Appendix A Air Quality and Greenhouse Gas Background and Modeling Data

Appendices

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1. Air Quality

Ambient air quality standards (AAQS) have been adopted at State and federal levels for criteria air pollutants. In addition, both the State and federal government regulate the release of toxic air contaminants (TACs). The County of San Diego is in the San Diego Air Basin (SDAB) and is subject to the rules and regulations imposed by the San Diego Air Pollution Control District (SDAPCD), as well as the California AAQS adopted by the California Air Resources Board (CARB) and national AAQS adopted by the United States Environmental Protection Agency (EPA). Federal, State, regional and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

1.1 REGULATORY SETTING

1.1.1 Federal and State Laws

1.1.1.1 AMBIENT AIR QUALITY STANDARDS

The Clean Air Act (CAA) was passed in 1963 by the U.S. Congress and has been amended several times. The 1970 CAA 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, which are shown in Table 1, *Ambient Air Quality Standards for Criteria Pollutants*. These pollutants include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), 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	
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	*	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.

Table 1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Hydrogen Sulfide	1 hour	0.03 ppm	*	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	*	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016.
Notes: ppm: parts per million; $\mu g/m^3$: micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
4 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM_{10} standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
5 On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

California has also adopted 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

1.1.1.2 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. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that ambient air quality standards (AAQS) have been established for

them. VOC and oxides of nitrogen (NO_x) are air pollutant precursors that form secondary criteria pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and NO_2 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 gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (SCAQMD 2005; USEPA 2019a). The SDAB is designated under the California AAQS as being in attainment and under the National AAQS as being in unclassified/attainment of CO criteria levels (SDAPCD 2019).

- **Volatile Organic Compounds (VOC)** are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources 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 (SCAQMD 2005). There are no ambient air quality standards established for VOCs. However, because they contribute to the formation of ozone (O_3), the County has established a significance threshold for this pollutant.

- **Nitrogen Oxides (NO_x)** are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_2 produced by combustion is NO, but NO reacts with oxygen quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including people with asthma, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between breathing elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (SCAQMD 2005; USEPA 2019a). The SDAB is designated as an attainment area for NO_2 under both the National and California AAQS (SDAPCD 2019).

- **Sulfur Dioxide (SO_2)** 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 SO_2 (SCAQMD 2005; USEPA 2019a).

When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_x). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. The SDAB is designated as attainment under the California and National AAQS (SDAPCD 2019).

- **Suspended Particulate Matter (PM_{10} 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 PM_{10}, 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 PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems (SCAQMD 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 PM_{10} to contribute to health effects and at concentrations that extend well below those allowed by the current PM_{10} 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 (SCAQMD 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 <0.000004 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 (SCAQMD 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 damage[3] (SCAQMD 2005; USEPA 2019a). The SDAB is a nonattainment area for $PM_{2.5}$ and PM_{10} under the California AAQS and unclassified for PM_{10} and in attainment for $PM_{2.5}$ under the National AAQS (SDAPCD 2019).

- **Ozone (O_3)** is commonly referred to as "smog;" it is a gas that is formed when VOCs and NO_x, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the

[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.

summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for the formation of this pollutant. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (SCAQMD 2005; USEPA 2019a). The SDAB is designated as nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (SDAPCD 2019).

- **Lead (Pb)** is a metal found naturally in the environment as well as in manufactured products. 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 on-road motor vehicle 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 to the air today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. 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 lead effects 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 (SCAMQD 2005; USEPA 2019a). The SDAB is designated as in attainment under the California AAQS and unclassified/attainment under the National AAQS for lead (SDAPCD 2019). Because emissions of lead are found only in projects that are permitted by SDAPCD, lead is not an air quality of concern for the proposed project.

1.1.1.3 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, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) 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:

- CARB Rule 2485 (13 CCR Chapter 10, Section 2485), Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- CARB Rule 2480 (13 CCR Chapter 10, Section 2480), Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- CARB Rule 2477 (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.

1.2 ENVIRONMENTAL SETTING

1.2.1 San Diego Air Basin

The SDAB includes the entire County of San Diego. Emissions sources within the SDAB are primarily in the western region and dispersion of air pollutants is highly affected by the region's climate and geography. The climate in the project area is dominated by the strength and position of the semipermanent high pressure center over the Pacific Ocean near Hawaii. This high pressure center creates cool summers, mild winters, and infrequent rainfall, and drives the cool, daytime breezes, maintaining a comfortable level of humidity and ample sunshine.

Inversions

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

Temperature and Precipitation

The annual average temperature varies little throughout the 4,225 square-mile basin. The overall climate is Mediterranean, with average temperatures reaching 92˚F in the summer and 38˚F in the winter. High temperatures are often accompanied by very low relative humidity (often less than 20 percent). The Western Regional Climate Center maintains historical climate information for the western US. Its closest meteorological monitoring station to the project site is the Poway Valley Monitoring Station (ID No. 047111). The average low is reported at 38.6°F in December and the average high is 86.4°F in August (WRCC 2019).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. The total average annual precipitation is 13.24 inches as measured by the Western Regional Climate Center, and the majority of precipitation occurs between November and April (WRCC 2019).

Wind

Wind patterns across the south coastal region are characterized by westerly onshore winds during the day and occasional easterly breezes at night as a result of cold air drainage. Wind speed is somewhat greater during the dry summer months than during the rainy winter season. The onshore light-to-moderate winds at San

Diego Lindbergh Field average 6.6 knots. The offshore flow is less persistent in the winter when occasional hot, dry Santa Ana winds blow from the east with great force (SDAPCD 2009).

1.2.2 Air Quality Management Planning

To ensure continued progress toward clean air and to comply with state and federal requirements, the San Diego Air Pollution Control District (SDAPCD), in conjunction with CARB and the San Diego Association of Governments (SANDAG), prepared the 2016 San Diego Regional Air Quality Strategy (RAQS) (SDAPCD 2016). The 2016 RAQS employs up-to-date science and analytical tools and incorporates a comprehensive strategy aimed at controlling pollution from all sources, including stationary sources, on-road and off-road mobile sources, and area sources.

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

The SDAPCD also is required to submit separate attainment plans to demonstrate to the United States Environmental Protection Agency (EPA) how the SDAB will achieve compliance with the federal CAA for nonattainment designations. These plans include:

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

1.2.3 Existing Ambient Air Quality

Area Designations

The RAQS provides the framework for the SDAB to achieve attainment of the state and federal ambient air quality standards through the State Implementation Plan. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. Severity classifications for ozone nonattainment are marginal, moderate, serious, severe, and extreme. The following are descriptions of the attainment classifications and the attainment status for the SDAB is included in Table 2, *Attainment Status of Criteria Pollutants in the San Diego Air Basin*:

- ***Unclassified:*** a pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.
- ***Attainment:*** a pollutant is in attainment if the 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.

Table 2 Attainment Status of Criteria Pollutants in the San Diego Air Basin

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

Source: SDAPCD 2019.
1 The SDAB is designated as nonattainment for fine particulate matter due to the 8-hour ozone nonattainment designation. $PM_{2.5}$ is precursor to ozone formation.

Existing Ambient Air Quality

Existing levels of ambient air quality and historical trends and projections in the vicinity of the proposed project site, are best documented by measurements taken by the SDAPCD. The SDAPCD air quality monitoring station closest to the project site is the Del Mar – Mira Costa College Monitoring Station. However, this monitoring station only monitors O_3. Thus, data from the San Diego – Kearny Villa Road Monitoring Station was used for NO_2, PM_{10}, and $PM_{2.5}$. No data for CO and SO_2 is provided for the most current five years of data monitored. The most current five years of data monitored at these monitoring stations are included in Table 3, *Ambient Air Quality Monitoring Summary*. The data show recurring violations of state 1- and 8-hour and federal 8-hour 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				
	2013	2014	2015	2016	2017
Ozone (O_3)[1]					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	0	1	1	0	0
State 8-hour ≥ 0.07 ppm (days exceed threshold)	0	4	2	1	0
Federal 8-Hour > 0.075 ppm (days exceed threshold)	0	2	1	0	0
Max. 1-Hour Conc. (ppm)	0.076	0.100	0.098	0.079	0.075
Max. 8-Hour Conc. (ppm)	0.069	0.087	0.078	0.071	0.061
Carbon Monoxide (CO)[1]					
State 8-Hour > 9.0 ppm (days exceed threshold)	*	*	*	*	*
Federal 8-Hour ≥ 9.0 ppm (days exceed threshold)	*	*	*	*	*
Max. 8-Hour Conc. (ppm)	*	*	*	*	*
Nitrogen Dioxide (NO_2)[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)	0.067	0.051	0.051	0.053	0.054
Sulfur Dioxide (SO_2)[2]					
State 24-Hour ≥ 0.04 ppm (days exceed threshold)	*	*	*	*	*
Federal 24-Hour ≥ 0.14 ppm (days exceed threshold)	*	*	*	*	*
Max 24-Hour Conc. (ppm)	*	*	*	*	*
Coarse Particulates (PM_{10})[1]					
State 24-Hour > 50 µg/m^3 (days exceed threshold)	0	0	0	0	0
Federal 24-Hour > 150 µg/m^3 (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m^3)	39.0	39.0	39.0	36.0	46.0
Fine Particulates ($PM_{2.5}$)[1]					
Federal 24-Hour > 35 µg/m^3 (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m^3)	22.0	20.2	25.7	19.4	27.5

Source: CARB 2019.
ppm: parts per million; parts per billion, µg/m^3: micrograms per cubic meter
Notes: * Data not available.
[1] Data obtained from the Escondido – Del Mar – Mira Costa College Monitoring Station.
[2] Data obtained from the San Diego – Kearny Villa Road Monitoring Station.

1.2.4 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 cardiorespiratory diseases.

Residential areas are 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. Other sensitive receptors can include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Generally, industrial, commercial, retail, and office 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 are the single-family residences surrounding the school.

1.3 METHODOLOGY

Projected construction- and operation-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. CalEEMod compiles an emissions inventory of construction, area, energy (natural gas and purchased energy), water, waste, and vehicle emissions sources.

1.4 THRESHOLDS OF SIGNIFICANCE

1.4.1 County of San Diego

CEQA allows for the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. However, the SDAPCD does not provide CEQA significance thresholds for any air pollutant source they do not directly regulate. The SDAPCD regulates emissions from stationary sources and not mobile sources under SDAPCD Regulation II, Rule 20.2, Table 20-2-1, *Air Quality Impact Analysis (AQIA) Trigger Levels*. Because the SDAPCD does not prescribe emissions thresholds for all air pollutants during construction and operation, the County of San Diego's *Guidelines for Determining Significance and Report Format and Content Requirements, Air Quality* (2007), were used to evaluate potential air quality impacts relative to CEQA.

Regional Significance Thresholds

Table 4, *County of San Diego Air Quality Significance Thresholds*, lists regional emissions thresholds used in the following analysis.

Table 4 County of San Diego Air Quality Significance Thresholds

Air Pollutant	Threshold
Volatile Organic Gases (VOC)[1]	75 lbs/day
Nitrogen Oxides (NO_X)	250 lbs/day
Carbon Monoxide (CO)	550 lbs/day
Sulfur Oxides (SO_X)	250 lbs/day
Coarse Inhalable Particulates (PM_{10})	100 lbs/day
Fine Inhalable Particulates ($PM_{2.5}$)[2]	55 lbs/day

Source: County of San Diego 2007.
Notes: Based on SDAPCD Regulation 2, 20.2 (d) (2): Operational Emission Thresholds, and SDAPCD Regulation 20.3.
[1] Threshold for VOCs based on the threshold of significance for VOCs from the South Coast Air Quality Management District for the Coachella Valley.
[2] EPA "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published September 8, 2005. Also used by the SCAQMD.

