
tblVehicleEF	LHD1	9.2560e-003	4.5391e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.66	0.51
tblVehicleEF	LHD1	2.37	0.99
tblVehicleEF	LHD1	8.95	8.74
tblVehicleEF	LHD1	588.36	641.02
tblVehicleEF	LHD1	31.02	11.57
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.78	0.45

tblVehicleEF	LHD1	0.89	0.28
tblVehicleEF	LHD1	8.3700e-004	8.1539e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7826e-003
tblVehicleEF	LHD1	8.5610e-003	5.7485e-003
tblVehicleEF	LHD1	8.8500e-004	2.5368e-004
tblVehicleEF	LHD1	8.0100e-004	7.8012e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5540e-003	2.4456e-003
tblVehicleEF	LHD1	8.1660e-003	5.4721e-003
tblVehicleEF	LHD1	8.1400e-004	2.3325e-004
tblVehicleEF	LHD1	2.7900e-003	3.1859e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7340e-003	1.8617e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.29	0.17
tblVehicleEF	LHD1	0.22	0.06
tblVehicleEF	LHD1	8.9000e-005	8.4839e-005
tblVehicleEF	LHD1	5.7670e-003	6.2545e-003
tblVehicleEF	LHD1	3.5400e-004	1.1452e-004
tblVehicleEF	LHD1	2.7900e-003	3.1859e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7340e-003	1.8617e-003
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.29	0.17
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD1	4.9880e-003	5.3761e-003

tblVehicleEF	LHD1	9.4510e-003	5.0878e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.67	0.58
tblVehicleEF	LHD1	2.26	1.03
tblVehicleEF	LHD1	8.95	8.81
tblVehicleEF	LHD1	588.36	653.00
tblVehicleEF	LHD1	31.02	11.97
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.73	0.52
tblVehicleEF	LHD1	0.85	0.30
tblVehicleEF	LHD1	8.3700e-004	7.8359e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
tblVehicleEF	LHD1	8.5610e-003	5.9884e-003
tblVehicleEF	LHD1	8.8500e-004	2.6819e-004
tblVehicleEF	LHD1	8.0100e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5540e-003	2.4323e-003
tblVehicleEF	LHD1	8.1660e-003	5.7009e-003
tblVehicleEF	LHD1	8.1400e-004	2.4659e-004
tblVehicleEF	LHD1	4.1640e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.4160e-003	2.0042e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.28	0.18
tblVehicleEF	LHD1	0.21	0.07
tblVehicleEF	LHD1	8.9000e-005	8.5605e-005

tblVehicleEF	LHD1	5.7670e-003	6.3745e-003
tblVehicleEF	LHD1	3.5200e-004	1.1848e-004
tblVehicleEF	LHD1	4.1640e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.4160e-003	2.0042e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.28	0.18
tblVehicleEF	LHD1	0.23	0.08
tblVehicleEF	LHD1	4.9880e-003	5.1306e-003
tblVehicleEF	LHD1	9.2060e-003	4.4356e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.66	0.50
tblVehicleEF	LHD1	2.39	1.04
tblVehicleEF	LHD1	8.95	8.74
tblVehicleEF	LHD1	588.36	641.00
tblVehicleEF	LHD1	31.02	11.67
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.76	0.47
tblVehicleEF	LHD1	0.89	0.30
tblVehicleEF	LHD1	8.3700e-004	8.1539e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7826e-003
tblVehicleEF	LHD1	8.5610e-003	5.7485e-003
tblVehicleEF	LHD1	8.8500e-004	2.5368e-004
tblVehicleEF	LHD1	8.0100e-004	7.8012e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5540e-003	2.4456e-003

tblVehicleEF	LHD1	8.1660e-003	5.4721e-003
tblVehicleEF	LHD1	8.1400e-004	2.3325e-004
tblVehicleEF	LHD1	2.9050e-003	2.2616e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7020e-003	1.3351e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.31	0.19
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	8.9000e-005	8.4839e-005
tblVehicleEF	LHD1	5.7670e-003	6.2543e-003
tblVehicleEF	LHD1	3.5400e-004	1.1545e-004
tblVehicleEF	LHD1	2.9050e-003	2.2616e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7020e-003	1.3351e-003
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.31	0.19
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD2	3.5180e-003	3.5633e-003
tblVehicleEF	LHD2	3.4110e-003	3.2788e-003
tblVehicleEF	LHD2	6.5620e-003	8.8868e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.28	0.35
tblVehicleEF	LHD2	1.17	0.65
tblVehicleEF	LHD2	13.57	13.29
tblVehicleEF	LHD2	605.98	642.03
tblVehicleEF	LHD2	26.15	8.77
tblVehicleEF	LHD2	0.09	0.08

tblVehicleEF	LHD2	0.46	0.58
tblVehicleEF	LHD2	0.46	0.19
tblVehicleEF	LHD2	1.1260e-003	1.3052e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.4980e-003
tblVehicleEF	LHD2	4.2100e-004	1.4313e-004
tblVehicleEF	LHD2	1.0770e-003	1.2487e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6710e-003	2.6534e-003
tblVehicleEF	LHD2	7.7140e-003	9.0713e-003
tblVehicleEF	LHD2	3.8700e-004	1.3161e-004
tblVehicleEF	LHD2	9.3900e-004	1.9234e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.4000e-004	1.1636e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3300e-004	1.2730e-004
tblVehicleEF	LHD2	5.9000e-003	6.2092e-003
tblVehicleEF	LHD2	2.8200e-004	8.6758e-005
tblVehicleEF	LHD2	9.3900e-004	1.9234e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-004	1.1636e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.10	0.05

tblVehicleEF	LHD2	3.5180e-003	3.7479e-003
tblVehicleEF	LHD2	3.4510e-003	3.5743e-003
tblVehicleEF	LHD2	6.3490e-003	9.7971e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.28	0.39
tblVehicleEF	LHD2	1.12	0.69
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	605.98	654.07
tblVehicleEF	LHD2	26.15	9.16
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.44	0.67
tblVehicleEF	LHD2	0.44	0.21
tblVehicleEF	LHD2	1.1260e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.6267e-003
tblVehicleEF	LHD2	4.2100e-004	1.5202e-004
tblVehicleEF	LHD2	1.0770e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6710e-003	2.6429e-003
tblVehicleEF	LHD2	7.7140e-003	9.1939e-003
tblVehicleEF	LHD2	3.8700e-004	1.3978e-004
tblVehicleEF	LHD2	1.3970e-003	2.1079e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.8800e-004	1.2531e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.09	0.05

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tblVehicleEF	LHD2	5.9000e-003	6.3287e-003
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tblVehicleEF	LHD2	1.3970e-003	2.1079e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	8.8800e-004	1.2531e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	3.5180e-003	3.5541e-003
tblVehicleEF	LHD2	3.4000e-003	3.2376e-003
tblVehicleEF	LHD2	6.6050e-003	9.2660e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.28	0.35
tblVehicleEF	LHD2	1.18	0.68
tblVehicleEF	LHD2	13.57	13.29
tblVehicleEF	LHD2	605.98	642.02
tblVehicleEF	LHD2	26.15	8.83
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.46	0.61
tblVehicleEF	LHD2	0.46	0.21
tblVehicleEF	LHD2	1.1260e-003	1.3052e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.4980e-003
tblVehicleEF	LHD2	4.2100e-004	1.4313e-004
tblVehicleEF	LHD2	1.0770e-003	1.2487e-003
tblVehicleEF	LHD2	0.04	0.04

tblVehicleEF	LHD2	2.6710e-003	2.6534e-003
tblVehicleEF	LHD2	7.7140e-003	9.0713e-003
tblVehicleEF	LHD2	3.8700e-004	1.3161e-004
tblVehicleEF	LHD2	9.4200e-004	1.3333e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.1900e-004	8.1693e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.07	0.11
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2730e-004
tblVehicleEF	LHD2	5.9000e-003	6.2091e-003
tblVehicleEF	LHD2	2.8200e-004	8.7371e-005
tblVehicleEF	LHD2	9.4200e-004	1.3333e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.1900e-004	8.1693e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.07	0.11
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	MCY	0.55	0.38
tblVehicleEF	MCY	0.15	0.21
tblVehicleEF	MCY	18.62	18.05
tblVehicleEF	MCY	9.70	7.79
tblVehicleEF	MCY	190.93	223.47
tblVehicleEF	MCY	43.78	57.01
tblVehicleEF	MCY	1.13	0.99
tblVehicleEF	MCY	0.31	0.25
tblVehicleEF	MCY	0.01	0.01

tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.5427e-003
tblVehicleEF	MCY	3.5080e-003	3.0379e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3736e-003
tblVehicleEF	MCY	3.2930e-003	2.8511e-003
tblVehicleEF	MCY	1.05	1.70
tblVehicleEF	MCY	0.61	0.68
tblVehicleEF	MCY	0.64	1.04
tblVehicleEF	MCY	2.60	2.56
tblVehicleEF	MCY	0.56	0.50
tblVehicleEF	MCY	2.03	1.60
tblVehicleEF	MCY	2.2930e-003	2.2114e-003
tblVehicleEF	MCY	6.5600e-004	5.6414e-004
tblVehicleEF	MCY	1.05	1.70
tblVehicleEF	MCY	0.61	0.68
tblVehicleEF	MCY	0.64	1.04
tblVehicleEF	MCY	3.25	3.19
tblVehicleEF	MCY	0.56	0.50
tblVehicleEF	MCY	2.21	1.74
tblVehicleEF	MCY	0.54	0.37
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	17.96	18.15
tblVehicleEF	MCY	8.84	7.77
tblVehicleEF	MCY	190.93	222.30
tblVehicleEF	MCY	43.78	57.32
tblVehicleEF	MCY	0.99	0.99
tblVehicleEF	MCY	0.29	0.25

tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.4798e-003
tblVehicleEF	MCY	3.5080e-003	3.1545e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3160e-003
tblVehicleEF	MCY	3.2930e-003	2.9646e-003
tblVehicleEF	MCY	1.71	1.71
tblVehicleEF	MCY	0.67	0.69
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.54	2.54
tblVehicleEF	MCY	0.53	0.51
tblVehicleEF	MCY	1.81	1.60
tblVehicleEF	MCY	2.2810e-003	2.1999e-003
tblVehicleEF	MCY	6.3500e-004	5.6721e-004
tblVehicleEF	MCY	1.71	1.71
tblVehicleEF	MCY	0.67	0.69
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	3.18	3.16
tblVehicleEF	MCY	0.53	0.51
tblVehicleEF	MCY	1.97	1.74
tblVehicleEF	MCY	0.55	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.72	18.88
tblVehicleEF	MCY	9.85	8.72
tblVehicleEF	MCY	190.93	225.05
tblVehicleEF	MCY	43.78	59.29
tblVehicleEF	MCY	1.11	1.11

tblVehicleEF	MCY	0.31	0.27
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.5427e-003
tblVehicleEF	MCY	3.5080e-003	3.0379e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3736e-003
tblVehicleEF	MCY	3.2930e-003	2.8511e-003
tblVehicleEF	MCY	1.15	1.16
tblVehicleEF	MCY	0.78	0.80
tblVehicleEF	MCY	0.61	0.62
tblVehicleEF	MCY	2.61	2.63
tblVehicleEF	MCY	0.65	0.62
tblVehicleEF	MCY	2.07	1.84
tblVehicleEF	MCY	2.2950e-003	2.2270e-003
tblVehicleEF	MCY	6.5900e-004	5.8668e-004
tblVehicleEF	MCY	1.15	1.16
tblVehicleEF	MCY	0.78	0.80
tblVehicleEF	MCY	0.61	0.62
tblVehicleEF	MCY	3.26	3.28
tblVehicleEF	MCY	0.65	0.62
tblVehicleEF	MCY	2.25	2.00
tblVehicleEF	MDV	0.01	5.2986e-003
tblVehicleEF	MDV	0.01	0.06
tblVehicleEF	MDV	1.10	1.07
tblVehicleEF	MDV	1.99	2.34
tblVehicleEF	MDV	481.40	410.36
tblVehicleEF	MDV	96.60	77.49

tblVehicleEF	MDV	0.12	0.07
tblVehicleEF	MDV	0.17	0.26
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2730e-003	1.8649e-003
tblVehicleEF	MDV	2.4250e-003	1.8223e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0940e-003	1.7191e-003
tblVehicleEF	MDV	2.2300e-003	1.6756e-003
tblVehicleEF	MDV	0.06	0.12
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.07	0.11
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.15	0.29
tblVehicleEF	MDV	4.8190e-003	3.9762e-003
tblVehicleEF	MDV	1.0000e-003	7.5124e-004
tblVehicleEF	MDV	0.06	0.12
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.07	0.11
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.16	0.31
tblVehicleEF	MDV	0.01	6.0286e-003
tblVehicleEF	MDV	9.6010e-003	0.07
tblVehicleEF	MDV	1.21	1.19
tblVehicleEF	MDV	1.70	2.49
tblVehicleEF	MDV	502.45	423.99

tblVehicleEF	MDV	96.60	80.65
tblVehicleEF	MDV	0.10	0.08
tblVehicleEF	MDV	0.16	0.29
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2730e-003	1.9587e-003
tblVehicleEF	MDV	2.4250e-003	1.9377e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0940e-003	1.8056e-003
tblVehicleEF	MDV	2.2300e-003	1.7819e-003
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.13	0.32
tblVehicleEF	MDV	5.0310e-003	4.1085e-003
tblVehicleEF	MDV	9.9500e-004	7.8193e-004
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.14	0.35
tblVehicleEF	MDV	0.01	4.8813e-003
tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.06	0.95
tblVehicleEF	MDV	2.05	2.85

tblVehicleEF	MDV	473.66	394.54
tblVehicleEF	MDV	96.60	78.44
tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.17	0.28
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2730e-003	1.8649e-003
tblVehicleEF	MDV	2.4250e-003	1.8223e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0940e-003	1.7191e-003
tblVehicleEF	MDV	2.2300e-003	1.6756e-003
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.15	0.33
tblVehicleEF	MDV	4.7420e-003	3.8228e-003
tblVehicleEF	MDV	1.0010e-003	7.6048e-004
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tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.16	0.36
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tblVehicleEF	MH	1.43	0.83