CO Hotspot Analysis

The significance of localized project impacts depends on whether the project would cause substantial concentrations of CO. Prior to 1998 the SDAB was designated as nonattainment under the CAAQS and NAAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the SDAB and in the state have steadily declined. In 1998, the SDAPCD was designated as in attainment for CO under both the CAAQS and

NAAQS and was under a 10-year federal maintenance plan for CO as a result of its redesignation. The current version of the maintenance plan is the 2004 Revision to the *California State Implementation Plan (SIP) for Carbon Monoxide Updated Maintenance Plan for Ten Federal Planning Areas*, which was approved as an SIP revision in January 2006 (CARB 2004).

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). Therefore, the potential for CO hotspots to be generated in the SDAB is extremely unlikely because of the improvements in vehicle emission rates and control efficiencies.

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,[4] carbon (CO_2), methane (CH_4), and ozone (O_3)—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 (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[5] The major GHG are briefly described below.

- **Carbon dioxide (CO_2)** enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and respiration, and also as a result of other chemical reactions (e.g. manufacture of cement). Carbon dioxide is removed from the atmosphere (sequestered) when it is absorbed by plants as part of the biological carbon cycle.

- **Methane (CH_4)** 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 (N_2O)** 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-

[4] Water vapor (H_2O) 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 o rather than a primary cause of change.

[5] 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.

depleting gases and are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

- ***Perfluorocarbons (PFCs)*** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with HFCs, to the ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high global warming potential.

- ***Sulfur Hexafluoride (SF_6)*** is a colorless gas soluble in alcohol and ether, slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

- ***Hydrochlorofluorocarbons (HCFCs)*** contain hydrogen, fluorine, chlorine, and carbon atoms. Although ozone-depleting substances, they are less potent at destroying stratospheric ozone than CFCs. They have been introduced as temporary replacements for CFCs and are also GHGs.

- ***Hydrofluorocarbons (HFCs)*** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs (IPCC 2001; USEPA 2019b).

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 5, *GHG Emissions and Their Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For example, under IPCC's Fourth Assessment Report (AR4) GWP values for CH_4, a project that generates 10 metric tons (MT) of CH_4 would be equivalent to 250 MT of CO_2.[6]

Table 5 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

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_2O)	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

Table 5 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

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]
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_2F_6	10,000	10,000	9,200	12,200
Perfluorobutane: C_4F_{10}	2,600	NA	7,000	8,860
Perfluoro-2-methylpentane: C_6F_{14}	3,200	NA	7,400	9,300
Sulfur Hexafluoride (SF_6)	3,200	NA	23,900	22,800

Source: IPCC 1995; IPCC 2007.

Notes: 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 CO_2. However, SCAQMD 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.

[1] Based on 100-year time horizon of the GWP of the air pollutant relative to CO_2.

[2] The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

California's Greenhouse Gas Sources and Relative Contribution

In 2018, the statewide GHG emissions inventory was updated for 2000 to 2016 emissions using the GWPs in IPCC's AR4.[7] Based on these GWPs, California produced 429.4 $MMTCO_2e$ GHG emissions in 2016. California's transportation sector was the single largest generator of GHG emissions, producing 40.5 percent of the state's total emissions. Industrial sector emissions made up 23.4 percent, and electric power generation made up 16.1 percent of the state's emissions inventory. Other major sectors of GHG emissions include commercial and residential (12.0 percent), agriculture and forestry (7.9 percent) and other (solvents and chemicals at 0.2 percent), (CARB 2018a).

California's GHG emissions have followed a declining trend since 2007. In 2016, emissions from routine GHG emitting activities statewide were 429 $MMTCO_2e$, or 12 $MMTCO_2e$ lower than 2015 levels. This represents an overall decrease of 13 percent since peak levels in 2004 and 2 $MMTCO_2e$ below the 1990 level and the state's 2020 GHG target. During the 2000 to 2016 period, per capita GHG emissions in California have continued to drop from a peak in 2001 of 14.0 $MTCO_2e$ per capita to 10.8 $MTCO_2e$ per capita in 2016, a 23 percent decrease. 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 38 percent decline since the 2001 peak, while the state's GDP has grown 41 percent during this period (CARB 2018b).

[7] 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).

1.5 REGULATORY SETTING

1.5.1 Federal Laws

The U.S. 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—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—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 Air Quality Management District guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

1.5.1.1 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 CO_2 per year are required to submit an annual report.

1.5.1.2 UPDATE TO CORPORATE AVERAGE FUEL ECONOMY STANDARDS (2010/2012)

The current Corporate Average Fuel Economy standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued new standards in 2012 for model years 2017–2025 that will require a fleet average of 54.5 miles per gallon in 2025. However, the EPA is reexamining the 2017-2025 emissions standards.

1.5.1.3 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 stationary sources such as power plants, refineries, and other large sources of emissions. Pursuant to former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources also. However, the EPA is reviewing the Clean Power Plan under President Trump's Energy Independence Executive Order.

1.5.2 State Laws

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

1.5.2.1 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

1.5.2.2 EXECUTIVE ORDER B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions within 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 of Executive Order B-30-15 as well as the long-term goal for 2050 in Executive Order S-3-05. It also requires the Natural Resources Agency to conduct triennial updates the California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in State planning and investment decisions.

1.5.2.3 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 Scoping Plan Update

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).

1.5.2.4 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.

1.5.2.5 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 2017b).

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 proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydroflurocarbon 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 6, *2017 Climate Change Scoping Plan*

Emissions Reductions Gap. 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 6 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 2017b.

Table 7, *2017 Climate Change Scoping Plan Emissions Change by Sector*, provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

Table 7 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 2017b.
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.

1.5.2.6 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 CH_4. 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.

1.5.2.7 SENATE BILL 375

In 2008, Senate Bill 375 (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 San Diego Association of Governments (SANDAG) is the MPO for the San Diego region.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. CARB's per-capita GHG targets for San Diego are 7 percent per capita reduction by year 2020 and a 13 percent per capita reduction for 2035 (CARB 2010).

2017 Update to the SB 375 Targets

The targets for the MPOs are required to be updated every eight years. In March 2018, CARB adopted revised SB 375 targets for the MPOs, which became effective on October 1, 2018. The updated SB 375 targets for the SANDAG region are a 15 percent per capita GHG reduction in 2020 from 2005 levels (compared to the 2010 target of 7 percent) and a 19 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2018c).

The targets consider the need to further reduce VMT, as identified in the 2017 Scoping Plan Update (for SB 32), while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita 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 SCS to achieve the SB 375 targets. CARB foresees that the additional GHG emissions reductions in 2035 may be achieved from land use changes, transportation investment, and technology strategies (CARB 2018c).

SANDAG SCS

SB 375 requires the MPOs to prepare a Sustainable Communities Strategy (SCS) in their Regional Transportation Plan (RTP) (CARB 2010). SANDAG adopted the San Diego Forward: The Regional Plan, which combines the region's Regional Comprehensive Plan (RCP) and the RTP/SCS (SANDAG 2015). SANDAG's SCS shows how the region will meet the Scoping Plan targets for the region by using land in ways that make developments more compact, conserving open space, and investing in a transportation network that gives residents alternatives to driving alone. The proposed land uses pattern within SANDAG's SCS would accommodate 79 percent of all housing and 86 percent of all jobs within the Urban Area Transit Strategy Study Area where the greatest investments in public transit would be made. It is estimated that 82 percent of new housing in the region will be attached multifamily dwellings (SANDAG 2015). In addition to land use strategies, SANDAG's SCS relies on improvements to the transportation network (e.g., transit system, bicycle network), expansion of transportation demand measures, transportation system management measures, and pricing strategies. The SCS would result in a 15 percent reduction in emissions by 2020, and a 21 percent reduction by 2035—far more than what CARB mandates for the SANDAG region (SANDAG 2015).

The SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS, but provides incentives for consistency for governments and developers. The five strategies toward sustainability in the SCS include:

- Focus housing and job growth in urbanized areas where there is existing and planned transportation infrastructure, including transit.
- Protect the environment by preserving sensitive habitat, open space, and farmland.
- Invest in a transportation network that gives people transportation options and reduces greenhouse gas emissions.
- Address the housing needs of all economic segments of the population.
- Implement the Regional Plan through Incentives and Collaboration.

The Regional Plan's actions applicable for local agencies include:

- Promote the use of both zero-emission vehicles and alternative fuels and ensure that we have the infrastructure to support these innovations.
- Support the efforts of local jurisdictions to implement their Energy Roadmap Programs to save energy in their own operations and in their larger communities.
- Work with partner agencies to implement the transportation projects contained in the Regional Plan. These include:
- Implement state-of-the-art technologies and Transportation Demand and Systems Management Programs to provide more mobility choices and allow the transportation system to function more efficiently.
- Continue to pursue opportunities to expand shared mobility services near Smart Growth Opportunity Areas in the region. Examples of shared mobility services including carsharing, bikesharing, real-time ridesharing, Transportation Network Companies (e.g., Uber, Lyft, Sidecar), neighborhood electric vehicles, scootershare, and on-demand shuttle and jitney services.

- Support the development of policies, programs, and funding for moving goods in the state and nation, as well as for infrastructure in the region that supports moving goods.

1.5.2.8 TRANSPORTATION SECTOR SPECIFIC REGULATIONS

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles. 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-1-07

On January 18, 2007, the state set a new low carbon fuel standard (LCFS) for transportation fuels sold within the state. Executive Order S-1-07 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.

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.

1.5.2.9 RENEWABLES PORTFOLIO – CARBON NEUTRALITY REGULATIONS

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

A major component of California's Renewable Energy Program is the renewables portfolio standard established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order

to reach at least 20 percent by December 30, 2010. Executive Order S-14-08, signed in November 2008, expanded the state's renewable energy standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SB X1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

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

Senate Bill 100

On September 10, 2018, Governor Brown signed SB 100, 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.

1.5.2.10 ENERGY EFFICIENCY REGULATIONS

California Building Standards Code – Building and 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 2016 (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. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017. The 2019 Building Energy Efficiency Standards, which were recently adopted on May 9, 2018, go into effect starting January 1, 2020.

The 2016 Standards improve upon the previous 2013 Standards for new construction of and additions and alterations to residential and nonresidential buildings. Under the 2016 Standards, residential and nonresidential buildings are generally 28 and 5 percent more energy efficient than the 2013 Standards,

respectively (CEC 2015). Although the 2016 standards do not achieve zero net energy, they get very close to the state's goal and take important steps toward changing residential building practices in California.

The 2019 standards move toward cutting energy use in new homes by more than 50 percent and will require installation of solar photovoltaic systems for single-family homes and multifamily buildings of three stories and less. The 2019 standards focus on four key areas: 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 will be 30 percent more energy efficient compared to the 2016 standards, and 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 Green Building Standards 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 (Part 11, Title 24, known as "CALGreen") was adopted as part of the California Building Standards Code (Title 24, CCR). 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.[8] The mandatory provisions of the California Green Building Code Standards became effective January 1, 2011, and were last updated in 2016. The 2016 Standards became effective on January 1, 2017. 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 (Title 20, CCR Sections 1601 through 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.

1.5.2.11 SOLID WASTE REGULATIONS

AB 939 – Integrated Waste Management Act of 1989

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

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

AB 341

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses. Section 5.408 of 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.

AB 1327

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

AB 1826

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

1.5.2.12 WATER EFFICIENCY REGULATIONS

SBX7-7

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

AB 1881 – Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the Energy Commission, in consultation with the department, 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.

1.6 METHODOLOGY

Projected construction- and operation-related air pollutant emissions are calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2. CalEEMod compiles an emissions inventory of construction, area, energy (natural gas and purchased energy), water, waste, and vehicle emissions sources.

1.7 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.[9]

1.7.1 Bright-Line GHG Emissions Significance Thresholds

The latest guidance for evaluating GHG emissions released by the County of San Diego is the guidance document entitled, *Guidelines for Determining Significance: Climate Change* (2018 Guidelines) (2018). In general, the guidelines to determine potential project impacts under 2018 Guidelines is based on consistency to the County's adopted Climate Action Plan (CAP). However, in December 2018, the County's CAP was invalidated by the San Diego Superior Court of California in *Sierra Club vs Count of San Diego*. In light of and since the ruling, the County has not formally released updated guidelines in assessing GHG emissions impacts to account for the recent ruling. Until the County and SDAPCD provides updated formal guidance to account for the recent ruling, the Solana Beach School District has identified the following alternative bright-line metric to assess GHG emissions impacts:

The bright-line significance threshold is a numeric, mass emissions threshold. In general, the bright-line threshold identifies the point at which additional analysis of project-related GHG emissions impacts is necessary. Projects below the established bright-line significance criteria have a *de minimus* contribution the local, regional, and/or statewide GHG emissions inventory and have less than significant impacts. Projects above this threshold may result in a substantial increase in GHG emissions.

The bright-line threshold is based on the methodology identified in the 2008 California Air Pollution Control Officers Association (CAPCOA) white paper (CAPCOA 2008). It is based on the market capture approach and reflects the amount of emissions that 90 percent of development projects surveyed in four cities within California would generate. CAPCOA identified that a bright-line threshold set at 900 $MTCO_2e$ would capture 90 percent of projects. Prior to the County releasing the 2018 Guidelines, its previous guidelines released in

[9] 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.

July of 2016 had also recommended a bright-line threshold of 900 $MTCO_2e$/yr based on the 2008 CAPCOA white paper (San Diego, County of 2016). In general, 900 $MTCO_2e$/yr corresponds to (1) a residential development of 50 dwelling units; (2) 35,000 square feet of office space; (3) 11,000 square feet of retail space; and (4) 6,300 square feet of supermarket space.

The 900 $MTCO_2e$/yr is a conservative bright-line threshold. As a comparison, the Bay Area Air Quality Management District (BAAQMD) and South Coast Air Quality Management District (SCAQMD) have also established bright-line screening thresholds of 1,100 $MTCO_2e$ and 3,000 $MTCO_2e$ per year, respectively, for development projects based on similar market capture methodologies utilized by CAPCOA. The SCAQMD based their bright-line screening threshold on review of 711 CEQA projects and determined that 90 percent of the projects reviewed would exceed 3,000 $MTCO_2e$ per year (SCAQMD 2009). Similarly, the bright-line screening threshold established by BAAQMD captures approximately 59 percent of all development projects (BAAQMD 2017).

Overall, for the purpose of this CEQA assessment, projects that are not exempt from CEQA are required to quantify project-level GHG emissions and compared to the bright-line threshold of 900 $MTCO_2e$/yr. A GHG inventory for a development project should include GHG emissions for the following GHG sectors where applicable: electricity, transportation, waste generation, wastewater treatment, and commercial and residential (e.g., natural gas use, area sources).[10] In addition, construction-related emissions are amortized over the lifetime of a project, which is conservatively estimated at 20 years unless a longer project lifetime can be substantiated. Projects that do not exceed the bright-line threshold of significance are considered to have a less than cumulatively considerable impact to climate change. Projects that do exceed the applicable GHG bright-line significance threshold would be considered potentially significant and would require inclusion of all feasible mitigation measures to reduce GHG emissions.

[10] Permitted sources are evaluated separately under the stationary source threshold of 10,000 $MTCO_2e$.

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Criteria Air Pollutant and GHG Emissions Worksheets

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Regional Construction Emissions Worksheet

*CalEEMod, Version 2016.3.2

Building Demolition

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Fugitive Dust						0.7384	0.1118
	Off-Road		3.3121	33.201	21.7532	0.0388	1.6587	1.5419
	Total		**3.3121**	**33.201**	**21.7532**	**0.0388**	**2.3971**	**1.6537**
Offsite								
	Hauling		0.0626	2.2094	0.5016	6.20E-03	0.136	0.0424
	Vendor		0.015	0.451	0.1149	1.10E-03	0.0276	9.48E-03
	Worker		0.055	0.0371	0.4252	1.27E-03	0.1145	0.0311
	Total		**0.1326**	**2.6975**	**1.0417**	**8.57E-03**	**0.278**	**0.083**
TOTAL			***3.4447***	***35.8985***	***22.7949***	***0.0474***	***2.6751***	***1.7367***
Onsite		**2020 Winter**						
	Fugitive Dust						0.7384	0.1118
	Off-Road		3.3121	33.201	21.7532	0.0388	1.6587	1.5419
	Total		**3.3121**	**33.201**	**21.7532**	**0.0388**	**2.3971**	**1.6537**
Offsite								
	Hauling		0.0643	2.2307	0.5348	6.09E-03	0.1362	0.0425
	Vendor		0.0157	0.4507	0.1275	1.07E-03	0.0276	9.52E-03
	Worker		0.0623	0.0416	0.4009	1.19E-03	0.1145	0.0311
	Total		**0.1423**	**2.723**	**1.0632**	**8.35E-03**	**0.2782**	**0.0831**
TOTAL			***3.4544***	***35.9240***	***22.8164***	***0.0472***	***2.6753***	***1.7368***
Onsite		**2020**						
	Off-Road		3.3121	33.201	21.7532	0.0388	1.6587	1.5419
	Total		**3.3121**	**33.201**	**21.7532**	**0.0388**	**2.3971**	**1.6537**
Offsite								
	Hauling		0.0643	2.2307	0.5348	0.0062	0.1362	0.0425
	Vendor		0.0157	0.451	0.1275	0.0011	0.0276	0.00952
	Worker		0.0623	0.0416	0.4252	0.00127	0.1145	0.0311
	Total		**0.1423**	**2.723**	**1.0632**	**0.00857**	**0.2782**	**0.0831**
TOTAL			***3.4544***	***35.9240***	***22.8164***	***0.0474***	***2.6753***	***1.7368***

Asphalt Demolition

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Fugitive Dust						0.6298	0.0954
	Off-Road		3.3121	33.201	21.7532	0.0388	1.6587	1.5419
	Total		**3.3121**	**33.201**	**21.7532**	**0.0388**	**2.2885**	**1.6372**
Offsite								
	Hauling		0.0538	1.897	0.4307	5.32E-03	0.1168	0.0364
	Vendor		0.015	0.451	0.1149	1.10E-03	0.0276	9.48E-03
	Worker		0.055	0.0371	0.4252	1.27E-03	0.1145	0.0311
	Total		**0.1237**	**2.3851**	**0.9708**	**7.69E-03**	**0.2588**	**0.077**
TOTAL			***3.4358***	***35.5861***	***22.7240***	***0.0465***	***2.5473***	***1.7142***

Onsite		**2020 Winter**					
	Fugitive Dust					0.6298	0.0954
	Off-Road	3.3121	33.201	21.7532	0.0388	1.6587	1.5419
	Total	**3.3121**	**33.201**	**21.7532**	**0.0388**	**2.2885**	**1.6372**
Offsite							
	Hauling	0.0552	1.9152	0.4592	5.23E-03	0.1169	0.0365
	Vendor	0.0157	0.4507	0.1275	1.07E-03	0.0276	9.52E-03
	Worker	0.0623	0.0416	0.4009	1.19E-03	0.1145	0.0311
	Total	**0.1332**	**2.4075**	**0.9876**	**7.49E-03**	**0.259**	**0.0771**
TOTAL		***3.4453***	***35.6085***	***22.7408***	***0.0463***	***2.5475***	***1.7143***

Onsite		**2020**					
	Off-Road	3.3121	33.201	21.7532	0.0388	1.6587	1.5419
	Total	**3.3121**	**33.201**	**21.7532**	**0.0388**	**2.2885**	**1.6372**
Offsite							
	Hauling	0.0552	1.9152	0.4592	0.00532	0.1169	0.0365
	Vendor	0.0157	0.451	0.1275	0.0011	0.0276	0.00952
	Worker	0.0623	0.0416	0.4252	0.00127	0.1145	0.0311
	Total	**0.1332**	**2.4075**	**0.9876**	**0.00769**	**0.259**	**0.0771**
TOTAL		***3.4453***	***35.6085***	***22.7408***	***0.0465***	***2.5475***	***1.7143***

Building Demoltion & Asphalt Demolition	***6.90***	***71.53***	***45.56***	***0.09***	***5.22***	***3.45***

Site Preparation

		ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer					
	Fugitive Dust					7.7233	4.2454
	Off-Road	4.0765	42.4173	21.5136	0.038	2.1974	2.0216
	Total	**4.0765**	**42.4173**	**21.5136**	**0.038**	**9.9207**	**6.267**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.015	0.451	0.1149	1.10E-03	0.0276	9.48E-03
	Worker	0.0661	0.0445	0.5102	1.52E-03	0.1373	0.0373
	Total	**0.081**	**0.4955**	**0.6251**	**2.62E-03**	**0.1649**	**0.0468**
TOTAL		***4.1575***	***42.9128***	***22.1387***	***0.0406***	***10.0856***	***6.3138***

Onsite		**2020 Winter**					
	Fugitive Dust					7.7233	4.2454
	Off-Road	4.0765	42.4173	21.5136	0.038	2.1974	2.0216
	Total	**4.0765**	**42.4173**	**21.5136**	**0.038**	**9.9207**	**6.267**
Offsite							
	Hauling	0	0	0	0	0	0
	Vendor	0.0157	0.4507	0.1275	1.07E-03	0.0276	9.52E-03
	Worker	0.0748	0.05	0.481	1.43E-03	0.1373	0.0373
	Total	**0.0905**	**0.5006**	**0.6086**	**2.50E-03**	**0.1649**	**0.0469**
TOTAL		***4.1670***	***42.9179***	***22.1222***	***0.0405***	***10.0856***	***6.3139***

Onsite		**2020**						
	Fugitive Dust		0	0	0	0	7.7233	4.2454
	Off-Road		4.0765	42.4173	21.5136	0.038	2.1974	2.0216
	Total		**4.0765**	**42.4173**	**21.5136**	**0.038**	**9.9207**	**6.267**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0157	0.451	0.1275	0.0011	0.0276	0.00952
	Worker		0.0748	0.05	0.5102	0.00152	0.1373	0.0373
	Total		**0.0905**	**0.5006**	**0.6251**	**0.00262**	**0.1649**	**0.0469**
TOTAL			***4.1670***	***42.9179***	***22.1387***	***0.0406***	***10.0856***	***6.3139***

Grading

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Fugitive Dust						2.8032	1.4399
	Off-Road		2.4288	26.3859	16.053	0.0297	1.2734	1.1716
	Total		**2.4288**	**26.3859**	**16.053**	**0.0297**	**4.0766**	**2.6115**
Offsite								
	Hauling		0.0337	1.191	0.2704	3.34E-03	0.0733	0.0228
	Vendor		0.015	0.451	0.1149	1.10E-03	0.0276	9.48E-03
	Worker		0.055	0.0371	0.4252	1.27E-03	0.1145	0.0311
	Total		**0.1037**	**1.6791**	**0.8105**	**5.71E-03**	**0.2153**	**0.0634**
TOTAL			***2.5325***	***28.0650***	***16.8635***	***0.0354***	***4.2919***	***2.6749***
Onsite		**2020 Winter**						
	Fugitive Dust						2.8032	1.4399
	Off-Road		2.4288	26.3859	16.053	0.0297	1.2734	1.1716
	Total		**2.4288**	**26.3859**	**16.053**	**0.0297**	**4.0766**	**2.6115**
Offsite								
	Hauling		0.0347	1.2024	0.2883	3.28E-03	0.0734	0.0229
	Vendor		0.0157	0.4507	0.1275	1.07E-03	0.0276	9.52E-03
	Worker		0.0623	0.0416	0.4009	1.19E-03	0.1145	0.0311
	Total		**0.1127**	**1.6947**	**0.8167**	**5.54E-03**	**0.2154**	**0.0636**
TOTAL			***2.5415***	***28.0806***	***16.8697***	***0.0352***	***4.2920***	***2.6751***