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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.5494e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2578e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.3440e-004
tblVehicleEF	MH	0.76	0.93
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.33	0.39
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.28	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7800e-004	1.7926e-004
tblVehicleEF	MH	0.76	0.93
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.33	0.39
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.30	0.09
tblVehicleEF	MH	0.02	8.8559e-003
tblVehicleEF	MH	0.02	0.02

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tblVehicleEF	MH	4.54	1.92
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tblVehicleEF	MH	0.86	0.97
tblVehicleEF	MH	0.68	0.24
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.6718e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2515e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.4566e-004
tblVehicleEF	MH	1.12	1.04
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.47	0.43
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.27	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7300e-004	1.8454e-004
tblVehicleEF	MH	1.12	1.04
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.47	0.43
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.29	0.10
tblVehicleEF	MH	0.02	7.6203e-003

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tblVehicleEF	MH	4.87	1.96
tblVehicleEF	MH	1,126.11	1,447.93
tblVehicleEF	MH	59.42	18.33
tblVehicleEF	MH	0.91	0.99
tblVehicleEF	MH	0.71	0.25
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.5494e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2578e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.3440e-004
tblVehicleEF	MH	0.85	0.72
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	0.06	0.04
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.28	0.09
tblVehicleEF	MH	0.01	0.01
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tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.31	0.10

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tblVehicleEF	MHD	0.35	0.33
tblVehicleEF	MHD	0.29	0.24
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tblVehicleEF	MHD	0.76	1.03
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1497e-003
tblVehicleEF	MHD	7.8500e-004	1.2776e-004
tblVehicleEF	MHD	8.6000e-005	2.3001e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8771e-003
tblVehicleEF	MHD	7.2200e-004	1.1747e-004
tblVehicleEF	MHD	9.8100e-004	8.4134e-004
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	6.6900e-004	5.3093e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.32	0.06

tblVehicleEF	MHD	1.2770e-003	6.0471e-004
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tblVehicleEF	MHD	7.0500e-004	1.1250e-004
tblVehicleEF	MHD	9.8100e-004	8.4134e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.6900e-004	5.3093e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.01	4.2036e-003
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tblVehicleEF	MHD	0.30	0.28
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tblVehicleEF	MHD	0.71	1.02
tblVehicleEF	MHD	10.08	1.58
tblVehicleEF	MHD	7.6000e-005	2.7779e-004
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1299e-003
tblVehicleEF	MHD	7.8500e-004	1.3466e-004
tblVehicleEF	MHD	7.2000e-005	2.6577e-004
tblVehicleEF	MHD	0.06	0.06

tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8582e-003
tblVehicleEF	MHD	7.2200e-004	1.2382e-004
tblVehicleEF	MHD	1.4660e-003	9.2475e-004
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tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	9.3700e-004	5.7330e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.3510e-003	6.1548e-004
tblVehicleEF	MHD	0.01	9.8544e-003
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tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	9.3700e-004	5.7330e-004
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tblVehicleEF	MHD	0.02	0.02
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tblVehicleEF	MHD	0.29	0.24
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tblVehicleEF	MHD	1,140.29	1,014.00
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tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1497e-003
tblVehicleEF	MHD	7.8500e-004	1.2776e-004
tblVehicleEF	MHD	1.0500e-004	3.2456e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8771e-003
tblVehicleEF	MHD	7.2200e-004	1.1747e-004
tblVehicleEF	MHD	9.9000e-004	5.7591e-004
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tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.4900e-004	3.7019e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.1750e-003	6.0440e-004
tblVehicleEF	MHD	0.01	9.6934e-003
tblVehicleEF	MHD	7.0600e-004	1.1379e-004
tblVehicleEF	MHD	9.9000e-004	5.7591e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.4900e-004	3.7019e-004
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tblVehicleEF	MHD	0.02	0.03

tblVehicleEF	MHD	0.35	0.07
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tblVehicleEF	OBUS	5.4840e-003	4.5133e-003
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tblVehicleEF	OBUS	0.25	0.61
tblVehicleEF	OBUS	0.41	0.56
tblVehicleEF	OBUS	4.93	2.14
tblVehicleEF	OBUS	102.93	90.13
tblVehicleEF	OBUS	1,248.17	1,333.81
tblVehicleEF	OBUS	67.50	18.36
tblVehicleEF	OBUS	0.22	0.34
tblVehicleEF	OBUS	0.71	1.11
tblVehicleEF	OBUS	2.50	0.84
tblVehicleEF	OBUS	2.0000e-005	1.0741e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.7480e-003	7.3393e-003
tblVehicleEF	OBUS	8.4800e-004	2.0131e-004
tblVehicleEF	OBUS	1.9000e-005	1.0277e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.6130e-003	7.0068e-003
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tblVehicleEF	OBUS	0.03	0.05
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tblVehicleEF	OBUS	0.04	0.07

tblVehicleEF	OBUS	0.31	0.10
tblVehicleEF	OBUS	9.9400e-004	8.5745e-004
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tblVehicleEF	OBUS	7.6100e-004	1.8171e-004
tblVehicleEF	OBUS	1.3910e-003	2.6323e-003
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tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6200e-004	1.3143e-003
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tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.34	0.11
tblVehicleEF	OBUS	0.01	8.4017e-003
tblVehicleEF	OBUS	5.5780e-003	5.0478e-003
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tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.42	0.63
tblVehicleEF	OBUS	4.66	2.21
tblVehicleEF	OBUS	108.07	89.14
tblVehicleEF	OBUS	1,248.17	1,355.72
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tblVehicleEF	OBUS	0.23	0.33
tblVehicleEF	OBUS	0.67	1.09
tblVehicleEF	OBUS	2.46	0.83
tblVehicleEF	OBUS	1.7000e-005	1.0501e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.7480e-003	7.0871e-003
tblVehicleEF	OBUS	8.4800e-004	2.0001e-004
tblVehicleEF	OBUS	1.6000e-005	1.0047e-004

tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.6130e-003	6.7657e-003
tblVehicleEF	OBUS	7.8000e-004	1.8390e-004
tblVehicleEF	OBUS	2.0340e-003	2.6502e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.0660e-003	1.3153e-003
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.30	0.11
tblVehicleEF	OBUS	1.0430e-003	8.4822e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.5700e-004	1.8613e-004
tblVehicleEF	OBUS	2.0340e-003	2.6502e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.0660e-003	1.3153e-003
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.32	0.12
tblVehicleEF	OBUS	0.01	8.1710e-003
tblVehicleEF	OBUS	5.4590e-003	4.3905e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.63
tblVehicleEF	OBUS	0.41	0.55
tblVehicleEF	OBUS	4.98	2.29
tblVehicleEF	OBUS	95.85	92.62
tblVehicleEF	OBUS	1,248.17	1,333.79

tblVehicleEF	OBUS	67.50	18.62
tblVehicleEF	OBUS	0.21	0.38
tblVehicleEF	OBUS	0.70	1.16
tblVehicleEF	OBUS	2.50	0.85
tblVehicleEF	OBUS	2.4000e-005	1.3949e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.7480e-003	7.3393e-003
tblVehicleEF	OBUS	8.4800e-004	2.0131e-004
tblVehicleEF	OBUS	2.3000e-005	1.3345e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.6130e-003	7.0068e-003
tblVehicleEF	OBUS	7.8000e-004	1.8509e-004
tblVehicleEF	OBUS	1.4050e-003	1.8913e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.3700e-004	9.3069e-004
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.31	0.11
tblVehicleEF	OBUS	9.2600e-004	8.8101e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.6200e-004	1.8421e-004
tblVehicleEF	OBUS	1.4050e-003	1.8913e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.3700e-004	9.3069e-004
tblVehicleEF	OBUS	0.05	0.04

tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.34	0.12
tblVehicleEF	SBUS	0.83	0.08
tblVehicleEF	SBUS	0.01	6.3970e-003
tblVehicleEF	SBUS	0.06	6.5347e-003
tblVehicleEF	SBUS	8.41	3.26
tblVehicleEF	SBUS	0.61	0.55
tblVehicleEF	SBUS	7.01	0.81
tblVehicleEF	SBUS	1,089.91	359.94
tblVehicleEF	SBUS	1,062.27	1,068.93
tblVehicleEF	SBUS	57.76	5.88
tblVehicleEF	SBUS	7.82	2.97
tblVehicleEF	SBUS	3.46	3.87
tblVehicleEF	SBUS	11.58	1.00
tblVehicleEF	SBUS	7.0050e-003	2.7465e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.9100e-004	6.5725e-005
tblVehicleEF	SBUS	6.7020e-003	2.6277e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6490e-003	2.6420e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.1900e-004	6.0432e-005
tblVehicleEF	SBUS	3.4080e-003	1.5690e-003
tblVehicleEF	SBUS	0.03	9.6318e-003
tblVehicleEF	SBUS	1.00	0.38
tblVehicleEF	SBUS	1.8930e-003	8.2589e-004
tblVehicleEF	SBUS	0.09	0.08

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.37	0.04
tblVehicleEF	SBUS	0.01	3.4388e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.9900e-004	5.8203e-005
tblVehicleEF	SBUS	3.4080e-003	1.5690e-003
tblVehicleEF	SBUS	0.03	9.6318e-003
tblVehicleEF	SBUS	1.45	0.55
tblVehicleEF	SBUS	1.8930e-003	8.2589e-004
tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.41	0.04
tblVehicleEF	SBUS	0.83	0.08
tblVehicleEF	SBUS	0.01	6.7846e-003
tblVehicleEF	SBUS	0.05	6.3039e-003
tblVehicleEF	SBUS	8.31	3.11
tblVehicleEF	SBUS	0.62	0.58
tblVehicleEF	SBUS	5.69	0.79
tblVehicleEF	SBUS	1,137.73	361.51
tblVehicleEF	SBUS	1,062.27	1,086.01
tblVehicleEF	SBUS	57.76	5.68
tblVehicleEF	SBUS	8.07	3.09
tblVehicleEF	SBUS	3.26	4.13
tblVehicleEF	SBUS	11.55	0.95
tblVehicleEF	SBUS	5.9050e-003	3.0311e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03
tblVehicleEF	SBUS	8.9100e-004	6.0241e-005

tblVehicleEF	SBUS	5.6500e-003	2.9000e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6490e-003	2.6525e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.1900e-004	5.5389e-005
tblVehicleEF	SBUS	5.0090e-003	1.4874e-003
tblVehicleEF	SBUS	0.03	9.1168e-003
tblVehicleEF	SBUS	1.00	0.36
tblVehicleEF	SBUS	2.6560e-003	7.7378e-004
tblVehicleEF	SBUS	0.09	0.09
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.04
tblVehicleEF	SBUS	0.01	3.4522e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.7700e-004	5.6163e-005
tblVehicleEF	SBUS	5.0090e-003	1.4874e-003
tblVehicleEF	SBUS	0.03	9.1168e-003
tblVehicleEF	SBUS	1.44	0.52
tblVehicleEF	SBUS	2.6560e-003	7.7378e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.36	0.04
tblVehicleEF	SBUS	0.83	0.08
tblVehicleEF	SBUS	0.01	6.3019e-003
tblVehicleEF	SBUS	0.06	7.5038e-003
tblVehicleEF	SBUS	8.54	3.34
tblVehicleEF	SBUS	0.61	0.54
tblVehicleEF	SBUS	7.24	1.03
tblVehicleEF	SBUS	1,023.86	344.60

tblVehicleEF	SBUS	1,062.27	1,068.92
tblVehicleEF	SBUS	57.76	6.25
tblVehicleEF	SBUS	7.48	2.84
tblVehicleEF	SBUS	3.40	4.03
tblVehicleEF	SBUS	11.58	1.01
tblVehicleEF	SBUS	8.5240e-003	3.9414e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.9100e-004	6.5725e-005
tblVehicleEF	SBUS	8.1550e-003	3.7709e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6490e-003	2.6420e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.1900e-004	6.0432e-005
tblVehicleEF	SBUS	3.3910e-003	1.0829e-003
tblVehicleEF	SBUS	0.03	9.8617e-003
tblVehicleEF	SBUS	1.00	0.38
tblVehicleEF	SBUS	1.8130e-003	5.7290e-004
tblVehicleEF	SBUS	0.09	0.08
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.2939e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	7.0300e-004	6.1800e-005
tblVehicleEF	SBUS	3.3910e-003	1.0829e-003
tblVehicleEF	SBUS	0.03	9.8617e-003
tblVehicleEF	SBUS	1.45	0.55
tblVehicleEF	SBUS	1.8130e-003	5.7290e-004

tblVehicleEF	SBUS	0.11	0.10
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.42	0.05
tblVehicleEF	UBUS	2.28	5.85
tblVehicleEF	UBUS	0.05	9.0511e-003
tblVehicleEF	UBUS	10.20	45.43
tblVehicleEF	UBUS	8.89	0.63
tblVehicleEF	UBUS	1,934.49	1,980.91
tblVehicleEF	UBUS	104.15	7.90
tblVehicleEF	UBUS	8.69	0.46
tblVehicleEF	UBUS	14.82	0.07
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2446e-003
tblVehicleEF	UBUS	1.1960e-003	7.1367e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0994e-003
tblVehicleEF	UBUS	1.1000e-003	6.5620e-005
tblVehicleEF	UBUS	4.1520e-003	6.2304e-004
tblVehicleEF	UBUS	0.07	5.0779e-003
tblVehicleEF	UBUS	2.4690e-003	4.2109e-004
tblVehicleEF	UBUS	0.74	0.09
tblVehicleEF	UBUS	0.02	1.0548e-003
tblVehicleEF	UBUS	0.69	0.04
tblVehicleEF	UBUS	9.7410e-003	1.3278e-003
tblVehicleEF	UBUS	1.2020e-003	7.8193e-005
tblVehicleEF	UBUS	4.1520e-003	6.2304e-004
tblVehicleEF	UBUS	0.07	5.0779e-003

tblVehicleEF	UBUS	2.4690e-003	4.2109e-004
tblVehicleEF	UBUS	3.11	5.97
tblVehicleEF	UBUS	0.02	1.0548e-003
tblVehicleEF	UBUS	0.76	0.04
tblVehicleEF	UBUS	2.29	5.85
tblVehicleEF	UBUS	0.05	9.9367e-003
tblVehicleEF	UBUS	10.25	45.42
tblVehicleEF	UBUS	7.71	0.63
tblVehicleEF	UBUS	1,934.49	1,987.99
tblVehicleEF	UBUS	104.15	8.27
tblVehicleEF	UBUS	8.19	0.47
tblVehicleEF	UBUS	14.77	0.08
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2067e-003
tblVehicleEF	UBUS	1.1960e-003	5.6569e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0642e-003
tblVehicleEF	UBUS	1.1000e-003	5.2013e-005
tblVehicleEF	UBUS	5.9260e-003	8.6079e-004
tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3920e-003	5.9984e-004
tblVehicleEF	UBUS	0.75	0.09
tblVehicleEF	UBUS	0.02	1.6648e-003
tblVehicleEF	UBUS	0.64	0.04
tblVehicleEF	UBUS	9.7420e-003	1.4048e-003
tblVehicleEF	UBUS	1.1820e-003	8.1863e-005
tblVehicleEF	UBUS	5.9260e-003	8.6079e-004

tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3920e-003	5.9984e-004
tblVehicleEF	UBUS	3.12	5.97
tblVehicleEF	UBUS	0.02	1.6648e-003
tblVehicleEF	UBUS	0.70	0.05
tblVehicleEF	UBUS	2.28	5.85
tblVehicleEF	UBUS	0.05	9.8939e-003
tblVehicleEF	UBUS	10.19	45.43
tblVehicleEF	UBUS	9.10	0.73
tblVehicleEF	UBUS	1,934.49	1,980.90
tblVehicleEF	UBUS	104.15	8.08
tblVehicleEF	UBUS	8.53	0.46
tblVehicleEF	UBUS	14.83	0.07
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2446e-003
tblVehicleEF	UBUS	1.1960e-003	7.1367e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0994e-003
tblVehicleEF	UBUS	1.1000e-003	6.5620e-005
tblVehicleEF	UBUS	4.6510e-003	4.3012e-004
tblVehicleEF	UBUS	0.08	5.3044e-003
tblVehicleEF	UBUS	2.5600e-003	2.8731e-004
tblVehicleEF	UBUS	0.74	0.09
tblVehicleEF	UBUS	0.03	1.4176e-003
tblVehicleEF	UBUS	0.71	0.04
tblVehicleEF	UBUS	9.7410e-003	1.3278e-003
tblVehicleEF	UBUS	1.2060e-003	7.9923e-005

tblVehicleEF	UBUS	4.6510e-003	4.3012e-004
tblVehicleEF	UBUS	0.08	5.3044e-003
tblVehicleEF	UBUS	2.5600e-003	2.8731e-004
tblVehicleEF	UBUS	3.10	5.97
tblVehicleEF	UBUS	0.03	1.4176e-003
tblVehicleEF	UBUS	0.77	0.05
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	6.31
tblVehicleTrips	HO_TL	8.70	6.31
tblVehicleTrips	HS_TL	5.90	6.31
tblVehicleTrips	HS_TL	5.90	6.31
tblVehicleTrips	HW_TL	14.70	6.31
tblVehicleTrips	HW_TL	14.70	6.31
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	5.67	8.13
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	4.84	6.29
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	5.81	7.32
tblVehicleTrips	WD_TR	33.82	0.00
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPerce nt	2.21	0.00

tblWater	IndoorWaterUseRate	2,475,852.97	0.00
tblWater	IndoorWaterUseRate	532,288.30	0.00
tblWater	IndoorWaterUseRate	11,011,030.33	13,321,770.00
tblWater	OutdoorWaterUseRate	1,560,863.83	0.00
tblWater	OutdoorWaterUseRate	326,241.21	0.00
tblWater	OutdoorWaterUseRate	6,941,736.51	2,360,090.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	1.90	0.00
tblWoodstoves	NumberCatalytic	8.45	0.00
tblWoodstoves	NumberNoncatalytic	1.90	0.00
tblWoodstoves	NumberNoncatalytic	8.45	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554
Energy	0.1464	1.2510	0.5323	7.9800e-003		0.1011	0.1011		0.1011	0.1011		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672
Mobile	2.8965	2.7361	31.4572	0.0763	9.2230	0.0565	9.2794	2.4466	0.0521	2.4986		7,873.6169	7,873.6169	0.3577		7,882.5597
Total	12.6323	4.1840	49.0897	0.0852	9.2230	0.2523	9.4753	2.4466	0.2480	2.6945	0.0000	9,501.4078	9,501.4078	0.4180	0.0293	9,520.5824

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554
Energy	0.1464	1.2510	0.5323	7.9800e-003		0.1011	0.1011		0.1011	0.1011		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672
Mobile	2.8965	2.7361	31.4572	0.0763	9.2230	0.0565	9.2794	2.4466	0.0521	2.4986		7,873.6169	7,873.6169	0.3577		7,882.5597
Total	12.6323	4.1840	49.0897	0.0852	9.2230	0.2523	9.4753	2.4466	0.2480	2.6945	0.0000	9,501.4078	9,501.4078	0.4180	0.0293	9,520.5824

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.8965	2.7361	31.4572	0.0763	9.2230	0.0565	9.2794	2.4466	0.0521	2.4986		7,873.6169	7,873.6169	0.3577		7,882.5597
Unmitigated	2.8965	2.7361	31.4572	0.0763	9.2230	0.0565	9.2794	2.4466	0.0521	2.4986		7,873.6169	7,873.6169	0.3577		7,882.5597

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Condo/Townhouse	278.16	308.94	239.02	636,146	636,146
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Single Family Housing	1,595.36	1,612.26	1,444.95	3,620,479	3,620,479
Total	1,873.52	1,921.20	1,683.97	4,256,625	4,256,625

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	6.31	6.31	6.31	40.20	19.20	40.60	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Single Family Housing	6.31	6.31	6.31	40.20	19.20	40.60	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.659532	0.053962	0.249808	0.020000	0.001996	0.000832	0.002743	0.004224	0.000000	0.000000	0.006698	0.000093	0.000113
Other Asphalt Surfaces	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Other Non-Asphalt Surfaces	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Parking Lot	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Recreational Swimming Pool	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Single Family Housing	0.659532	0.053962	0.249808	0.020000	0.001996	0.000832	0.002743	0.004224	0.000000	0.000000	0.006698	0.000093	0.000113

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.1464	1.2510	0.5323	7.9800e-003		0.1011	0.1011		0.1011	0.1011		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672
NaturalGas Unmitigated	0.1464	1.2510	0.5323	7.9800e-003		0.1011	0.1011		0.1011	0.1011		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Condo/Townhouse	1732.06	0.0187	0.1596	0.0679	1.0200e-003		0.0129	0.0129		0.0129	0.0129			203.7722	203.7722	3.9100e-003	3.7400e-003	204.9832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	11842.2	0.1277	1.0913	0.4644	6.9700e-003		0.0882	0.0882		0.0882	0.0882			1,393.2050	1,393.2050	0.0267	0.0255	1,401.4841
Total		0.1464	1.2510	0.5323	7.9900e-003		0.1012	0.1012		0.1012	0.1012			1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Land Use	kBTU/yr	lb/day										lb/day						
Condo/Townhouse	1.73206	0.0187	0.1596	0.0679	1.0200e-003		0.0129	0.0129		0.0129	0.0129			203.7722	203.7722	3.9100e-003	3.7400e-003	204.9832
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000

Single Family Housing	11.8422	0.1277	1.0913	0.4644	6.9700e-003		0.0882	0.0882		0.0882	0.0882		1,393.2050	1,393.2050	0.0267	0.0255	1,401.4841
Total		0.1464	1.2510	0.5323	7.9900e-003		0.1012	0.1012		0.1012	0.1012		1,596.9772	1,596.9772	0.0306	0.0293	1,606.4672

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554
Unmitigated	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.3580					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.5160	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947		30.8137	30.8137	0.0297		31.5554
Total	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.7154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.3580					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.5160	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947		30.8137	30.8137	0.0297		31.5554
Total	9.5894	0.1970	17.1001	9.0000e-004		0.0947	0.0947		0.0947	0.0947	0.0000	30.8137	30.8137	0.0297	0.0000	31.5554

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Starlite Residential Development Project Operations - Los Angeles-South Coast County, Annual

**Starlite Residential Development Project Operations
Los Angeles-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	136.25	1000sqft	3.13	136,247.00	0
Other Non-Asphalt Surfaces	140.08	1000sqft	3.22	140,080.00	0
Parking Lot	4.20	1000sqft	0.10	4,200.00	0
Recreational Swimming Pool	9.00	1000sqft	0.21	9,000.00	0
Condo/Townhouse	38.00	Dwelling Unit	0.48	62,100.00	109
Single Family Housing	169.00	Dwelling Unit	5.28	346,004.00	483

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	531.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2019 SCE Sustainability Report

Land Use - based on info provided by applicant, remainder of land use acreage assigned to single family home acreage (2.63 acres).

Construction Phase -

Vehicle Trips - based on trip generation provided by Iteris

Vehicle Emission Factors - see emfac emissions adjustment

Woodstoves - no fireplaces

Area Coating - assuming pool and associated buildings will be coated as residential. Assumes parking area to be striped only

Energy Use - based on adjustment from NORESCO study. See assumptions file for adjustmet calculations

Water And Wastewater - see USS section of MND. Assigns all water use to single family housing. Assumes 100% aerobic treatment.

Solid Waste - based on solid waste from USS section of MND.