Onsite		**2020**						
	Fugitive Dust		0	0	0	0	2.8032	1.4399
	Off-Road		2.4288	26.3859	16.053	0.0297	1.2734	1.1716
	Total		**2.4288**	**26.3859**	**16.053**	**0.0297**	**4.0766**	**2.6115**
Offsite								
	Hauling		0.0347	1.2024	0.2883	0.00334	0.0734	0.0229
	Vendor		0.0157	0.451	0.1275	0.0011	0.0276	0.00952
	Worker		0.0623	0.0416	0.4252	0.00127	0.1145	0.0311
	Total		**0.1127**	**1.6947**	**0.8167**	**0.00571**	**0.2154**	**0.0636**
TOTAL			***2.5415***	***28.0806***	***16.8697***	***0.0354***	***4.2920***	***2.6751***

Building Construction

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2020** Summer						
	Off-Road		2.1198	19.186	16.8485	0.0269	1.1171	1.0503
	Total		**2.1198**	**19.186**	**16.8485**	**0.0269**	**1.1171**	**1.0503**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0934	2.819	0.7182	6.84E-03	0.1722	0.0593
	Worker		0.2349	0.1582	1.8141	5.41E-03	0.4883	0.1328
	Total		**0.3283**	**2.9772**	**2.5323**	**0.0123**	**0.6605**	**0.192**
TOTAL			***2.4481***	***22.1632***	***19.3808***	***0.0392***	***1.7776***	***1.2423***
Onsite		**2020** Winter						
	Off-Road		2.1198	19.186	16.8485	0.0269	1.1171	1.0503
	Total		**2.1198**	**19.186**	**16.8485**	**0.0269**	**1.1171**	**1.0503**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0978	2.8167	0.797	6.67E-03	0.1724	0.0595
	Worker		0.266	0.1777	1.7104	5.08E-03	0.4883	0.1328
	Total		**0.3638**	**2.9943**	**2.5074**	**0.0118**	**0.6608**	**0.1923**
TOTAL			***2.4836***	***22.1803***	***19.3559***	***0.0387***	***1.7779***	***1.2426***
Onsite		**2020**						
	Off-Road		2.1198	19.186	16.8485	0.0269	1.1171	1.0503
	Total		**2.1198**	**19.186**	**16.8485**	**0.0269**	**1.1171**	**1.0503**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0978	2.819	0.797	0.00684	0.1724	0.0595
	Worker		0.266	0.1777	1.8141	0.00541	0.4883	0.1328
	Total		**0.3638**	**2.9943**	**2.5323**	**0.0123**	**0.6608**	**0.1923**
TOTAL			***2.4836***	***22.1803***	***19.3808***	***0.0392***	***1.7779***	***1.2426***

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021** Summer						
	Off-Road		1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total		**1.9009**	**17.4321**	**16.5752**	**0.0269**	**0.9586**	**0.9013**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0756	2.5457	0.6488	6.77E-03	0.1637	0.0512
	Worker		0.2214	0.1438	1.6975	5.23E-03	0.4883	0.1327
	Total		**0.297**	**2.6896**	**2.3463**	**0.012**	**0.652**	**0.1839**
TOTAL			***2.1979***	***20.1217***	***18.9215***	***0.0389***	***1.6106***	***1.0852***
Onsite		**2021** Winter						
	Off-Road		1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total		**1.9009**	**17.4321**	**16.5752**	**0.0269**	**0.9586**	**0.9013**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0797	2.539	0.7224	6.60E-03	0.1639	0.0514
	Worker		0.251	0.1614	1.5957	4.91E-03	0.4883	0.1327
	Total		**0.3307**	**2.7004**	**2.318**	**0.0115**	**0.6522**	**0.1841**
TOTAL			***2.2316***	***20.1325***	***18.8932***	***0.0384***	***1.6108***	***1.0854***

Onsite		**2021**						
	Off-Road		1.9009	17.4321	16.5752	0.0269	0.9586	0.9013
	Total		**1.9009**	**17.4321**	**16.5752**	**0.0269**	**0.9586**	**0.9013**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0.0797	2.5457	0.7224	0.00677	0.1639	0.0514
	Worker		0.251	0.1614	1.6975	0.00523	0.4883	0.1327
	Total		**0.3307**	**2.7004**	**2.3463**	**0.012**	**0.6522**	**0.1841**
TOTAL			***2.2316***	***20.1325***	***18.9215***	***0.0389***	***1.6108***	***1.0854***

Asphalt Paving

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021** Summer						
	Off-Road		1.2556	12.9191	14.6532	0.0228	0.6777	0.6235
	Paving		0.2973				0	0
	Total		**1.5528**	**12.9191**	**14.6532**	**0.0228**	**0.6777**	**0.6235**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0519	0.0337	0.3979	1.23E-03	0.1144	0.0311
	Total		**0.0519**	**0.0337**	**0.3979**	**1.23E-03**	**0.1144**	**0.0311**
TOTAL			***1.6047***	***12.9528***	***15.0511***	***0.0240***	***0.7921***	***0.6546***
Onsite		**2021** Winter						
	Off-Road		1.2556	12.9191	14.6532	0.0228	0.6777	0.6235
	Paving		0.2973				0	0
	Total		**1.5528**	**12.9191**	**14.6532**	**0.0228**	**0.6777**	**0.6235**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0588	0.0378	0.374	1.15E-03	0.1144	0.0311
	Total		**0.0588**	**0.0378**	**0.374**	**1.15E-03**	**0.1144**	**0.0311**
TOTAL			***1.6116***	***12.9569***	***15.0272***	***0.0240***	***0.7921***	***0.6546***

Onsite		**2021**						
	Off-Road		1.2556	12.9191	14.6532	0.0228	0.6777	0.6235
	Paving		0.2973	0	0	0	0	0
	Total		**1.5528**	**12.9191**	**14.6532**	**0.0228**	**0.6777**	**0.6235**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.0588	0.0378	0.3979	0.00123	0.1144	0.0311
	Total		**0.0588**	**0.0378**	**0.3979**	**0.00123**	**0.1144**	**0.0311**
TOTAL			***1.6116***	***12.9569***	***15.0511***	***0.0240***	***0.7921***	***0.6546***

Architectural Coating

			ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Onsite		**2021** Summer						
	Archit. Coating		23.1647				0	0
	Off-Road		0.2189	1.5268	1.8176	2.97E-03	0.0941	0.0941
	Total		**23.3836**	**1.5268**	**1.8176**	**2.97E-03**	**0.0941**	**0.0941**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.045	0.0292	0.3448	1.06E-03	0.0992	0.027
	Total		**0.045**	**0.0292**	**0.3448**	**1.06E-03**	**0.0992**	**0.027**
TOTAL			***23.4286***	***1.5560***	***2.1624***	***0.0040***	***0.1933***	***0.1211***
Onsite		**2021** Winter						
	Archit. Coating		23.1647				0	0
	Off-Road		0.2189	1.5268	1.8176	2.97E-03	0.0941	0.0941
	Total		**23.3836**	**1.5268**	**1.8176**	**2.97E-03**	**0.0941**	**0.0941**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.051	0.0328	0.3241	1.00E-03	0.0992	0.027
	Total		**0.051**	**0.0328**	**0.3241**	**1.00E-03**	**0.0992**	**0.027**
TOTAL			***23.4346***	***1.5596***	***2.1417***	***0.0040***	***0.1933***	***0.1211***
Onsite		**2021**						
	Archit. Coating		23.1647	0	0	0	0	0
	Off-Road		0.2189	1.5268	1.8176	0.00297	0.0941	0.0941
	Total		**23.3836**	**1.5268**	**1.8176**	**0.00297**	**0.0941**	**0.0941**
Offsite								
	Hauling		0	0	0	0	0	0
	Vendor		0	0	0	0	0	0
	Worker		0.051	0.0328	0.3448	0.00106	0.0992	0.027
	Total		**0.051**	**0.0328**	**0.3448**	**0.00106**	**0.0992**	**0.027**
TOTAL			***23.4346***	***1.5596***	***2.1624***	***0.0040***	***0.1933***	***0.1211***
	Building Construction, Paving, & Architectural Coating		***27.28***	***34.65***	***36.14***	***0.07***	***2.60***	***1.86***
MAX DAILY			**27.28**	**71.53**	**45.56**	**0.09**	**10.09**	**6.31**
Regional Thresholds			**75**	**250**	**550**	**250**	**100**	**55**
Exceeds Thresholds?			No	No	No	No	No	No

Existing (2019) Emissions Worksheet*

*CalEEMod, Version 2016.3.2

Criteria Air Pollutants (pounds per day)

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.2027	3.00E-05	3.09E-03	0	1.00E-05	1.00E-05
Energy	8.81E-03	0.0801	0.0673	4.80E-04	6.09E-03	6.09E-03
Mobile	0.0813	0.072	0.8696	2.25E-03	0.2223	0.0599
Total	**1.2927**	**0.1521**	**0.94**	**2.73E-03**	**0.2284**	**0.066**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.2027	3.00E-05	3.09E-03	0	1.00E-05	1.00E-05
Energy	8.81E-03	0.0801	0.0673	4.80E-04	6.09E-03	6.09E-03
Mobile	0.0813	0.072	0.8696	2.25E-03	0.2223	0.0599
Total	**1.2927**	**0.1521**	**0.94**	**2.73E-03**	**0.2284**	**0.066**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.203	0.000	0.003	0.000	0.000	0.000
Energy	0.009	0.080	0.067	0.000	0.006	0.006
Mobile	0.081	0.072	0.870	0.002	0.222	0.060
Total	**1.293**	**0.152**	**0.940**	**0.003**	**0.228**	**0.066**

Greenhouse Gas

Sector		
Area	**0.0006**	$MTCO_2e$/Year*
Energy	**106**	$MTCO_2e$/Year
Mobile	**25**	$MTCO_2e$/Year
Solid Waste	**1**	$MTCO_2e$/Year
Water	**1**	$MTCO_2e$/Year
Total	**133**	**$MTCO_2e$/Year**

*metric tons of carbon dioxide equivalent per year.