Water Mitigation -

Fleet Mix - see fleet mix adjustment in assumptions file

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	4500	0
tblAreaCoating	Area_Nonresidential_Interior	13500	0
tblAreaCoating	Area_Parking	16832	252
tblAreaCoating	Area_Residential_Exterior	275470	281545
tblAreaCoating	Area_Residential_Interior	826411	844636
tblEnergyUse	T24E	243.83	238.95
tblEnergyUse	T24E	443.48	425.74
tblEnergyUse	T24NG	10,792.56	10,252.93
tblEnergyUse	T24NG	21,090.59	19,192.44
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	32.30	0.00
tblFireplaces	NumberGas	143.65	0.00
tblFireplaces	NumberNoFireplace	3.80	0.00

tblFireplaces	NumberNoFireplace	16.90	0.00
tblFireplaces	NumberWood	1.90	0.00
tblFireplaces	NumberWood	8.45	0.00
tblFleetMix	HHD	0.03	4.2240e-003
tblFleetMix	HHD	0.03	4.2240e-003
tblFleetMix	LDA	0.55	0.66
tblFleetMix	LDA	0.55	0.66
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.21	0.25
tblFleetMix	LDT2	0.21	0.25
tblFleetMix	LHD1	0.02	1.9960e-003
tblFleetMix	LHD1	0.02	1.9960e-003
tblFleetMix	LHD2	6.2530e-003	8.3200e-004
tblFleetMix	LHD2	6.2530e-003	8.3200e-004
tblFleetMix	MCY	5.2170e-003	6.6980e-003
tblFleetMix	MCY	5.2170e-003	6.6980e-003
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MDV	0.12	0.02
tblFleetMix	MH	8.5000e-004	1.1300e-004
tblFleetMix	MH	8.5000e-004	1.1300e-004
tblFleetMix	MHD	0.02	2.7430e-003
tblFleetMix	MHD	0.02	2.7430e-003
tblFleetMix	OBUS	2.5600e-003	0.00
tblFleetMix	OBUS	2.5600e-003	0.00
tblFleetMix	SBUS	6.9600e-004	9.3000e-005
tblFleetMix	SBUS	6.9600e-004	9.3000e-005
tblFleetMix	UBUS	2.0710e-003	0.00
tblFleetMix	UBUS	2.0710e-003	0.00

tblLandUse	LandUseSquareFeet	136,250.00	136,247.00
tblLandUse	LandUseSquareFeet	38,000.00	62,100.00
tblLandUse	LandUseSquareFeet	304,200.00	346,004.00
tblLandUse	LotAcreage	2.38	0.48
tblLandUse	LotAcreage	54.87	5.28
tblProjectCharacteristics	CO2IntensityFactor	702.44	531.44
tblSolidWaste	SolidWasteGenerationRate	17.48	0.00
tblSolidWaste	SolidWasteGenerationRate	51.30	0.00
tblSolidWaste	SolidWasteGenerationRate	198.03	324.85
tblVehicleEF	HHD	0.47	0.03
tblVehicleEF	HHD	0.09	0.08
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tblVehicleEF	HHD	8.8420e-003	8.8994e-003

tblVehicleEF	HHD	6.0050e-003	0.02
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tblVehicleEF	HHD	3.8700e-004	8.9534e-005
tblVehicleEF	HHD	0.07	2.5791e-006

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tblVehicleEF	HHD	0.01	0.01
tblVehicleEF	HHD	1.6100e-004	7.8578e-007
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tblVehicleEF	HHD	0.20	0.02
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tblVehicleEF	LDA	0.09	0.09
tblVehicleEF	LDA	0.03	0.06

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tblVehicleEF	LDA	0.04	0.02
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tblVehicleEF	LDA	0.03	0.06
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.02
tblVehicleEF	LDA	0.06	0.18
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tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.05	0.16
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.0900e-003	1.7127e-003
tblVehicleEF	LDA	2.2190e-003	1.7623e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9260e-003	1.5777e-003
tblVehicleEF	LDA	2.0400e-003	1.6204e-003
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.09	0.10

tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.05	0.18
tblVehicleEF	LDA	2.6610e-003	2.7078e-003
tblVehicleEF	LDA	5.4100e-004	5.0571e-004
tblVehicleEF	LDA	0.05	0.07
tblVehicleEF	LDA	0.09	0.10
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.03	0.02
tblVehicleEF	LDA	0.05	0.20
tblVehicleEF	LDA	4.3320e-003	2.3135e-003
tblVehicleEF	LDA	4.2560e-003	0.04
tblVehicleEF	LDA	0.55	0.60
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tblVehicleEF	LDA	52.79	51.15
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.16
tblVehicleEF	LDA	0.04	0.04
tblVehicleEF	LDA	8.0000e-003	8.0000e-003
tblVehicleEF	LDA	2.0900e-003	1.6549e-003
tblVehicleEF	LDA	2.2190e-003	1.6911e-003
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	2.0000e-003	2.0000e-003
tblVehicleEF	LDA	1.9260e-003	1.5241e-003
tblVehicleEF	LDA	2.0400e-003	1.5549e-003
tblVehicleEF	LDA	0.03	0.04

tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.01	8.8101e-003
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.19
tblVehicleEF	LDA	2.4990e-003	2.4810e-003
tblVehicleEF	LDA	5.4400e-004	4.9594e-004
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.10	0.10
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.02	0.01
tblVehicleEF	LDA	0.04	0.03
tblVehicleEF	LDA	0.06	0.21
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tblVehicleEF	LDT1	2.25	1.80
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tblVehicleEF	LDT1	0.13	0.08
tblVehicleEF	LDT1	0.13	0.20
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.2340e-003	2.3497e-003
tblVehicleEF	LDT1	3.1500e-003	2.2896e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.9770e-003	2.1620e-003
tblVehicleEF	LDT1	2.8970e-003	2.1052e-003

tblVehicleEF	LDT1	0.11	0.16
tblVehicleEF	LDT1	0.23	0.18
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.16	0.07
tblVehicleEF	LDT1	0.15	0.25
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tblVehicleEF	LDT1	6.9400e-004	5.8407e-004
tblVehicleEF	LDT1	0.11	0.16
tblVehicleEF	LDT1	0.23	0.18
tblVehicleEF	LDT1	0.09	0.13
tblVehicleEF	LDT1	0.05	0.04
tblVehicleEF	LDT1	0.16	0.07
tblVehicleEF	LDT1	0.16	0.28
tblVehicleEF	LDT1	0.01	7.0910e-003
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tblVehicleEF	LDT1	1.52	1.41
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tblVehicleEF	LDT1	0.11	0.09
tblVehicleEF	LDT1	0.12	0.22
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
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tblVehicleEF	LDT1	3.1500e-003	2.4463e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003
tblVehicleEF	LDT1	2.9770e-003	2.2954e-003

tblVehicleEF	LDT1	2.8970e-003	2.2494e-003
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.24	0.19
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.14	0.08
tblVehicleEF	LDT1	0.13	0.28
tblVehicleEF	LDT1	3.3800e-003	3.1676e-003
tblVehicleEF	LDT1	6.8800e-004	6.0018e-004
tblVehicleEF	LDT1	0.17	0.18
tblVehicleEF	LDT1	0.24	0.19
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.05	0.05
tblVehicleEF	LDT1	0.14	0.08
tblVehicleEF	LDT1	0.15	0.31
tblVehicleEF	LDT1	0.01	5.8250e-003
tblVehicleEF	LDT1	0.01	0.06
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tblVehicleEF	LDT1	0.13	0.09
tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	8.0000e-003	8.0000e-003
tblVehicleEF	LDT1	3.2340e-003	2.3497e-003
tblVehicleEF	LDT1	3.1500e-003	2.2896e-003
tblVehicleEF	LDT1	0.02	0.02
tblVehicleEF	LDT1	2.0000e-003	2.0000e-003

tblVehicleEF	LDT1	2.9770e-003	2.1620e-003
tblVehicleEF	LDT1	2.8970e-003	2.1052e-003
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tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.18	0.09
tblVehicleEF	LDT1	0.15	0.29
tblVehicleEF	LDT1	3.1850e-003	2.9454e-003
tblVehicleEF	LDT1	6.9500e-004	5.9132e-004
tblVehicleEF	LDT1	0.11	0.11
tblVehicleEF	LDT1	0.26	0.19
tblVehicleEF	LDT1	0.09	0.09
tblVehicleEF	LDT1	0.04	0.04
tblVehicleEF	LDT1	0.18	0.09
tblVehicleEF	LDT1	0.17	0.32
tblVehicleEF	LDT2	6.1600e-003	4.2736e-003
tblVehicleEF	LDT2	5.0900e-003	0.05
tblVehicleEF	LDT2	0.76	0.96
tblVehicleEF	LDT2	1.14	2.10
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tblVehicleEF	LDT2	72.80	63.85
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.21
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.7734e-003
tblVehicleEF	LDT2	2.3970e-003	1.7548e-003
tblVehicleEF	LDT2	0.02	0.02

tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	2.0060e-003	1.6322e-003
tblVehicleEF	LDT2	2.2040e-003	1.6135e-003
tblVehicleEF	LDT2	0.04	0.10
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.04	0.09
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.07	0.23
tblVehicleEF	LDT2	3.5800e-003	3.2531e-003
tblVehicleEF	LDT2	7.4700e-004	6.1899e-004
tblVehicleEF	LDT2	0.04	0.10
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.04	0.09
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.06	0.04
tblVehicleEF	LDT2	0.08	0.26
tblVehicleEF	LDT2	6.5370e-003	4.7109e-003
tblVehicleEF	LDT2	4.5360e-003	0.06
tblVehicleEF	LDT2	0.83	1.03
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tblVehicleEF	LDT2	0.06	0.07
tblVehicleEF	LDT2	0.08	0.24
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.8262e-003
tblVehicleEF	LDT2	2.3970e-003	1.8187e-003

tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	2.0060e-003	1.6808e-003
tblVehicleEF	LDT2	2.2040e-003	1.6722e-003
tblVehicleEF	LDT2	0.06	0.11
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.06	0.26
tblVehicleEF	LDT2	3.7410e-003	3.3624e-003
tblVehicleEF	LDT2	7.4400e-004	6.4329e-004
tblVehicleEF	LDT2	0.06	0.11
tblVehicleEF	LDT2	0.09	0.12
tblVehicleEF	LDT2	0.06	0.10
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.05	0.05
tblVehicleEF	LDT2	0.07	0.28
tblVehicleEF	LDT2	6.0370e-003	3.9315e-003
tblVehicleEF	LDT2	5.2090e-003	0.06
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tblVehicleEF	LDT2	72.80	64.68
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.24
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	8.0000e-003	8.0000e-003
tblVehicleEF	LDT2	2.1810e-003	1.7734e-003

tblVehicleEF	LDT2	2.3970e-003	1.7548e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	2.0000e-003	2.0000e-003
tblVehicleEF	LDT2	2.0060e-003	1.6322e-003
tblVehicleEF	LDT2	2.2040e-003	1.6135e-003
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.01	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.07	0.27
tblVehicleEF	LDT2	3.5210e-003	3.1053e-003
tblVehicleEF	LDT2	7.4800e-004	6.2709e-004
tblVehicleEF	LDT2	0.04	0.06
tblVehicleEF	LDT2	0.10	0.12
tblVehicleEF	LDT2	0.04	0.07
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.07	0.06
tblVehicleEF	LDT2	0.08	0.29
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tblVehicleEF	LHD1	9.2560e-003	4.5391e-003
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tblVehicleEF	LHD1	0.14	0.19
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tblVehicleEF	LHD1	0.07	0.05

tblVehicleEF	LHD1	0.78	0.45
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tblVehicleEF	LHD1	8.3700e-004	8.1539e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7826e-003
tblVehicleEF	LHD1	8.5610e-003	5.7485e-003
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tblVehicleEF	LHD1	8.0100e-004	7.8012e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5540e-003	2.4456e-003
tblVehicleEF	LHD1	8.1660e-003	5.4721e-003
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tblVehicleEF	LHD1	2.7900e-003	3.1859e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7340e-003	1.8617e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.29	0.17
tblVehicleEF	LHD1	0.22	0.06
tblVehicleEF	LHD1	8.9000e-005	8.4839e-005
tblVehicleEF	LHD1	5.7670e-003	6.2545e-003
tblVehicleEF	LHD1	3.5400e-004	1.1452e-004
tblVehicleEF	LHD1	2.7900e-003	3.1859e-003
tblVehicleEF	LHD1	0.10	0.07
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7340e-003	1.8617e-003
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.29	0.17
tblVehicleEF	LHD1	0.24	0.07

tblVehicleEF	LHD1	4.9880e-003	5.3761e-003
tblVehicleEF	LHD1	9.4510e-003	5.0878e-003
tblVehicleEF	LHD1	0.02	0.01
tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.67	0.58
tblVehicleEF	LHD1	2.26	1.03
tblVehicleEF	LHD1	8.95	8.81
tblVehicleEF	LHD1	588.36	653.00
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tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.73	0.52
tblVehicleEF	LHD1	0.85	0.30
tblVehicleEF	LHD1	8.3700e-004	7.8359e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7291e-003
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tblVehicleEF	LHD1	8.0100e-004	7.4969e-004
tblVehicleEF	LHD1	0.03	0.03
tblVehicleEF	LHD1	2.5540e-003	2.4323e-003
tblVehicleEF	LHD1	8.1660e-003	5.7009e-003
tblVehicleEF	LHD1	8.1400e-004	2.4659e-004
tblVehicleEF	LHD1	4.1640e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.4160e-003	2.0042e-003
tblVehicleEF	LHD1	0.06	0.05
tblVehicleEF	LHD1	0.28	0.18
tblVehicleEF	LHD1	0.21	0.07

tblVehicleEF	LHD1	8.9000e-005	8.5605e-005
tblVehicleEF	LHD1	5.7670e-003	6.3745e-003
tblVehicleEF	LHD1	3.5200e-004	1.1848e-004
tblVehicleEF	LHD1	4.1640e-003	3.4572e-003
tblVehicleEF	LHD1	0.10	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	2.4160e-003	2.0042e-003
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.28	0.18
tblVehicleEF	LHD1	0.23	0.08
tblVehicleEF	LHD1	4.9880e-003	5.1306e-003
tblVehicleEF	LHD1	9.2060e-003	4.4356e-003
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tblVehicleEF	LHD1	0.14	0.19
tblVehicleEF	LHD1	0.66	0.50
tblVehicleEF	LHD1	2.39	1.04
tblVehicleEF	LHD1	8.95	8.74
tblVehicleEF	LHD1	588.36	641.00
tblVehicleEF	LHD1	31.02	11.67
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.76	0.47
tblVehicleEF	LHD1	0.89	0.30
tblVehicleEF	LHD1	8.3700e-004	8.1539e-004
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	9.7826e-003
tblVehicleEF	LHD1	8.5610e-003	5.7485e-003
tblVehicleEF	LHD1	8.8500e-004	2.5368e-004
tblVehicleEF	LHD1	8.0100e-004	7.8012e-004
tblVehicleEF	LHD1	0.03	0.03

tblVehicleEF	LHD1	2.5540e-003	2.4456e-003
tblVehicleEF	LHD1	8.1660e-003	5.4721e-003
tblVehicleEF	LHD1	8.1400e-004	2.3325e-004
tblVehicleEF	LHD1	2.9050e-003	2.2616e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	1.7020e-003	1.3351e-003
tblVehicleEF	LHD1	0.06	0.04
tblVehicleEF	LHD1	0.31	0.19
tblVehicleEF	LHD1	0.22	0.07
tblVehicleEF	LHD1	8.9000e-005	8.4839e-005
tblVehicleEF	LHD1	5.7670e-003	6.2543e-003
tblVehicleEF	LHD1	3.5400e-004	1.1545e-004
tblVehicleEF	LHD1	2.9050e-003	2.2616e-003
tblVehicleEF	LHD1	0.11	0.08
tblVehicleEF	LHD1	0.02	0.03
tblVehicleEF	LHD1	1.7020e-003	1.3351e-003
tblVehicleEF	LHD1	0.07	0.05
tblVehicleEF	LHD1	0.31	0.19
tblVehicleEF	LHD1	0.24	0.07
tblVehicleEF	LHD2	3.5180e-003	3.5633e-003
tblVehicleEF	LHD2	3.4110e-003	3.2788e-003
tblVehicleEF	LHD2	6.5620e-003	8.8868e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.28	0.35
tblVehicleEF	LHD2	1.17	0.65
tblVehicleEF	LHD2	13.57	13.29
tblVehicleEF	LHD2	605.98	642.03
tblVehicleEF	LHD2	26.15	8.77

tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.46	0.58
tblVehicleEF	LHD2	0.46	0.19
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tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.4980e-003
tblVehicleEF	LHD2	4.2100e-004	1.4313e-004
tblVehicleEF	LHD2	1.0770e-003	1.2487e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6710e-003	2.6534e-003
tblVehicleEF	LHD2	7.7140e-003	9.0713e-003
tblVehicleEF	LHD2	3.8700e-004	1.3161e-004
tblVehicleEF	LHD2	9.3900e-004	1.9234e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.4000e-004	1.1636e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.07	0.10
tblVehicleEF	LHD2	0.09	0.04
tblVehicleEF	LHD2	1.3300e-004	1.2730e-004
tblVehicleEF	LHD2	5.9000e-003	6.2092e-003
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tblVehicleEF	LHD2	9.3900e-004	1.9234e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-004	1.1636e-003
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.07	0.10

tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	LHD2	3.5180e-003	3.7479e-003
tblVehicleEF	LHD2	3.4510e-003	3.5743e-003
tblVehicleEF	LHD2	6.3490e-003	9.7971e-003
tblVehicleEF	LHD2	0.13	0.15
tblVehicleEF	LHD2	0.28	0.39
tblVehicleEF	LHD2	1.12	0.69
tblVehicleEF	LHD2	13.57	13.36
tblVehicleEF	LHD2	605.98	654.07
tblVehicleEF	LHD2	26.15	9.16
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.44	0.67
tblVehicleEF	LHD2	0.44	0.21
tblVehicleEF	LHD2	1.1260e-003	1.2759e-003
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.6267e-003
tblVehicleEF	LHD2	4.2100e-004	1.5202e-004
tblVehicleEF	LHD2	1.0770e-003	1.2207e-003
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	2.6710e-003	2.6429e-003
tblVehicleEF	LHD2	7.7140e-003	9.1939e-003
tblVehicleEF	LHD2	3.8700e-004	1.3978e-004
tblVehicleEF	LHD2	1.3970e-003	2.1079e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	8.8800e-004	1.2531e-003
tblVehicleEF	LHD2	0.04	0.05
tblVehicleEF	LHD2	0.06	0.11

tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2803e-004
tblVehicleEF	LHD2	5.9000e-003	6.3287e-003
tblVehicleEF	LHD2	2.8100e-004	9.0638e-005
tblVehicleEF	LHD2	1.3970e-003	2.1079e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	8.8800e-004	1.2531e-003
tblVehicleEF	LHD2	0.05	0.06
tblVehicleEF	LHD2	0.06	0.11
tblVehicleEF	LHD2	0.09	0.05
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tblVehicleEF	LHD2	3.4000e-003	3.2376e-003
tblVehicleEF	LHD2	6.6050e-003	9.2660e-003
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tblVehicleEF	LHD2	0.28	0.35
tblVehicleEF	LHD2	1.18	0.68
tblVehicleEF	LHD2	13.57	13.29
tblVehicleEF	LHD2	605.98	642.02
tblVehicleEF	LHD2	26.15	8.83
tblVehicleEF	LHD2	0.09	0.08
tblVehicleEF	LHD2	0.46	0.61
tblVehicleEF	LHD2	0.46	0.21
tblVehicleEF	LHD2	1.1260e-003	1.3052e-003
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tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	8.0770e-003	9.4980e-003
tblVehicleEF	LHD2	4.2100e-004	1.4313e-004
tblVehicleEF	LHD2	1.0770e-003	1.2487e-003

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tblVehicleEF	LHD2	7.7140e-003	9.0713e-003
tblVehicleEF	LHD2	3.8700e-004	1.3161e-004
tblVehicleEF	LHD2	9.4200e-004	1.3333e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	6.1900e-004	8.1693e-004
tblVehicleEF	LHD2	0.04	0.04
tblVehicleEF	LHD2	0.07	0.11
tblVehicleEF	LHD2	0.09	0.05
tblVehicleEF	LHD2	1.3300e-004	1.2730e-004
tblVehicleEF	LHD2	5.9000e-003	6.2091e-003
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tblVehicleEF	LHD2	9.4200e-004	1.3333e-003
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.1900e-004	8.1693e-004
tblVehicleEF	LHD2	0.05	0.05
tblVehicleEF	LHD2	0.07	0.11
tblVehicleEF	LHD2	0.10	0.05
tblVehicleEF	MCY	0.55	0.38
tblVehicleEF	MCY	0.15	0.21
tblVehicleEF	MCY	18.62	18.05
tblVehicleEF	MCY	9.70	7.79
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tblVehicleEF	MCY	1.13	0.99
tblVehicleEF	MCY	0.31	0.25

tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.5427e-003
tblVehicleEF	MCY	3.5080e-003	3.0379e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3736e-003
tblVehicleEF	MCY	3.2930e-003	2.8511e-003
tblVehicleEF	MCY	1.05	1.70
tblVehicleEF	MCY	0.61	0.68
tblVehicleEF	MCY	0.64	1.04
tblVehicleEF	MCY	2.60	2.56
tblVehicleEF	MCY	0.56	0.50
tblVehicleEF	MCY	2.03	1.60
tblVehicleEF	MCY	2.2930e-003	2.2114e-003
tblVehicleEF	MCY	6.5600e-004	5.6414e-004
tblVehicleEF	MCY	1.05	1.70
tblVehicleEF	MCY	0.61	0.68
tblVehicleEF	MCY	0.64	1.04
tblVehicleEF	MCY	3.25	3.19
tblVehicleEF	MCY	0.56	0.50
tblVehicleEF	MCY	2.21	1.74
tblVehicleEF	MCY	0.54	0.37
tblVehicleEF	MCY	0.13	0.21
tblVehicleEF	MCY	17.96	18.15
tblVehicleEF	MCY	8.84	7.77
tblVehicleEF	MCY	190.93	222.30
tblVehicleEF	MCY	43.78	57.32
tblVehicleEF	MCY	0.99	0.99

tblVehicleEF	MCY	0.29	0.25
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.4798e-003
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tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3160e-003
tblVehicleEF	MCY	3.2930e-003	2.9646e-003
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tblVehicleEF	MCY	0.67	0.69
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	2.54	2.54
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tblVehicleEF	MCY	1.81	1.60
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tblVehicleEF	MCY	6.3500e-004	5.6721e-004
tblVehicleEF	MCY	1.71	1.71
tblVehicleEF	MCY	0.67	0.69
tblVehicleEF	MCY	1.05	1.05
tblVehicleEF	MCY	3.18	3.16
tblVehicleEF	MCY	0.53	0.51
tblVehicleEF	MCY	1.97	1.74
tblVehicleEF	MCY	0.55	0.38
tblVehicleEF	MCY	0.15	0.24
tblVehicleEF	MCY	18.72	18.88
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tblVehicleEF	MCY	190.93	225.05
tblVehicleEF	MCY	43.78	59.29

tblVehicleEF	MCY	1.11	1.11
tblVehicleEF	MCY	0.31	0.27
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tblVehicleEF	MCY	4.0000e-003	4.0000e-003
tblVehicleEF	MCY	2.5350e-003	2.5427e-003
tblVehicleEF	MCY	3.5080e-003	3.0379e-003
tblVehicleEF	MCY	5.0400e-003	5.0400e-003
tblVehicleEF	MCY	1.0000e-003	1.0000e-003
tblVehicleEF	MCY	2.3660e-003	2.3736e-003
tblVehicleEF	MCY	3.2930e-003	2.8511e-003
tblVehicleEF	MCY	1.15	1.16
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tblVehicleEF	MCY	0.61	0.62
tblVehicleEF	MCY	2.61	2.63
tblVehicleEF	MCY	0.65	0.62
tblVehicleEF	MCY	2.07	1.84
tblVehicleEF	MCY	2.2950e-003	2.2270e-003
tblVehicleEF	MCY	6.5900e-004	5.8668e-004
tblVehicleEF	MCY	1.15	1.16
tblVehicleEF	MCY	0.78	0.80
tblVehicleEF	MCY	0.61	0.62
tblVehicleEF	MCY	3.26	3.28
tblVehicleEF	MCY	0.65	0.62
tblVehicleEF	MCY	2.25	2.00
tblVehicleEF	MDV	0.01	5.2986e-003
tblVehicleEF	MDV	0.01	0.06
tblVehicleEF	MDV	1.10	1.07
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tblVehicleEF	MDV	0.12	0.07
tblVehicleEF	MDV	0.17	0.26
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2730e-003	1.8649e-003
tblVehicleEF	MDV	2.4250e-003	1.8223e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
tblVehicleEF	MDV	2.0940e-003	1.7191e-003
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tblVehicleEF	MDV	0.06	0.12
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.07	0.11
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.15	0.29
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tblVehicleEF	MDV	0.06	0.12
tblVehicleEF	MDV	0.14	0.13
tblVehicleEF	MDV	0.07	0.11
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.16	0.31
tblVehicleEF	MDV	0.01	6.0286e-003
tblVehicleEF	MDV	9.6010e-003	0.07
tblVehicleEF	MDV	1.21	1.19
tblVehicleEF	MDV	1.70	2.49

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tblVehicleEF	MDV	96.60	80.65
tblVehicleEF	MDV	0.10	0.08
tblVehicleEF	MDV	0.16	0.29
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
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tblVehicleEF	MDV	2.2300e-003	1.7819e-003
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tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.13	0.32
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tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.14	0.14
tblVehicleEF	MDV	0.09	0.12
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.08	0.05
tblVehicleEF	MDV	0.14	0.35
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tblVehicleEF	MDV	0.01	0.07
tblVehicleEF	MDV	1.06	0.95