Regional Operation Emissions Worksheet*

*CalEEMod, Version 2016.3.2

Existing-2021

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.2026	3.00E-05	3.07E-03	0	1.00E-05	1.00E-05
Energy	8.81E-03	0.0801	0.0673	4.80E-04	6.09E-03	6.09E-03
Mobile	0.0704	0.0597	0.7551	2.09E-03	0.2222	0.0599
Total	**1.2818**	**0.1398**	**0.8254**	**2.57E-03**	**0.2283**	**0.066**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.2026	3.00E-05	3.07E-03	0	1.00E-05	1.00E-05
Energy	8.81E-03	0.0801	0.0673	4.80E-04	6.09E-03	6.09E-03
Mobile	0.0677	0.0669	0.7466	1.96E-03	0.2222	0.0599
Total	**1.2792**	**0.147**	**0.817**	**2.44E-03**	**0.2283**	**0.066**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.203	0.00003	0.003	0.000	0.000	0.000
Energy	0.009	0.080	0.067	0.000	0.006	0.006
Mobile	0.070	0.067	0.755	0.002	0.222	0.060
Total	**1.282**	**0.147**	**0.825**	**0.003**	**0.228**	**0.066**

Proposed Project

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.6635	4.10E-04	0.0446	0	1.60E-04	1.60E-04
Energy	7.34E-03	0.0668	0.0561	4.00E-04	5.07E-03	5.07E-03
Mobile	0	0	0	0	0	0
Total	**1.6708**	**0.0672**	**0.1007**	**4.00E-04**	**5.23E-03**	**5.23E-03**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.6635	4.10E-04	0.0446	0	1.60E-04	1.60E-04
Energy	0.0101	0.0922	0.0774	5.50E-04	7.00E-03	7.00E-03
Mobile	0	0	0	0	0	0
Total	**1.6736**	**0.0926**	**0.122**	**5.50E-04**	**7.16E-03**	**7.16E-03**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	1.664	0.000	0.045	0.000	0.000	0.000
Energy	0.010	0.092	0.077	0.001	0.007	0.007
Mobile	0.000	0.000	0.000	0.000	0.000	0.000
Total	**1.674**	**0.093**	**0.122**	**0.001**	**0.007**	**0.007**

Net Change

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	0.4609	3.80E-04	0.04153	0	1.50E-04	1.50E-04
Energy	-1.47E-03	-0.0133	-0.0112	-8.00E-05	-1.02E-03	-1.02E-03
Mobile	-0.0704	-0.0597	-0.7551	-0.00209	-0.2222	-0.0599
Total	**0.389**	**-0.0726**	**-0.7247**	**-0.00217**	**-0.22307**	**-0.06077**

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	0.4609	3.80E-04	0.04153	0	1.50E-04	1.50E-04
Energy	1.29E-03	0.0121	0.0101	7.00E-05	9.10E-04	9.10E-04
Mobile	-0.0677	-0.0669	-0.7466	-0.00196	-0.2222	-0.0599
Total	**0.3944**	**-0.0544**	**-0.695**	**-0.00189**	**-0.22114**	**-0.05884**

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Area	0.461	0.000	0.042	0.000	0.000	0.000
Energy	0.001	0.012	0.010	0.000	0.001	0.001
Mobile	-0.068	-0.060	-0.747	-0.002	-0.222	-0.060
Total	**0.394**	**-0.054**	**-0.695**	**-0.002**	**-0.221**	**-0.059**
Regional Thresholds	**75**	**250**	**550**	**250**	**100**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

Regional Operation Emissions Worksheet: Interim Emissions*

*CalEEMod, Version 2016.3.2

Skyline Elementary School

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.1904	0.0671	0.9037	1.24E-03	0.1039	0.0285

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.1819	0.0758	1.056	1.18E-03	0.1039	0.0285

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.190	0.076	1.056	0.001	0.104	0.029

Solana Highland Elementary School

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.034	0.9563	0.3423	1.08E-03	0.0801	0.0314

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.0358	0.9505	0.4007	1.05E-03	0.0802	0.0315

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.036	0.956	0.401	0.001	0.080	0.032

Combined

Summer

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.2244	1.0234	1.246	2.32E-03	0.184	0.0599

Winter

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.2177	1.0263	1.4567	2.23E-03	0.1841	0.06

Max Daily

	ROG	NOx	CO	SO2	PM10 Total	PM2.5 Total
Mobile	0.224	1.026	1.457	0.002	0.184	0.060
Regional Thresholds	**75**	**250**	**550**	**250**	**100**	**55**
Exceeds Thresholds?	No	No	No	No	No	No

GHG Emissions Inventory

Proposed Project Buildout

Construction*

	$MTCO_2e$ Total**
2020	325
2021	479
Total Construction	**804**

*CalEEMod, Version 2016.3.2.

Operation*

Interim		
Mobile - Skyline ES	14	$MTCO_2e$/Year
Mobile - Solana Highaland ES	13	$MTCO_2e$/Year
Total	**27**	**$MTCO_2e$/Year**
Existing-2019		
Area	**0.0006**	$MTCO_2e$/Year
Energy	**106**	$MTCO_2e$/Year
Mobile	**25**	$MTCO_2e$/Year
Solid Waste	**1**	$MTCO_2e$/Year
Water	**1**	$MTCO_2e$/Year
Total	**133**	**$MTCO_2e$/Year**
Proposed		
Area	0.0083	$MTCO_2e$/Year
Energy	124	$MTCO_2e$/Year
Mobile	0	$MTCO_2e$/Year
Solid Waste	0	$MTCO_2e$/Year
Water	0	$MTCO_2e$/Year
Amortized Interim Emissions***	1	$MTCO_2e$/Year
Amortized Construction Emissions***	40	$MTCO_2e$/Year
Total	**165**	**$MTCO_2e$/Year**
Net Change		
Area	0.0077	$MTCO_2e$/Year
Energy	17	$MTCO_2e$/Year
Mobile	-25	$MTCO_2e$/Year
Solid Waste	-1	$MTCO_2e$/Year
Water	-1	$MTCO_2e$/Year
Amortized Interim Emissions***	1	$MTCO_2e$/Year
Amortized Construction Emissions***	40	$MTCO_2e$/Year
Total	**32**	**$MTCO_2e$/Year**
GHG Brightline Threshold	900	$MTCO_2e$/Year
Exceed Threshold?	**No**	

*CalEEMod, Version 2016.3.2.

** $MTCO_2e$=metric tons of carbon dioxide equivalent.

***Total interim and construction emissions are amortized over 20 years.

Criteria Air Pollutant and GHG Modeling Inputs and Assumptions

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CalEEMod Project Characteristics Inputs (Construction)

Project Address:	Solana Vista ES Reconstruction
Project Location:	San Diego County
Climate Zone:	13
Land Use Setting:	Urban
Operational Year:	2021
Utility Company:	San Diego Gas & Electric
Air Basin:	San Diego Air Basin
Air District:	SDAPCD

	Acres	SQFT
New Building	1.33	57,963
Parking Lot	1.14	49,550
Non-Parking Asphalt	1.01	43,880
Hardscape	0.81	35,100
Landscaping	5.70	248,460
	9.99	434,953

CalEEMod Land Use Inputs

Land Use	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet
New School Buildings	Educational	Elementary School	57.963	1000 sqft	1.3306	57,963
Surface Parking Lot	Parking	Parking Lot	49.550	1000 sqft	1.1375	49,550
Non-Parking Asphalt/Hardscape*	Parking	Other Asphalt Surfaces	78.980	1000 sqft	1.8131	43,880
Landscaping	Parking	Other Non-Asphalt Surfaces	248.46	1000 sqft	5.7039	0
					9.9851	

nes non-parking asphalt would be painted/striped.

Building Demolition

Construction Activity	Building SQFT Demo Tons*	Haul Truck Capacity (tons)**	Haul Distance (miles)**	Total Trip Ends	Total Days	Trip Ends/Day
Building Demo Debris Haul	1,993	20	20	198	25	8

** 2017-18 School Accountability Report Card for Solana Vista School*
***CalEEMod Default*

Asphalt Demolition

Construction Activity	Demolition Volume (ton)	Haul Truck Capacity (tons)**	Haul Distance (miles)**	Total Trip Ends	Total Days	Trip Ends/Day
Asphalt Demo Debris Haul	1,700	20	20	170	25	7

**Provided by the District.*
***CalEEMod Default*

Soil Hauling

Construction Activity	Export Volume (CY)*	Haul Truck Capacity (CY)**	Haul Distance (miles)**	Total Trip Ends	Duration (days)	Trip Ends/Day
Grading Soil Haul	885	16	20	111	26	5

**Provided by the District.*
***CalEEMod Default*

Architectural Coating

SDAPCD Rule 67.0.1

Percentage of Buildings' Interior Painted:	100%	percent
Percentage of Buildings' Exterior Painted:	100%	percent
Interior Paint VOC content:	100	grams per liter
Exterior Paint VOC content:	100	grams per liter

Nonresidential Structures	Land Use Square Feet	SCAQMD Factor	Total Paintable Surface Area[2]	Paintable Interior Area[1]	Paintable Exterior Area[1]
New School Buildings	57,963	2	115,926	86,945	28,982
			Total	86,945	28,982
Surface Parking Lot	49,550	0.06	2,973		2,973
Other Asphalt Surface	43,880	0.06	2,633		2,633
			Total	0	5,606

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

[2] ** Applied CalEEMod Methodology in calculating total

Construction - Unmitigated Run

SDAPCD Rule 55

Replace Ground Cover	PM10:	5	% Reduction
	PM25:	5	% Reduction
Water Exposed Area	Frequency:	2	per day
	PM10:	55	% Reduction
	PM25:	55	% Reduction
Unpaved Roads	Vehicle Speed:	15	mph
Clean Paved Road	9	% PM Reduction	

CalEEMod Construction Phase Inputs

5-Day Work Week

CalEEMod Default Construction Schedule

Phase Name	Phase Type	Start Date	End Date	CalEEMod Total Days
Demolition	Demolition	2020/06/01	2020/06/26	20
Site Preparation	Site Preparation	2020/06/27	2020/07/10	10
Grading	Grading	2020/07/11	2020/08/07	20
Building Construction	Building Construction	2020/08/08	2021/06/25	230
Paving	Paving	2021/06/26	2021/07/23	20
Architectural Coating	Architectural Coating	2021/07/24	2021/08/20	20

Normalized for 14-Month Construction Duration

Phase Name	Phase Type	Start Date	End Date	CalEEMod Total Days
Building Demolition	Demolition	6/1/2020	7/3/2020	25
Asphalt Demolition	Demolition	6/1/2020	7/3/2020	25
Site Preparation	Site Preparation	7/5/2020	7/22/2020	13
Grading	Grading	7/23/2020	8/27/2020	26
Grading Soil Haul	Grading	7/23/2020	8/27/2020	26
Building Construction	Building Construction	8/28/2020	12/30/2021	350
Paving	Paving	11/25/2021	12/30/2021	26
Architectural Coating	Architectural Coating	11/25/2021	12/30/2021	26

*Normalized CalEEMod's default construction schedule for 19-month construction duration.

CalEEMod Construction Off-Road Equipment Inputs*

Equipment Type	CalEEMod Equipment Type	Unit Amount	Hours/Day	HP	LF	Vendor Trips
Building Demolition						
Concrete/Industrial Saw	Concrete/Industrial Saw	1	8	81	0.73	
Excavators	Excavators	3	8	158	0.38	
Rubber Tired Dozers	Rubber Tired Dozers	2	8	247	0.4	
Water Truck**						4
Asphalt Demolition						
Concrete/Industrial Saw	Concrete/Industrial Saw	1	8	81	0.73	
Excavators	Excavators	3	8	158	0.38	
Rubber Tired Dozers	Rubber Tired Dozers	2	8	247	0.4	
Water Truck**						4
Site Preparation						
Rubber Tired Dozers	Rubber Tired Dozers	3	8	247	0.4	
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	4	8	97	0.37	
Water Truck**						4
Grading						
Excavators	Excavators	1	8	158	0.38	
Graders	Graders	1	8	187	0.41	
Rubber Tired Dozers	Rubber Tired Dozers	1	8	247	0.4	
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	3	8	97	0.37	
Water Truck**						4
Building Construction						
Cranes	Cranes	1	7	231	0.29	
Forklifts	Forklifts	3	8	89	0.2	
Generator Sets	Generator Sets	1	8	84	0.74	
Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	3	7	97	0.37	
Welders	Welders	1	8	46	0.45	
Paving						
Pavers	Pavers	2	8	130	0.42	
Paving Equipment	Paving Equipment	2	8	132	0.36	
Rollers	Rollers	2	8	80	0.38	
Architectural Coating						
Air Compressors	Air Compressors	1	6	78	0.48	

*CalEEMod Defaults

**Assumes 4 water truck trips per day.

Demo Haul Trip Calculation

Conversion factors

0.046	ton/SF*	<<---CalEEMod Appendix A
1.2641662	tons/cy*	<<---CalEEMod Appendix A
20	tons*	<<---CalEEMod User's Guide
15.820705	CY	
0.7910352	CY/ton	

**California Emissions Model Estimator, Version 2016.3.2, User's Guide, Appendix A.*

Building Demoltion Haul Trips (BSF and Haul Truck (CY) given)

BSF Demo	Tons/SF	Tons	Haul Truck (CY)	Haul Truck (Ton)	Round Trips	Total Trip Ends
43,329	0.046	1993.134	16	20.23	99	198

Construction Trips Worksheet

PhaseName	Worker Trip Ends Per Day	Vendor Trip Ends Per Day	Haul Truck Trip Ends Per Day	Total Haul Truck Trip Ends	Start Date	End Date	Workdays
Building Demolition	15	4	8	198	2020/06/01	2020/07/03	25
Asphalt Demolition	15	4	7	170	2020/06/01	2020/07/03	25
Site Preparation	18	4	0	0	2020/07/06	2020/07/22	13
Grading	15	4	4	111	2020/07/23	2020/08/27	26
Building Construction	64	25	0	0	2020/08/28	2021/12/30	350
Paving	15	0	0	0	2021/11/25	2021/12/30	26
Architectural Coating	13	0	0	0	2021/11/25	2021/12/30	26

Construction Scenario	Worker Trip Ends Per Day	Vendor Trip Ends Per Day	Haul Truck Trip Ends Per Day	Total Trip Ends Per Day	Start Date	End Date	Workdays
Building and Asphalt Demolition Overlap	30	8	15	53	6/1/2020	7/3/2020	25
Site Preparation	18	4	0	22	7/6/2020	7/22/2020	13
Grading	15	4	4	23	7/23/2020	8/27/2020	26
Building Construction	64	25	0	89	8/28/2020	11/24/2021	324
Building Construction, Paving, and Coating Overlap	92	25	0	117	11/25/2021	12/30/2021	26
Maximum Daily Trips	**92**	**25**	**15**	**117**			

CalEEMod Project Characteristics Inputs (Operation - Proposed)

Project Address:	Solana Vista ES Reconstruction
Project Location:	San Diego County
Climate Zone:	13
Land Use Setting:	Urban
Operational Year:	2021
Utility Company:	San Diego Gas & Electric
Air Basin:	San Diego Air Basin
Air District:	SDAPCD

Proposed Students	**0**
Project Square Footage	**57,963**

	Acres	SQFT
New Building	1.33	57,963
Parking Lot	1.14	49,550
Non-Parking Asphalt	1.01	43,880
Hardscape	0.81	35,100
Landscaping	5.70	248,460
	9.99	434,953

CalEEMod Land Use Inputs

Land Use	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet
New School Buildings	Educational	Elementary School	57.963	1000 sqft	1.33064738	57963
Surface Parking Lot	Parking	Parking Lot	49.55	1000 sqft	1.13751148	49550
Non-Parking Asphalt/Hardscape*	Parking	Other Asphalt Surfaces	78.98	1000 sqft	1.81313131	43,880
Hardscape	Parking	Other Asphalt Surfaces	0	1000 sqft	0	0
Landscaping	Parking	Other Non-Asphalt Surfaces	248.46	1000 sqft	5.70385675	0

Energy Mitigation

Assumes buildings would be built to comply with the 2019 Building Energy Efficiency Standards, which become effective effective on January 1, 2020. Non-residential buildings built in compliance with the 2019 Standards are general 30 percent more energy efficient than buildings built under the 2016 Standards.

CalEEMod Project Characteristics Inputs (Operation - Existing)

Project Address:	Solana Vista ES Reconstruction
Project Location:	San Diego County
Climate Zone:	13
Land Use Setting:	Urban
Operational Year:	2019, 2021
Utility Company:	San Diego Gas & Electric
Air Basin:	San Diego Air Basin
Air District:	SDAPCD

Existing Students:	**30**
Existing Square Footage:	**43,329**

CalEEMod Land Use Inputs

Land Use	Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet
Existing Building to Be Demolished	Educational	Elementary School	30	student	9.99	43,329

Trip Generation

Trip Generation*	48	ADT
Weekday Trip Rate*	1.60	trips/student
Saturday Trip Rate	0.00	trips/student
Sunday Trip Rate	0.00	trips/student

** As provided by IBI Group.*

Solid Waste

Elementary School Generation Rate*	0.50	pounds/day/student		
Total Solid Waste	**2.7**	tons/year	15.0	PPD

**Consistent with Skyline Elementary School Reconstruction Initial Study 5.17 Utilities and Service Systems.*

Water Use

Septic Tank	0%			
Aerobic	100%			
Facultative Lagoons	0%			
Wastewater Generation Factor*	8	gallons/day/student		
Indoor Water Use:	**87,600**	GPY	240	GPD
Total Water Use*:	10	gallons/day/student		
	109,500	GPY	300	GPD
Outdoor Water Use:	**21,900**	GPY		

**Consistent with Skyline Elementary School Reconstruction Initial Study 5.17 Utilities and Service Systems.*

Energy Mitigation

The CalEEMod historical energy rates are utilized, and are based on the 2005 Building Energy Efficiency Standards.

CalEEMod Project Characteristics Inputs (Operation - Skyline Elementary School Interim during Construction)

Project Location:	San Diego County
Climate Zone:	13
Land Use Setting:	Urban
Operational Year:	2020
Utility Company:	San Diego Gas & Electric
Air Basin:	San Diego Air Basin
Air District:	SDAPCD

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet
Educational	Elementary School	109	students	0.98	42,889

Trip Generation

Students	No. of Students	Daily Weekday Trip Generation Rate (trip/student/day)*	Total Weekday Daily Trip Generation
3rd Grade Students	109	1.6	174

**Based on trip generation rate provided by IBI Group.*

Weekday Trip Rate*	1.60	trips/student
Saturday Trip Rate	0	trips/student
Sunday Trip Rate	0	trips/student

Skyline ES

3rd Grade Students from SVES	174	ADT
Distance from SVES	1.10	miles*

**Based on the measured travel distance between Solana Vista Elementary School and Skyline Elementary School.*

CalEEMod Project Characteristics Inputs (Operation - Solana Highland Elementary School Interim during Construction)

Project Location:	San Diego County
Climate Zone:	13
Land Use Setting:	Urban
Operational Year:	2020
Utility Company:	San Diego Gas & Electric
Air Basin:	San Diego Air Basin
Air District:	SDAPCD

CalEEMod Land Use Inputs

Land Use Type	Land Use Subtype	Unit Amount	Size Metric	Lot Acreage	Square Feet
Educational	Elementary School	240	students	0.98	42,889

Trip Generation

Students	No. of Students	Bus Loads Per Day	Total Weekday Daily Trip Generation
K-2nd Grade Students	240	5	10

Weekday Trip Rate*	0.04	trips/student
Saturday Trip Rate	0	trips/student
Sunday Trip Rate	0	trips/student

Solana Highland Elementary School

K-2nd Grade Students from SVES	10	ADT
Distance from SVES	5.00	miles**

**Based on information provided by IBI Group.*

**Based on the measured travel distance between Solana Vista Elementary School and Solana Highland Elementary School.

Changes to the CalEEMod Defaults - Fleet Mix 2019

						Trips	48							
Default	LDA		LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix (Model Default)	0.581689	0.044135	0.186694	0.113515	0.018244	0.0056	0.015197	0.022573	0.001888	0.002088	0.006279	0.000742	0.001357	100%
Trips	28	2	9	5	1	0	1	1	0	0	0	0	0	48
Percent	82%			11%	7%									100%
without buses/MH	0.581689	0.044135	0.186694	0.113515	0.018244	0.005600	0.015197	0.022573	0	0	0.006279	0.000742	0	99%
Percent	82%			11%	6%									99%
Adjusted without buses/MH	0.581689	0.044135	0.186694	0.113515	0.019804	0.006079	0.016497	0.024504	0.000000	0.000000	0.006816	0.000805	0.000000	
Percent check	82%			11%	7%									100%
Assumed Mix	100.0%			0.00%	0.00%									100%
adjusted with Assumed	**0.709953**	**0.053867**	**0.227861**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.008319**	**0.000000**	**0.000000**	**100%**
Trips	34	3	11	0	0	0	0	0	0	0	0	0	0	48
Percent check	100%			0%	0%									
Check	*48*			*0*	*0*									

Source: IBI Group.

Fleet mix for the school project is modified to reflect a higher proportion of passenger vehicles that the regional VMT. The primary vehicle trips are passenger vehicles from parents dropping off students and staff trips. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.

Changes to the CalEEMod Defaults - Fleet Mix 2020 (Interim Operation for Skyline Elementary School)

Trips 174

Default	LDA		LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix (Model Default)	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0.001902	0.002024	0.006181	0.000745	0.001271	100%
Trips	103	7	32	19	3	1	3	4	0	0	1	0	0	174
Percent	82%			11%	7%									100%
without buses/MH	0.588316	0.042913	0.184449	0.110793	0.017294	0.005558	0.015534	0.023021	0	0	0.006181	0.000000	0	99%
Percent	82%			11%	6%									99%
Adjusted without buses/MH	0.588316	0.042913	0.184449	0.110793	0.018967	0.006096	0.017037	0.025249	0.000000	0.000000	0.006181	0.000000	0.000000	
Percent check	82%			11%	7%									100%
Assumed Mix	100.0%			0.00%	0.00%									100%
adjusted with Assumed	**0.715914**	**0.052215**	**0.224429**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.007521**	**0.000000**	**0.000000**	**100%**
Trips	125	9	39	0	0	0	0	0	0	0	1	0	0	174
Percent check	100%			0%	0%									
Check	*174*			*0*	*0*									

Source: Transpogroup, 2016.

Fleet mix for the school project is modified to reflect a higher proportion of passenger vehicles that the regional VMT. The primary vehicle trips are passenger vehicles from parents dropping off students and staff trips. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.

Changes to the CalEEMod Defaults - Fleet Mix 2021

						Trips	48							
Default	LDA		LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
FleetMix (Model Default)	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.01594	0.023523	0.001912	0.001972	0.00609	0.000748	0.001193	100%
Trips	29	2	9	5	1	0	1	1	0	0	0	0	0	48
Percent	82%			11%	7%									100%
without buses/MH	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0	0	0.006090	0.000748	0	99%
Percent	82%			11%	6%									99%
Adjusted without buses/MH	0.593936	0.041843	0.182569	0.108325	0.017778	0.005963	0.017242	0.025444	0.000000	0.000000	0.006587	0.000809	0.000000	
Percent check	82%			11%	7%									100%
Assumed Mix	100.0%			0.00%	0.00%									100%
adjusted with Assumed	**0.719979**	**0.050723**	**0.221313**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.000000**	**0.007985**	**0.000000**	**0.000000**	**100%**
Trips	35	2	11	0	0	0	0	0	0	0	0	0	0	48
Percent check	100%			0%	0%									
Check	*48*			*0*	*0*									

Source: IBI Group.

Fleet mix for the school project is modified to reflect a higher proportion of passenger vehicles that the regional VMT. The primary vehicle trips are passenger vehicles from parents dropping off students and staff trips. Assumes a mix of approximately 97% passenger vehicles, 2% medium duty trucks, and 1% heavy duty trucks and buses.