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tblVehicleEF	MDV	473.66	394.54
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tblVehicleEF	MDV	0.11	0.08
tblVehicleEF	MDV	0.17	0.28
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	8.0000e-003	8.0000e-003
tblVehicleEF	MDV	2.2730e-003	1.8649e-003
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tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	2.0000e-003	2.0000e-003
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tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.03	0.02
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.15	0.33
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tblVehicleEF	MDV	1.0010e-003	7.6048e-004
tblVehicleEF	MDV	0.06	0.07
tblVehicleEF	MDV	0.15	0.13
tblVehicleEF	MDV	0.06	0.08
tblVehicleEF	MDV	0.04	0.03
tblVehicleEF	MDV	0.10	0.06
tblVehicleEF	MDV	0.16	0.36
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tblVehicleEF	MH	0.02	0.02

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tblVehicleEF	MH	1,126.11	1,447.98
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tblVehicleEF	MH	0.93	0.94
tblVehicleEF	MH	0.71	0.24
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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.5494e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2578e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.3440e-004
tblVehicleEF	MH	0.76	0.93
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.33	0.39
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tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.28	0.08
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7800e-004	1.7926e-004
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tblVehicleEF	MH	0.33	0.39
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	0.01
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tblVehicleEF	MH	0.02	8.8559e-003

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tblVehicleEF	MH	0.86	0.97
tblVehicleEF	MH	0.68	0.24
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tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.6718e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2515e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.4566e-004
tblVehicleEF	MH	1.12	1.04
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.47	0.43
tblVehicleEF	MH	0.06	0.05
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.27	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7300e-004	1.8454e-004
tblVehicleEF	MH	1.12	1.04
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	0.47	0.43
tblVehicleEF	MH	0.09	0.07
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.29	0.10

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tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.42	0.81
tblVehicleEF	MH	4.87	1.96
tblVehicleEF	MH	1,126.11	1,447.93
tblVehicleEF	MH	59.42	18.33
tblVehicleEF	MH	0.91	0.99
tblVehicleEF	MH	0.71	0.25
tblVehicleEF	MH	0.13	0.13
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.8700e-004	2.5494e-004
tblVehicleEF	MH	0.06	0.06
tblVehicleEF	MH	3.2070e-003	3.2578e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	9.0800e-004	2.3440e-004
tblVehicleEF	MH	0.85	0.72
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	0.06	0.04
tblVehicleEF	MH	0.02	0.01
tblVehicleEF	MH	0.28	0.09
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	6.7900e-004	1.8140e-004
tblVehicleEF	MH	0.85	0.72
tblVehicleEF	MH	0.07	0.06
tblVehicleEF	MH	0.34	0.29
tblVehicleEF	MH	0.08	0.06
tblVehicleEF	MH	0.02	0.01

tblVehicleEF	MH	0.31	0.10
tblVehicleEF	MHD	0.02	4.1214e-003
tblVehicleEF	MHD	3.4980e-003	1.8347e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.35	0.33
tblVehicleEF	MHD	0.29	0.24
tblVehicleEF	MHD	5.13	1.21
tblVehicleEF	MHD	132.56	63.60
tblVehicleEF	MHD	1,140.29	1,014.01
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tblVehicleEF	MHD	0.76	1.03
tblVehicleEF	MHD	10.11	1.59
tblVehicleEF	MHD	9.0000e-005	2.4041e-004
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1497e-003
tblVehicleEF	MHD	7.8500e-004	1.2776e-004
tblVehicleEF	MHD	8.6000e-005	2.3001e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8771e-003
tblVehicleEF	MHD	7.2200e-004	1.1747e-004
tblVehicleEF	MHD	9.8100e-004	8.4134e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	6.6900e-004	5.3093e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.02

tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.2770e-003	6.0471e-004
tblVehicleEF	MHD	0.01	9.6935e-003
tblVehicleEF	MHD	7.0500e-004	1.1250e-004
tblVehicleEF	MHD	9.8100e-004	8.4134e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	6.6900e-004	5.3093e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.35	0.06
tblVehicleEF	MHD	0.01	4.2036e-003
tblVehicleEF	MHD	3.5450e-003	2.1413e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.26	0.34
tblVehicleEF	MHD	0.30	0.28
tblVehicleEF	MHD	4.87	1.31
tblVehicleEF	MHD	140.40	64.73
tblVehicleEF	MHD	1,140.29	1,030.65
tblVehicleEF	MHD	61.49	11.94
tblVehicleEF	MHD	0.36	0.34
tblVehicleEF	MHD	0.71	1.02
tblVehicleEF	MHD	10.08	1.58
tblVehicleEF	MHD	7.6000e-005	2.7779e-004
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1299e-003
tblVehicleEF	MHD	7.8500e-004	1.3466e-004
tblVehicleEF	MHD	7.2000e-005	2.6577e-004

tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8582e-003
tblVehicleEF	MHD	7.2200e-004	1.2382e-004
tblVehicleEF	MHD	1.4660e-003	9.2475e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	9.3700e-004	5.7330e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.30	0.06
tblVehicleEF	MHD	1.3510e-003	6.1548e-004
tblVehicleEF	MHD	0.01	9.8544e-003
tblVehicleEF	MHD	7.0000e-004	1.1815e-004
tblVehicleEF	MHD	1.4660e-003	9.2475e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.03	0.03
tblVehicleEF	MHD	9.3700e-004	5.7330e-004
tblVehicleEF	MHD	0.04	0.02
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.33	0.07
tblVehicleEF	MHD	0.02	4.6594e-003
tblVehicleEF	MHD	3.4850e-003	1.7872e-003
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.49	0.49
tblVehicleEF	MHD	0.29	0.24
tblVehicleEF	MHD	5.18	1.28
tblVehicleEF	MHD	121.72	63.61
tblVehicleEF	MHD	1,140.29	1,014.00

tblVehicleEF	MHD	61.49	11.50
tblVehicleEF	MHD	0.33	0.35
tblVehicleEF	MHD	0.74	1.07
tblVehicleEF	MHD	10.12	1.60
tblVehicleEF	MHD	1.0900e-004	3.3923e-004
tblVehicleEF	MHD	0.13	0.13
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	2.8650e-003	6.1497e-003
tblVehicleEF	MHD	7.8500e-004	1.2776e-004
tblVehicleEF	MHD	1.0500e-004	3.2456e-004
tblVehicleEF	MHD	0.06	0.06
tblVehicleEF	MHD	3.0000e-003	3.0000e-003
tblVehicleEF	MHD	2.7360e-003	5.8771e-003
tblVehicleEF	MHD	7.2200e-004	1.1747e-004
tblVehicleEF	MHD	9.9000e-004	5.7591e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.03	0.02
tblVehicleEF	MHD	6.4900e-004	3.7019e-004
tblVehicleEF	MHD	0.04	0.01
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.32	0.06
tblVehicleEF	MHD	1.1750e-003	6.0440e-004
tblVehicleEF	MHD	0.01	9.6934e-003
tblVehicleEF	MHD	7.0600e-004	1.1379e-004
tblVehicleEF	MHD	9.9000e-004	5.7591e-004
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	0.04	0.03
tblVehicleEF	MHD	6.4900e-004	3.7019e-004
tblVehicleEF	MHD	0.04	0.02

tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.35	0.07
tblVehicleEF	OBUS	0.01	8.3628e-003
tblVehicleEF	OBUS	5.4840e-003	4.5133e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.25	0.61
tblVehicleEF	OBUS	0.41	0.56
tblVehicleEF	OBUS	4.93	2.14
tblVehicleEF	OBUS	102.93	90.13
tblVehicleEF	OBUS	1,248.17	1,333.81
tblVehicleEF	OBUS	67.50	18.36
tblVehicleEF	OBUS	0.22	0.34
tblVehicleEF	OBUS	0.71	1.11
tblVehicleEF	OBUS	2.50	0.84
tblVehicleEF	OBUS	2.0000e-005	1.0741e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.7480e-003	7.3393e-003
tblVehicleEF	OBUS	8.4800e-004	2.0131e-004
tblVehicleEF	OBUS	1.9000e-005	1.0277e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.6130e-003	7.0068e-003
tblVehicleEF	OBUS	7.8000e-004	1.8509e-004
tblVehicleEF	OBUS	1.3910e-003	2.6323e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.6200e-004	1.3143e-003
tblVehicleEF	OBUS	0.04	0.03

tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.31	0.10
tblVehicleEF	OBUS	9.9400e-004	8.5745e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.6100e-004	1.8171e-004
tblVehicleEF	OBUS	1.3910e-003	2.6323e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.6200e-004	1.3143e-003
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.34	0.11
tblVehicleEF	OBUS	0.01	8.4017e-003
tblVehicleEF	OBUS	5.5780e-003	5.0478e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.24	0.61
tblVehicleEF	OBUS	0.42	0.63
tblVehicleEF	OBUS	4.66	2.21
tblVehicleEF	OBUS	108.07	89.14
tblVehicleEF	OBUS	1,248.17	1,355.72
tblVehicleEF	OBUS	67.50	18.81
tblVehicleEF	OBUS	0.23	0.33
tblVehicleEF	OBUS	0.67	1.09
tblVehicleEF	OBUS	2.46	0.83
tblVehicleEF	OBUS	1.7000e-005	1.0501e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.7480e-003	7.0871e-003
tblVehicleEF	OBUS	8.4800e-004	2.0001e-004

tblVehicleEF	OBUS	1.6000e-005	1.0047e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.6130e-003	6.7657e-003
tblVehicleEF	OBUS	7.8000e-004	1.8390e-004
tblVehicleEF	OBUS	2.0340e-003	2.6502e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	1.0660e-003	1.3153e-003
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.30	0.11
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tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.5700e-004	1.8613e-004
tblVehicleEF	OBUS	2.0340e-003	2.6502e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	1.0660e-003	1.3153e-003
tblVehicleEF	OBUS	0.05	0.04
tblVehicleEF	OBUS	0.04	0.07
tblVehicleEF	OBUS	0.32	0.12
tblVehicleEF	OBUS	0.01	8.1710e-003
tblVehicleEF	OBUS	5.4590e-003	4.3905e-003
tblVehicleEF	OBUS	0.03	0.02
tblVehicleEF	OBUS	0.26	0.63
tblVehicleEF	OBUS	0.41	0.55
tblVehicleEF	OBUS	4.98	2.29
tblVehicleEF	OBUS	95.85	92.62

tblVehicleEF	OBUS	1,248.17	1,333.79
tblVehicleEF	OBUS	67.50	18.62
tblVehicleEF	OBUS	0.21	0.38
tblVehicleEF	OBUS	0.70	1.16
tblVehicleEF	OBUS	2.50	0.85
tblVehicleEF	OBUS	2.4000e-005	1.3949e-004
tblVehicleEF	OBUS	0.13	0.13
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	2.7480e-003	7.3393e-003
tblVehicleEF	OBUS	8.4800e-004	2.0131e-004
tblVehicleEF	OBUS	2.3000e-005	1.3345e-004
tblVehicleEF	OBUS	0.06	0.06
tblVehicleEF	OBUS	3.0000e-003	3.0000e-003
tblVehicleEF	OBUS	2.6130e-003	7.0068e-003
tblVehicleEF	OBUS	7.8000e-004	1.8509e-004
tblVehicleEF	OBUS	1.4050e-003	1.8913e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.03	0.05
tblVehicleEF	OBUS	7.3700e-004	9.3069e-004
tblVehicleEF	OBUS	0.04	0.03
tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.31	0.11
tblVehicleEF	OBUS	9.2600e-004	8.8101e-004
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	7.6200e-004	1.8421e-004
tblVehicleEF	OBUS	1.4050e-003	1.8913e-003
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.05	0.07
tblVehicleEF	OBUS	7.3700e-004	9.3069e-004

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tblVehicleEF	OBUS	0.04	0.08
tblVehicleEF	OBUS	0.34	0.12
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tblVehicleEF	SBUS	1,062.27	1,068.93
tblVehicleEF	SBUS	57.76	5.88
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tblVehicleEF	SBUS	11.58	1.00
tblVehicleEF	SBUS	7.0050e-003	2.7465e-003
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.9100e-004	6.5725e-005
tblVehicleEF	SBUS	6.7020e-003	2.6277e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6490e-003	2.6420e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.1900e-004	6.0432e-005
tblVehicleEF	SBUS	3.4080e-003	1.5690e-003
tblVehicleEF	SBUS	0.03	9.6318e-003
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tblVehicleEF	SBUS	1.8930e-003	8.2589e-004