CalEEMod Output: Construction

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Construction - San Diego County, Summer

Construction

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	57.96	1000sqft	1.33	57,963.00	0
Parking Lot	49.55	1000sqft	1.14	49,550.00	0
Other Asphalt Surfaces	78.98	1000sqft	1.81	43,880.00	0
Other Non-Asphalt Surfaces	248.46	1000sqft	5.70	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See assumptions file for details. Assumes hardscapes and landscaping not painted.

Construction Phase - Based on provided general construction schedule.

Grading -

Demolition -

Trips and VMT - Based on information provided. See assumpstion file for details.

Architectural Coating - Based SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per SDAPCD Rule 55

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	230.00	350.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	10.00	13.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	PhaseEndDate	8/20/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	6/25/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	6/26/2020	7/3/2020
tblConstructionPhase	PhaseEndDate	8/7/2020	8/27/2020
tblConstructionPhase	PhaseEndDate	7/23/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	7/10/2020	7/22/2020
tblConstructionPhase	PhaseStartDate	7/24/2021	11/25/2021
tblConstructionPhase	PhaseStartDate	8/8/2020	8/28/2020
tblConstructionPhase	PhaseStartDate	7/11/2020	7/23/2020
tblConstructionPhase	PhaseStartDate	6/26/2021	11/25/2021

tblConstructionPhase	PhaseStartDate	6/27/2020	7/6/2020
tblGrading	MaterialExported	0.00	885.00
tblLandUse	LandUseSquareFeet	78,980.00	43,880.00
tblLandUse	LandUseSquareFeet	248,460.00	0.00
tblTripsAndVMT	HaulingTripNumber	197.00	198.00
tblTripsAndVMT	HaulingTripNumber	168.00	170.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

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					
2020	6.8806	71.4846	45.5189	0.0939	18.2412	3.3366	20.4419	9.9777	3.1021	12.0024	0.0000	9,243.9789	9,243.9789	2.2518	0.0000	9,300.2746
2021	27.2311	34.6305	36.1349	0.0670	0.9250	1.7410	2.6660	0.2492	1.6288	1.8780	0.0000	6,519.6883	6,519.6883	1.4226	0.0000	6,555.2537
Maximum	**27.2311**	**71.4846**	**45.5189**	**0.0939**	**18.2412**	**3.3366**	**20.4419**	**9.9777**	**3.1021**	**12.0024**	**0.0000**	**9,243.9789**	**9,243.9789**	**2.2518**	**0.0000**	**9,300.2746**

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					
2020	6.8806	71.4846	45.5189	0.0939	7.8850	3.3366	10.0856	4.2891	3.1021	6.3138	0.0000	9,243.9789	9,243.9789	2.2518	0.0000	9,300.2746
2021	27.2311	34.6305	36.1349	0.0670	0.8550	1.7410	2.5960	0.2320	1.6288	1.8608	0.0000	6,519.6883	6,519.6883	1.4226	0.0000	6,555.2537
Maximum	**27.2311**	**71.4846**	**45.5189**	**0.0939**	**7.8850**	**3.3366**	**10.0856**	**4.2891**	**3.1021**	**6.3138**	**0.0000**	**9,243.9789**	**9,243.9789**	**2.2518**	**0.0000**	**9,300.2746**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.40**	**0.00**	**45.12**	**55.79**	**0.00**	**41.11**	**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	Building Demolition	Demolition	6/1/2020	7/3/2020	5	25	
2	Asphalt Demolition	Demolition	6/1/2020	7/3/2020	5	25	
3	Site Preparation	Site Preparation	7/6/2020	7/22/2020	5	13	
4	Grading	Grading	7/23/2020	8/27/2020	5	26	
5	Building Construction	Building Construction	8/28/2020	12/30/2021	5	350	
6	Paving	Paving	11/25/2021	12/30/2021	5	26	
7	Architectural Coating	Architectural Coating	11/25/2021	12/30/2021	5	26	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 13

Acres of Paving: 8.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 86,945; Non-Residential Outdoor: 28,982; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Demolition	Excavators	3	8.00	158	0.38
Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Building Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Asphalt Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Asphalt Demolition	Excavators	3	8.00	158	0.38
Asphalt Demolition	Rubber Tired Dozers	2	8.00	247	0.40

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
Building Demolition	6	15.00	4.00	198.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	111.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition	6	15.00	4.00	170.00	10.80	7.30	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 Building Demolition - 2020

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					1.7272	0.0000	1.7272	0.2616	0.0000	0.2616			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.7272**	**1.6587**	**3.3859**	**0.2616**	**1.5419**	**1.8034**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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	0.0626	2.2094	0.5016	6.2000e-003	0.1384	7.0500e-003	0.1454	0.0379	6.7400e-003	0.0447		678.2107	678.2107	0.0597		679.7042
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0271	2.2100e-003	0.0293	7.8000e-003	2.1100e-003	9.9100e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.1326**	**2.6975**	**1.0417**	**8.5700e-003**	**0.2887**	**0.0101**	**0.2988**	**0.0784**	**9.6500e-003**	**0.0881**		**922.2388**	**922.2388**	**0.0722**		**924.0436**

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					0.7384	0.0000	0.7384	0.1118	0.0000	0.1118			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.7384**	**1.6587**	**2.3971**	**0.1118**	**1.5419**	**1.6537**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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	0.0626	2.2094	0.5016	6.2000e-003	0.1290	7.0500e-003	0.1360	0.0356	6.7400e-003	0.0424		678.2107	678.2107	0.0597		679.7042
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0253	2.2100e-003	0.0276	7.3700e-003	2.1100e-003	9.4800e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1136	8.6000e-004	0.1145	0.0303	8.0000e-004	0.0311		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.1326**	**2.6975**	**1.0417**	**8.5700e-003**	**0.2679**	**0.0101**	**0.2780**	**0.0733**	**9.6500e-003**	**0.0830**		**922.2388**	**922.2388**	**0.0722**		**924.0436**

3.3 Asphalt Demolition - 2020

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					1.4733	0.0000	1.4733	0.2231	0.0000	0.2231			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.4733**	**1.6587**	**3.1320**	**0.2231**	**1.5419**	**1.7650**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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	0.0538	1.8970	0.4307	5.3200e-003	0.1188	6.0500e-003	0.1249	0.0326	5.7900e-003	0.0384		582.3021	582.3021	0.0513		583.5844
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0271	2.2100e-003	0.0293	7.8000e-003	2.1100e-003	9.9100e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.1237**	**2.3851**	**0.9708**	**7.6900e-003**	**0.2691**	**9.1200e-003**	**0.2783**	**0.0730**	**8.7000e-003**	**0.0817**		**826.3302**	**826.3302**	**0.0637**		**827.9238**

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					0.6298	0.0000	0.6298	0.0954	0.0000	0.0954			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.6298**	**1.6587**	**2.2885**	**0.0954**	**1.5419**	**1.6372**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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	0.0538	1.8970	0.4307	5.3200e-003	0.1107	6.0500e-003	0.1168	0.0306	5.7900e-003	0.0364		582.3021	582.3021	0.0513		583.5844
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0253	2.2100e-003	0.0276	7.3700e-003	2.1100e-003	9.4800e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1136	8.6000e-004	0.1145	0.0303	8.0000e-004	0.0311		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.1237**	**2.3851**	**0.9708**	**7.6900e-003**	**0.2497**	**9.1200e-003**	**0.2588**	**0.0683**	**8.7000e-003**	**0.0770**		**826.3302**	**826.3302**	**0.0637**		**827.9238**

3.4 Site Preparation - 2020

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

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	0.0150	0.4510	0.1149	1.1000e-003	0.0271	2.2100e-003	0.0293	7.8000e-003	2.1100e-003	9.9100e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		151.6945	151.6945	4.5300e-003		151.8077
Total	**0.0810**	**0.4955**	**0.6251**	**2.6200e-003**	**0.1750**	**3.2500e-003**	**0.1782**	**0.0470**	**3.0700e-003**	**0.0501**		**269.3105**	**269.3105**	**0.0132**		**269.6407**

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					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**7.7233**	**2.1974**	**9.9207**	**4.2454**	**2.0216**	**6.2670**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

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	0.0150	0.4510	0.1149	1.1000e-003	0.0253	2.2100e-003	0.0276	7.3700e-003	2.1100e-003	9.4800e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0661	0.0445	0.5102	1.5200e-003	0.1363	1.0400e-003	0.1373	0.0364	9.6000e-004	0.0373		151.6945	151.6945	4.5300e-003		151.8077
Total	**0.0810**	**0.4955**	**0.6251**	**2.6200e-003**	**0.1616**	**3.2500e-003**	**0.1649**	**0.0438**	**3.0700e-003**	**0.0468**		**269.3105**	**269.3105**	**0.0132**		**269.6407**

3.5 Grading - 2020

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					6.5571	0.0000	6.5571	3.3682	0.0000	3.3682			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5571**	**1.2734**	**7.8306**	**3.3682**	**1.1716**	**4.5398**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

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	0.0337	1.1910	0.2704	3.3400e-003	0.0746	3.8000e-003	0.0784	0.0204	3.6400e-003	0.0241		365.5856	365.5856	0.0322		366.3907
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0271	2.2100e-003	0.0293	7.8000e-003	2.1100e-003	9.9100e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.1037**	**1.6791**	**0.8105**	**5.7100e-003**	**0.2249**	**6.8700e-003**	**0.2318**	**0.0609**	**6.5500e-003**	**0.0675**		**609.6137**	**609.6137**	**0.0447**		**610.7301**

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					2.8032	0.0000	2.8032	1.4399	0.0000	1.4399			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**2.8032**	**1.2734**	**4.0766**	**1.4399**	**1.1716**	**2.6115**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

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	0.0337	1.1910	0.2704	3.3400e-003	0.0695	3.8000e-003	0.0733	0.0192	3.6400e-003	0.0228		365.5856	365.5856	0.0322		366.3907
Vendor	0.0150	0.4510	0.1149	1.1000e-003	0.0253	2.2100e-003	0.0276	7.3700e-003	2.1100e-003	9.4800e-003		117.6160	117.6160	8.6800e-003		117.8330
Worker	0.0550	0.0371	0.4252	1.2700e-003	0.1136	8.6000e-004	0.1145	0.0303	8.0000e-004	0.0311		126.4121	126.4121	3.7700e-003		126.5064
Total	**0.1037**	**1.6791**	**0.8105**	**5.7100e-003**	**0.2084**	**6.8700e-003**	**0.2153**	**0.0569**	**6.5500e-003**	**0.0634**		**609.6137**	**609.6137**	**0.0447**		**610.7301**

3.6 Building Construction - 2020

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0934	2.8190	0.7182	6.8400e-003	0.1692	0.0138	0.1830	0.0487	0.0132	0.0619		735.1002	735.1002	0.0542		736.4559
Worker	0.2349	0.1582	1.8141	5.4100e-003	0.5257	3.6900e-003	0.5294	0.1395	3.4000e-003	0.1429		539.3581	539.3581	0.0161		539.7607
Total	**0.3283**	**2.9772**	**2.5323**	**0.0123**	**0.6950**	**0.0175**	**0.7125**	**0.1882**	**0.0166**	**0.2048**		**1,274.4583**	**1,274.4583**	**0.0703**		**1,276.2167**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0934	2.8190	0.7182	6.8400e-003	0.1584	0.0138	0.1722	0.0461	0.0132	0.0593		735.1002	735.1002	0.0542		736.4559
Worker	0.2349	0.1582	1.8141	5.4100e-003	0.4846	3.6900e-003	0.4883	0.1294	3.4000e-003	0.1328		539.3581	539.3581	0.0161		539.7607
Total	**0.3283**	**2.9772**	**2.5323**	**0.0123**	**0.6430**	**0.0175**	**0.6605**	**0.1754**	**0.0166**	**0.1920**		**1,274.4583**	**1,274.4583**	**0.0703**		**1,276.2167**