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tblVehicleEF	SBUS	6.9900e-004	5.8203e-005
tblVehicleEF	SBUS	3.4080e-003	1.5690e-003
tblVehicleEF	SBUS	0.03	9.6318e-003
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tblVehicleEF	SBUS	1.8930e-003	8.2589e-004
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.41	0.04
tblVehicleEF	SBUS	0.83	0.08
tblVehicleEF	SBUS	0.01	6.7846e-003
tblVehicleEF	SBUS	0.05	6.3039e-003
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tblVehicleEF	SBUS	0.62	0.58
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tblVehicleEF	SBUS	3.26	4.13
tblVehicleEF	SBUS	11.55	0.95
tblVehicleEF	SBUS	5.9050e-003	3.0311e-003
tblVehicleEF	SBUS	0.74	0.74
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.03

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tblVehicleEF	SBUS	5.6500e-003	2.9000e-003
tblVehicleEF	SBUS	0.32	0.32
tblVehicleEF	SBUS	2.6490e-003	2.6525e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.1900e-004	5.5389e-005
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tblVehicleEF	SBUS	2.6560e-003	7.7378e-004
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.33	0.04
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	6.7700e-004	5.6163e-005
tblVehicleEF	SBUS	5.0090e-003	1.4874e-003
tblVehicleEF	SBUS	0.03	9.1168e-003
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tblVehicleEF	SBUS	2.6560e-003	7.7378e-004
tblVehicleEF	SBUS	0.11	0.11
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.36	0.04
tblVehicleEF	SBUS	0.83	0.08
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tblVehicleEF	SBUS	0.06	7.5038e-003
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tblVehicleEF	SBUS	7.24	1.03

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tblVehicleEF	SBUS	3.40	4.03
tblVehicleEF	SBUS	11.58	1.01
tblVehicleEF	SBUS	8.5240e-003	3.9414e-003
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tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.02	0.02
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tblVehicleEF	SBUS	8.1550e-003	3.7709e-003
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tblVehicleEF	SBUS	2.6490e-003	2.6420e-003
tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	8.1900e-004	6.0432e-005
tblVehicleEF	SBUS	3.3910e-003	1.0829e-003
tblVehicleEF	SBUS	0.03	9.8617e-003
tblVehicleEF	SBUS	1.00	0.38
tblVehicleEF	SBUS	1.8130e-003	5.7290e-004
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tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.38	0.04
tblVehicleEF	SBUS	0.01	3.2939e-003
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tblVehicleEF	SBUS	7.0300e-004	6.1800e-005
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tblVehicleEF	SBUS	0.03	9.8617e-003
tblVehicleEF	SBUS	1.45	0.55

tblVehicleEF	SBUS	1.8130e-003	5.7290e-004
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tblVehicleEF	SBUS	0.02	0.02
tblVehicleEF	SBUS	0.42	0.05
tblVehicleEF	UBUS	2.28	5.85
tblVehicleEF	UBUS	0.05	9.0511e-003
tblVehicleEF	UBUS	10.20	45.43
tblVehicleEF	UBUS	8.89	0.63
tblVehicleEF	UBUS	1,934.49	1,980.91
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tblVehicleEF	UBUS	8.69	0.46
tblVehicleEF	UBUS	14.82	0.07
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2446e-003
tblVehicleEF	UBUS	1.1960e-003	7.1367e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0994e-003
tblVehicleEF	UBUS	1.1000e-003	6.5620e-005
tblVehicleEF	UBUS	4.1520e-003	6.2304e-004
tblVehicleEF	UBUS	0.07	5.0779e-003
tblVehicleEF	UBUS	2.4690e-003	4.2109e-004
tblVehicleEF	UBUS	0.74	0.09
tblVehicleEF	UBUS	0.02	1.0548e-003
tblVehicleEF	UBUS	0.69	0.04
tblVehicleEF	UBUS	9.7410e-003	1.3278e-003
tblVehicleEF	UBUS	1.2020e-003	7.8193e-005
tblVehicleEF	UBUS	4.1520e-003	6.2304e-004

tblVehicleEF	UBUS	0.07	5.0779e-003
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tblVehicleEF	UBUS	0.02	1.0548e-003
tblVehicleEF	UBUS	0.76	0.04
tblVehicleEF	UBUS	2.29	5.85
tblVehicleEF	UBUS	0.05	9.9367e-003
tblVehicleEF	UBUS	10.25	45.42
tblVehicleEF	UBUS	7.71	0.63
tblVehicleEF	UBUS	1,934.49	1,987.99
tblVehicleEF	UBUS	104.15	8.27
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tblVehicleEF	UBUS	14.77	0.08
tblVehicleEF	UBUS	0.59	0.07
tblVehicleEF	UBUS	0.01	0.03
tblVehicleEF	UBUS	0.12	3.2067e-003
tblVehicleEF	UBUS	1.1960e-003	5.6569e-005
tblVehicleEF	UBUS	0.25	0.03
tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0642e-003
tblVehicleEF	UBUS	1.1000e-003	5.2013e-005
tblVehicleEF	UBUS	5.9260e-003	8.6079e-004
tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3920e-003	5.9984e-004
tblVehicleEF	UBUS	0.75	0.09
tblVehicleEF	UBUS	0.02	1.6648e-003
tblVehicleEF	UBUS	0.64	0.04
tblVehicleEF	UBUS	9.7420e-003	1.4048e-003
tblVehicleEF	UBUS	1.1820e-003	8.1863e-005

tblVehicleEF	UBUS	5.9260e-003	8.6079e-004
tblVehicleEF	UBUS	0.07	7.6581e-003
tblVehicleEF	UBUS	3.3920e-003	5.9984e-004
tblVehicleEF	UBUS	3.12	5.97
tblVehicleEF	UBUS	0.02	1.6648e-003
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tblVehicleEF	UBUS	2.28	5.85
tblVehicleEF	UBUS	0.05	9.8939e-003
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tblVehicleEF	UBUS	1,934.49	1,980.90
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tblVehicleEF	UBUS	0.12	3.2446e-003
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tblVehicleEF	UBUS	3.0000e-003	7.9689e-003
tblVehicleEF	UBUS	0.11	3.0994e-003
tblVehicleEF	UBUS	1.1000e-003	6.5620e-005
tblVehicleEF	UBUS	4.6510e-003	4.3012e-004
tblVehicleEF	UBUS	0.08	5.3044e-003
tblVehicleEF	UBUS	2.5600e-003	2.8731e-004
tblVehicleEF	UBUS	0.74	0.09
tblVehicleEF	UBUS	0.03	1.4176e-003
tblVehicleEF	UBUS	0.71	0.04
tblVehicleEF	UBUS	9.7410e-003	1.3278e-003

tblVehicleEF	UBUS	1.2060e-003	7.9923e-005
tblVehicleEF	UBUS	4.6510e-003	4.3012e-004
tblVehicleEF	UBUS	0.08	5.3044e-003
tblVehicleEF	UBUS	2.5600e-003	2.8731e-004
tblVehicleEF	UBUS	3.10	5.97
tblVehicleEF	UBUS	0.03	1.4176e-003
tblVehicleEF	UBUS	0.77	0.05
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	8.70	6.31
tblVehicleTrips	HO_TL	8.70	6.31
tblVehicleTrips	HS_TL	5.90	6.31
tblVehicleTrips	HS_TL	5.90	6.31
tblVehicleTrips	HW_TL	14.70	6.31
tblVehicleTrips	HW_TL	14.70	6.31
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	5.67	8.13
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	ST_TR	9.91	9.54
tblVehicleTrips	SU_TR	4.84	6.29
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	SU_TR	8.62	8.55
tblVehicleTrips	WD_TR	5.81	7.32
tblVehicleTrips	WD_TR	33.82	0.00
tblVehicleTrips	WD_TR	9.52	9.44
tblWater	AerobicPercent	87.46	100.00

tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	2,475,852.97	0.00
tblWater	IndoorWaterUseRate	532,288.30	0.00
tblWater	IndoorWaterUseRate	11,011,030.33	13,321,770.00
tblWater	OutdoorWaterUseRate	1,560,863.83	0.00
tblWater	OutdoorWaterUseRate	326,241.21	0.00
tblWater	OutdoorWaterUseRate	6,941,736.51	2,360,090.00
tblWater	SepticTankPercent	10.33	0.00
tblWoodstoves	NumberCatalytic	1.90	0.00
tblWoodstoves	NumberCatalytic	8.45	0.00
tblWoodstoves	NumberNoncatalytic	1.90	0.00
tblWoodstoves	NumberNoncatalytic	8.45	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7204	0.0246	2.1375	1.1000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	3.4942	3.4942	3.3600e-003	0.0000	3.5783
Energy	0.0267	0.2283	0.0972	1.4600e-003		0.0185	0.0185		0.0185	0.0185	0.0000	644.5458	644.5458	0.0258	9.1400e-003	647.9146
Mobile	0.5236	0.4410	5.6448	0.0141	1.5875	9.9000e-003	1.5973	0.4217	9.1300e-003	0.4309	0.0000	1,317.7834	1,317.7834	0.0553	0.0000	1,319.1652

Waste						0.0000	0.0000		0.0000	0.0000	65.9416	0.0000	65.9416	3.8970	0.0000	163.3676
Water						0.0000	0.0000		0.0000	0.0000	4.7133	48.1351	52.8484	0.0189	0.0108	56.5360
Total	2.2707	0.6939	7.8794	0.0156	1.5875	0.0402	1.6276	0.4217	0.0394	0.4612	70.6549	2,013.9586	2,084.6135	4.0003	0.0199	2,190.5617

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.7204	0.0246	2.1375	1.1000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	3.4942	3.4942	3.3600e-003	0.0000	3.5783
Energy	0.0267	0.2283	0.0972	1.4600e-003		0.0185	0.0185		0.0185	0.0185	0.0000	644.5458	644.5458	0.0258	9.1400e-003	647.9146
Mobile	0.5236	0.4410	5.6448	0.0141	1.5875	9.9000e-003	1.5973	0.4217	9.1300e-003	0.4309	0.0000	1,317.7834	1,317.7834	0.0553	0.0000	1,319.1652
Waste						0.0000	0.0000		0.0000	0.0000	65.9416	0.0000	65.9416	3.8970	0.0000	163.3676
Water						0.0000	0.0000		0.0000	0.0000	4.7133	48.1351	52.8484	0.0189	0.0108	56.5360
Total	2.2707	0.6939	7.8794	0.0156	1.5875	0.0402	1.6276	0.4217	0.0394	0.4612	70.6549	2,013.9586	2,084.6135	4.0003	0.0199	2,190.5617

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.5236	0.4410	5.6448	0.0141	1.5875	9.9000e-003	1.5973	0.4217	9.1300e-003	0.4309	0.0000	1,317.7834	1,317.7834	0.0553	0.0000	1,319.1652
Unmitigated	0.5236	0.4410	5.6448	0.0141	1.5875	9.9000e-003	1.5973	0.4217	9.1300e-003	0.4309	0.0000	1,317.7834	1,317.7834	0.0553	0.0000	1,319.1652

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	278.16	308.94	239.02	636,146	636,146
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Single Family Housing	1,595.36	1,612.26	1,444.95	3,620,479	3,620,479
Total	1,873.52	1,921.20	1,683.97	4,256,625	4,256,625

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Condo/Townhouse	6.31	6.31	6.31	40.20	19.20	40.60	100	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9
Single Family Housing	6.31	6.31	6.31	40.20	19.20	40.60	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.659532	0.053962	0.249808	0.020000	0.001996	0.000832	0.002743	0.004224	0.000000	0.000000	0.006698	0.000093	0.000113
Other Asphalt Surfaces	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Other Non-Asphalt Surfaces	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Parking Lot	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Recreational Swimming Pool	0.545348	0.044620	0.206559	0.118451	0.015002	0.006253	0.020617	0.031756	0.002560	0.002071	0.005217	0.000696	0.000850
Single Family Housing	0.659532	0.053962	0.249808	0.020000	0.001996	0.000832	0.002743	0.004224	0.000000	0.000000	0.006698	0.000093	0.000113

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	380.1484	380.1484	0.0207	4.2900e-003	381.9460
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	380.1484	380.1484	0.0207	4.2900e-003	381.9460
NaturalGas Mitigated	0.0267	0.2283	0.0972	1.4600e-003		0.0185	0.0185		0.0185	0.0185	0.0000	264.3975	264.3975	5.0700e-003	4.8500e-003	265.9687
NaturalGas Unmitigated	0.0267	0.2283	0.0972	1.4600e-003		0.0185	0.0185		0.0185	0.0185	0.0000	264.3975	264.3975	5.0700e-003	4.8500e-003	265.9687

5.2 Energy by Land Use - NaturalGas

Unmitigated

Land Use	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	632203	3.4100e-003	0.0291	0.0124	1.9000e-004		2.3600e-003	2.3600e-003		2.3600e-003	2.3600e-003	0.0000	33.7368	33.7368	6.5000e-004	6.2000e-004	33.9373

Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.32242e+006	0.0233	0.1992	0.0848	1.2700e-003	0.0161	0.0161	0.0161	0.0161	0.0000	230.6607	230.6607	4.4200e-003	4.2300e-003	232.0314		
Total		0.0267	0.2283	0.0972	1.4600e-003	0.0185	0.0185	0.0185	0.0185	0.0000	264.3975	264.3975	5.0700e-003	4.8500e-003	265.9687		

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	632203	3.4100e-003	0.0291	0.0124	1.9000e-004	2.3600e-003	2.3600e-003	2.3600e-003	2.3600e-003	2.3600e-003	2.3600e-003	0.0000	33.7368	33.7368	6.5000e-004	6.2000e-004	33.9373
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	4.32242e+006	0.0233	0.1992	0.0848	1.2700e-003	0.0161	0.0161	0.0161	0.0161	0.0161	0.0161	0.0000	230.6607	230.6607	4.4200e-003	4.2300e-003	232.0314
Total		0.0267	0.2283	0.0972	1.4600e-003	0.0185	0.0185	0.0185	0.0185	0.0185	0.0185	0.0000	264.3975	264.3975	5.0700e-003	4.8500e-003	265.9687

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
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Land Use	kWh/yr	MT/yr			
Condo/Townhouse	191332	46.1220	2.5200e-003	5.2000e-004	46.3401
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1470	0.3544	2.0000e-005	0.0000	0.3560
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.3842e+06	333.6720	0.0182	3.7700e-003	335.2498
Total		380.1484	0.0208	4.2900e-003	381.9460

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	191332	46.1220	2.5200e-003	5.2000e-004	46.3401
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	1470	0.3544	2.0000e-005	0.0000	0.3560
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.3842e+06	333.6720	0.0182	3.7700e-003	335.2498
Total		380.1484	0.0208	4.2900e-003	381.9460

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7204	0.0246	2.1375	1.1000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	3.4942	3.4942	3.3600e-003	0.0000	3.5783
Unmitigated	1.7204	0.0246	2.1375	1.1000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	3.4942	3.4942	3.3600e-003	0.0000	3.5783

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0645	0.0246	2.1375	1.1000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	3.4942	3.4942	3.3600e-003	0.0000	3.5783
Total	1.7204	0.0246	2.1375	1.1000e-004		0.0118	0.0118		0.0118	0.0118	0.0000	3.4942	3.4942	3.3600e-003	0.0000	3.5783

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1306					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Consumer Products	1.5253				0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0645	0.0246	2.1375	1.1000e-004	0.0118	0.0118		0.0118	0.0118	0.0000	3.4942	3.4942	3.3600e-003	0.0000	3.5783
Total	1.7204	0.0246	2.1375	1.1000e-004	0.0118	0.0118		0.0118	0.0118	0.0000	3.4942	3.4942	3.3600e-003	0.0000	3.5783

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	52.8484	0.0189	0.0108	56.5360
Unmitigated	52.8484	0.0189	0.0108	56.5360

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	13.3218 / 2.36009	52.8484	0.0189	0.0108	56.5360
Total		52.8484	0.0189	0.0108	56.5360

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	13.3218 / 2.36009	52.8484	0.0189	0.0108	56.5360
Total		52.8484	0.0189	0.0108	56.5360

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	65.9416	3.8970	0.0000	163.3676
Unmitigated	65.9416	3.8970	0.0000	163.3676

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	324.85	65.9416	3.8970	0.0000	163.3676
Total		65.9416	3.8970	0.0000	163.3676

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	324.85	65.9416	3.8970	0.0000	163.3676
Total		65.9416	3.8970	0.0000	163.3676

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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LST Worksheets

Construction Localized Significance Thresholds - Asphalt & Building Demolition

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	1.00	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5			0
NOx	83	Graders	0.5			0
CO	673	Dozers	0.5	8	2	1
PM10	5.00	Scrapers	1			0
PM2.5	4.00				Acres	1.00

	Acres	25	50	100	200	500
NOx	1	83	84	96	123	193
	1	83	84	96	123	193
		83	84	96	123	193
CO	1	673	760	1113	2110	6884
	1	673	760	1113	2110	6884
		673	760	1113	2110	6884
PM10	1	5	13	29	60	153
	1	5	13	29	60	153
		5	13	29	60	153
PM2.5	1	4	5	9	20	83
	1	4	5	9	20	83
		4	5	9	20	83
South San Gabriel Valley						
1.00 Acres						
	25	50	100	200	500	
NOx	83	84	96	123	193	
CO	673	760	1113	2110	6884	
PM10	5	13	29	60	153	
PM2.5	4	5	9	20	83	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	1	11	1
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds - Asphalt & Building Demolition and Debris Haul

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	1.50	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
25		Tractors	0.5	8	1	0.5
NOx	102	Graders	0.5			0
CO	852	Dozers	0.5	8	2	1
PM10	6.00	Scrapers	1			0
PM2.5	4.50					0
					Acres	1.50

	Acres	25	50	100	200	500
NOx	1	83	84	96	123	193
	2	121	118	126	147	206
		102	101	111	135	200
CO	1	673	760	1113	2110	6884
	2	1031	1143	1554	2660	7530
		852	952	1334	2385	7207
PM10	1	5	13	29	60	153
	2	7	22	37	68	162
		6	18	33	64	158
PM2.5	1	4	5	9	20	83
	2	5	8	12	24	89
		5	7	11	22	86
South San Gabriel Valley						
1.50 Acres						
	25	50	100	200	500	
NOx	102	101	111	135	200	
CO	852	952	1334	2385	7207	
PM10	6	18	33	64	158	
PM2.5	5	7	11	22	86	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	1	11	2
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds - Rough Grading

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	4.50	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625	8	2
	NOx	173	0.5	0.0625	8	1
	CO	1,683	0.5	0.0625	8	2
	PM10	12.83	1	0.125	8	2
	PM2.5	8.33				Acres
						4.50

	Acres	25	50	100	200	500
NOx	4	162	157	165	184	232
	5	183	176	184	202	245
CO	4	173	166	174	193	239
	5	1553	1704	2217	3569	8738
PM10	4	1814	1984	2549	4024	9342
	5	1684	1844	2383	3797	9040
PM2.5	4	12	36	52	83	178
	5	14	43	59	91	186
	4	13	40	55	87	182
	5	8	11	17	31	99
South San Gabriel Valley	4	9	12	19	34	104
	5	8	11	18	32	102
4.50 Acres						
NOx	25	50	100	200	500	
	173	166	174	193	239	
CO	1684	1844	2383	3797	9040	
	13	40	55	87	182	
PM2.5	8	11	18	32	102	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	4	11	5
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds - Rough Grading and Asphalt Demolition Debris Onsite Reprocessing

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	4.50	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres	
	25	Tractors	0.5	0.0625	8	2	1
NOx	173	Graders	0.5	0.0625	8	1	0.5
CO	1,683	Dozers	0.5	0.0625	8	2	1
PM10	12.83	Scrapers	1	0.125	8	2	2
PM2.5	8.33					Acres	4.50

	Acres	25	50	100	200	500
NOx	4	162	157	165	184	232
	5	183	176	184	202	245
CO	4	173	166	174	193	239
	5	1553	1704	2217	3569	8738
PM10	4	1814	1984	2549	4024	9342
	5	1684	1844	2383	3797	9040
PM2.5	4	12	36	52	83	178
	5	14	43	59	91	186
	4	13	40	55	87	182
	5	8	11	17	31	99
South San Gabriel Valley	4	9	12	19	34	104
	5	8	11	18	32	102
4.50 Acres						
	25	50	100	200	500	
NOx	173	166	174	193	239	
CO	1684	1844	2383	3797	9040	
PM10	13	40	55	87	182	
PM2.5	8	11	18	32	102	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	4	11	5
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds - Rough Grading and Soil Hauling

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	4.50	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625	8	2
NOx	173	Graders	0.5	0.0625	8	1
CO	1,683	Dozers	0.5	0.0625	8	2
PM10	12.83	Scrapers	1	0.125	8	2
PM2.5	8.33					4.50

	Acres	25	50	100	200	500
NOx	4	162	157	165	184	232
	5	183	176	184	202	245
CO	4	173	166	174	193	239
	5	1553	1704	2217	3569	8738
PM10	4	1814	1984	2549	4024	9342
	5	1684	1844	2383	3797	9040
PM2.5	4	12	36	52	83	178
	5	14	43	59	91	186
PM2.5	4	13	40	55	87	182
	5	8	11	17	31	99
South San Gabriel Valley	4	9	12	19	34	104
	5	8	11	18	32	102
4.50 Acres						
NOx	25	50	100	200	500	
CO	173	166	174	193	239	
PM10	1684	1844	2383	3797	9040	
PM2.5	13	40	55	87	182	
PM2.5	8	11	18	32	102	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	4	11	5
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds - Utilities Trenching

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	0.50	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	8	1	0.5
NOx	83	Graders	0.5			0
CO	673	Dozers	0.5			0
PM10	5.00	Scrapers	1			0
PM2.5	4.00					0.50

	Acres	25	50	100	200	500
NOx	1	83	84	96	123	193
	1	83	84	96	123	193
		83	84	96	123	193
CO	1	673	760	1113	2110	6884
	1	673	760	1113	2110	6884
		673	760	1113	2110	6884
PM10	1	5	13	29	60	153
	1	5	13	29	60	153
		5	13	29	60	153
PM2.5	1	4	5	9	20	83
	1	4	5	9	20	83
		4	5	9	20	83
South San Gabriel Valley						
0.50 Acres						
	25	50	100	200	500	
NOx	83	84	96	123	193	
CO	673	760	1113	2110	6884	
PM10	5	13	29	60	153	
PM2.5	4	5	9	20	83	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	1	11	1
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds - Paving

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	0.00	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	0.0625		0
NOx	83	Graders	0.5	0.0625		0
CO	673	Dozers	0.5	0.0625		0
PM10	5.00	Scrapers	1	0.125		0
PM2.5	4.00				Acres	0.00
	Acres	25	50	100	200	500
NOx	1	83	84	96	123	193
	1	83	84	96	123	193
		83	84	96	123	193
CO	1	673	760	1113	2110	6884
	1	673	760	1113	2110	6884
		673	760	1113	2110	6884
PM10	1	5	13	29	60	153
	1	5	13	29	60	153
		5	13	29	60	153
PM2.5	1	4	5	9	20	83
	1	4	5	9	20	83
		4	5	9	20	83
South San Gabriel Valley						
0.00 Acres						
	25	50	100	200	500	
NOx	83	84	96	123	193	
CO	673	760	1113	2110	6884	
PM10	5	13	29	60	153	
PM2.5	4	5	9	20	83	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	1	11	1
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	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	0.88	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	7	2	0.875
NOx	83	Graders	0.5			0
CO	673	Dozers	0.5			0
PM10	5.00	Scrapers	1			0
PM2.5	4.00					0.88

	Acres	25	50	100	200	500
NOx	1	83	84	96	123	193
	1	83	84	96	123	193
		83	84	96	123	193
CO	1	673	760	1113	2110	6884
	1	673	760	1113	2110	6884
		673	760	1113	2110	6884
PM10	1	5	13	29	60	153
	1	5	13	29	60	153
		5	13	29	60	153
PM2.5	1	4	5	9	20	83
	1	4	5	9	20	83
		4	5	9	20	83
South San Gabriel Valley						
0.88 Acres						
	25	50	100	200	500	
NOx	83	84	96	123	193	
CO	673	760	1113	2110	6884	
PM10	5	13	29	60	153	
PM2.5	4	5	9	20	83	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	1	11	1
Distance Increment Below			
25			
Distance Increment Above			
25			

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

Construction Localized Significance Thresholds - Building Construction and Architectural Coating

SRA No.	Acres	Source Receptor Distance (meters)	Source Receptor Distance (Feet)	Project site Acreage Disturbed
11	0.88	25	82	12.4

Source Receptor Distance (meters)	South San Gabriel Valley	Equipment	Acres/8-hr Day	Daily hours	Equipment Used	Acres
	25	Tractors	0.5	7	2	0.875
NOx	83	Graders	0.5			0
CO	673	Dozers	0.5			0
PM10	5.00	Scrapers	1			0
PM2.5	4.00					0.88

	Acres	25	50	100	200	500
NOx	1	83	84	96	123	193
	1	83	84	96	123	193
		83	84	96	123	193
CO	1	673	760	1113	2110	6884
	1	673	760	1113	2110	6884
		673	760	1113	2110	6884
PM10	1	5	13	29	60	153
	1	5	13	29	60	153
		5	13	29	60	153
PM2.5	1	4	5	9	20	83
	1	4	5	9	20	83
		4	5	9	20	83
South San Gabriel Valley						
0.88 Acres						
	25	50	100	200	500	
NOx	83	84	96	123	193	
CO	673	760	1113	2110	6884	
PM10	5	13	29	60	153	
PM2.5	4	5	9	20	83	

Acre Below		Acre Above	
SRA No.	Acres	SRA No.	Acres
11	1	11	1
Distance Increment Below			
25			
Distance Increment Above			
25			

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