3.6 Building Construction - 2021

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0756	2.5457	0.6488	6.7700e-003	0.1692	5.3500e-003	0.1746	0.0487	5.1100e-003	0.0538		728.3799	728.3799	0.0521		729.6810
Worker	0.2214	0.1438	1.6975	5.2300e-003	0.5257	3.6300e-003	0.5294	0.1395	3.3500e-003	0.1428		521.2422	521.2422	0.0149		521.6141
Total	**0.2970**	**2.6896**	**2.3463**	**0.0120**	**0.6950**	**8.9800e-003**	**0.7040**	**0.1882**	**8.4600e-003**	**0.1966**		**1,249.6220**	**1,249.6220**	**0.0669**		**1,251.2951**

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0756	2.5457	0.6488	6.7700e-003	0.1584	5.3500e-003	0.1637	0.0461	5.1100e-003	0.0512		728.3799	728.3799	0.0521		729.6810
Worker	0.2214	0.1438	1.6975	5.2300e-003	0.4846	3.6300e-003	0.4883	0.1294	3.3500e-003	0.1327		521.2422	521.2422	0.0149		521.6141
Total	**0.2970**	**2.6896**	**2.3463**	**0.0120**	**0.6430**	**8.9800e-003**	**0.6520**	**0.1754**	**8.4600e-003**	**0.1839**		**1,249.6220**	**1,249.6220**	**0.0669**		**1,251.2951**

3.7 Paving - 2021

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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5528**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

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	0.0519	0.0337	0.3979	1.2300e-003	0.1232	8.5000e-004	0.1241	0.0327	7.8000e-004	0.0335		122.1661	122.1661	3.4900e-003		122.2533
Total	**0.0519**	**0.0337**	**0.3979**	**1.2300e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**		**122.1661**	**122.1661**	**3.4900e-003**		**122.2533**

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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5528**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

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	0.0519	0.0337	0.3979	1.2300e-003	0.1136	8.5000e-004	0.1144	0.0303	7.8000e-004	0.0311		122.1661	122.1661	3.4900e-003		122.2533
Total	**0.0519**	**0.0337**	**0.3979**	**1.2300e-003**	**0.1136**	**8.5000e-004**	**0.1144**	**0.0303**	**7.8000e-004**	**0.0311**		**122.1661**	**122.1661**	**3.4900e-003**		**122.2533**

3.8 Architectural Coating - 2021

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	23.1647					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**23.3836**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	0.0450	0.0292	0.3448	1.0600e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		105.8773	105.8773	3.0200e-003		105.9529
Total	**0.0450**	**0.0292**	**0.3448**	**1.0600e-003**	**0.1068**	**7.4000e-004**	**0.1075**	**0.0283**	**6.8000e-004**	**0.0290**		**105.8773**	**105.8773**	**3.0200e-003**		**105.9529**

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	23.1647					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**23.3836**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	0.0450	0.0292	0.3448	1.0600e-003	0.0984	7.4000e-004	0.0992	0.0263	6.8000e-004	0.0270		105.8773	105.8773	3.0200e-003		105.9529
Total	**0.0450**	**0.0292**	**0.3448**	**1.0600e-003**	**0.0984**	**7.4000e-004**	**0.0992**	**0.0263**	**6.8000e-004**	**0.0270**		**105.8773**	**105.8773**	**3.0200e-003**		**105.9529**

Construction - San Diego County, Winter

Construction

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	57.96	1000sqft	1.33	57,963.00	0
Parking Lot	49.55	1000sqft	1.14	49,550.00	0
Other Asphalt Surfaces	78.98	1000sqft	1.81	43,880.00	0
Other Non-Asphalt Surfaces	248.46	1000sqft	5.70	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See assumptions file for details. Assumes hardscapes and landscaping not painted.

Construction Phase - Based on provided general construction schedule.

Grading -

Demolition -

Trips and VMT - Based on information provided. See assumpstion file for details.

Architectural Coating - Based SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per SDAPCD Rule 55

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	230.00	350.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	10.00	13.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	PhaseEndDate	8/20/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	6/25/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	6/26/2020	7/3/2020
tblConstructionPhase	PhaseEndDate	8/7/2020	8/27/2020
tblConstructionPhase	PhaseEndDate	7/23/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	7/10/2020	7/22/2020
tblConstructionPhase	PhaseStartDate	7/24/2021	11/25/2021
tblConstructionPhase	PhaseStartDate	8/8/2020	8/28/2020
tblConstructionPhase	PhaseStartDate	7/11/2020	7/23/2020
tblConstructionPhase	PhaseStartDate	6/26/2021	11/25/2021

tblConstructionPhase	PhaseStartDate	6/27/2020	7/6/2020
tblGrading	MaterialExported	0.00	885.00
tblLandUse	LandUseSquareFeet	78,980.00	43,880.00
tblLandUse	LandUseSquareFeet	248,460.00	0.00
tblTripsAndVMT	HaulingTripNumber	197.00	198.00
tblTripsAndVMT	HaulingTripNumber	168.00	170.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

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					
2020	6.8998	71.5325	45.5571	0.0935	18.2412	3.3370	20.4419	9.9777	3.1024	12.0024	0.0000	9,200.8066	9,200.8066	2.2563	0.0000	9,257.2145
2021	27.2779	34.6491	36.0621	0.0664	0.9250	1.7412	2.6662	0.2492	1.6290	1.8782	0.0000	6,454.9548	6,454.9548	1.4247	0.0000	6,490.5716
Maximum	**27.2779**	**71.5325**	**45.5571**	**0.0935**	**18.2412**	**3.3370**	**20.4419**	**9.9777**	**3.1024**	**12.0024**	**0.0000**	**9,200.8066**	**9,200.8066**	**2.2563**	**0.0000**	**9,257.2145**

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					
2020	6.8998	71.5325	45.5571	0.0935	7.8850	3.3370	10.0857	4.2891	3.1024	6.3139	0.0000	9,200.8066	9,200.8066	2.2563	0.0000	9,257.2145
2021	27.2779	34.6491	36.0621	0.0664	0.8550	1.7412	2.5962	0.2320	1.6290	1.8610	0.0000	6,454.9548	6,454.9548	1.4247	0.0000	6,490.5716
Maximum	**27.2779**	**71.5325**	**45.5571**	**0.0935**	**7.8850**	**3.3370**	**10.0857**	**4.2891**	**3.1024**	**6.3139**	**0.0000**	**9,200.8066**	**9,200.8066**	**2.2563**	**0.0000**	**9,257.2145**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.40**	**0.00**	**45.12**	**55.79**	**0.00**	**41.11**	**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	Building Demolition	Demolition	6/1/2020	7/3/2020	5	25	
2	Asphalt Demolition	Demolition	6/1/2020	7/3/2020	5	25	
3	Site Preparation	Site Preparation	7/6/2020	7/22/2020	5	13	
4	Grading	Grading	7/23/2020	8/27/2020	5	26	
5	Building Construction	Building Construction	8/28/2020	12/30/2021	5	350	
6	Paving	Paving	11/25/2021	12/30/2021	5	26	
7	Architectural Coating	Architectural Coating	11/25/2021	12/30/2021	5	26	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 13

Acres of Paving: 8.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 86,945; Non-Residential Outdoor: 28,982; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Demolition	Excavators	3	8.00	158	0.38
Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Building Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Asphalt Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Asphalt Demolition	Excavators	3	8.00	158	0.38
Asphalt Demolition	Rubber Tired Dozers	2	8.00	247	0.40

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
Building Demolition	6	15.00	4.00	198.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	111.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition	6	15.00	4.00	170.00	10.80	7.30	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 Building Demolition - 2020

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					1.7272	0.0000	1.7272	0.2616	0.0000	0.2616			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.7272**	**1.6587**	**3.3859**	**0.2616**	**1.5419**	**1.8034**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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	0.0643	2.2307	0.5348	6.0900e-003	0.1384	7.2000e-003	0.1456	0.0379	6.8800e-003	0.0448		666.5753	666.5753	0.0618		668.1199
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0271	2.2500e-003	0.0293	7.8000e-003	2.1500e-003	9.9500e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.1423**	**2.7230**	**1.0632**	**8.3500e-003**	**0.2887**	**0.0103**	**0.2990**	**0.0784**	**9.8300e-003**	**0.0882**		**899.8299**	**899.8299**	**0.0746**		**901.6944**

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					0.7384	0.0000	0.7384	0.1118	0.0000	0.1118			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.7384**	**1.6587**	**2.3971**	**0.1118**	**1.5419**	**1.6537**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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	0.0643	2.2307	0.5348	6.0900e-003	0.1290	7.2000e-003	0.1362	0.0356	6.8800e-003	0.0425		666.5753	666.5753	0.0618		668.1199
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0253	2.2500e-003	0.0276	7.3700e-003	2.1500e-003	9.5200e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1136	8.6000e-004	0.1145	0.0303	8.0000e-004	0.0311		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.1423**	**2.7230**	**1.0632**	**8.3500e-003**	**0.2679**	**0.0103**	**0.2782**	**0.0733**	**9.8300e-003**	**0.0831**		**899.8299**	**899.8299**	**0.0746**		**901.6944**

3.3 Asphalt Demolition - 2020

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					1.4733	0.0000	1.4733	0.2231	0.0000	0.2231			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.4733**	**1.6587**	**3.1320**	**0.2231**	**1.5419**	**1.7650**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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	0.0552	1.9152	0.4592	5.2300e-003	0.1188	6.1800e-003	0.1250	0.0326	5.9100e-003	0.0385		572.3121	572.3121	0.0531		573.6383
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0271	2.2500e-003	0.0293	7.8000e-003	2.1500e-003	9.9500e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.1332**	**2.4075**	**0.9876**	**7.4900e-003**	**0.2691**	**9.2900e-003**	**0.2784**	**0.0730**	**8.8600e-003**	**0.0819**		**805.5668**	**805.5668**	**0.0658**		**807.2128**

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					0.6298	0.0000	0.6298	0.0954	0.0000	0.0954			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.6298**	**1.6587**	**2.2885**	**0.0954**	**1.5419**	**1.6372**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

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	0.0552	1.9152	0.4592	5.2300e-003	0.1107	6.1800e-003	0.1169	0.0306	5.9100e-003	0.0365		572.3121	572.3121	0.0531		573.6383
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0253	2.2500e-003	0.0276	7.3700e-003	2.1500e-003	9.5200e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1136	8.6000e-004	0.1145	0.0303	8.0000e-004	0.0311		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.1332**	**2.4075**	**0.9876**	**7.4900e-003**	**0.2497**	**9.2900e-003**	**0.2590**	**0.0683**	**8.8600e-003**	**0.0771**		**805.5668**	**805.5668**	**0.0658**		**807.2128**

3.4 Site Preparation - 2020

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					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

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	0.0157	0.4507	0.1275	1.0700e-003	0.0271	2.2500e-003	0.0293	7.8000e-003	2.1500e-003	9.9500e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1479	1.0400e-003	0.1489	0.0392	9.6000e-004	0.0402		142.4038	142.4038	4.2900e-003		142.5109
Total	**0.0905**	**0.5006**	**0.6086**	**2.5000e-003**	**0.1750**	**3.2900e-003**	**0.1782**	**0.0470**	**3.1100e-003**	**0.0501**		**256.9886**	**256.9886**	**0.0135**		**257.3263**

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					7.7233	0.0000	7.7233	4.2454	0.0000	4.2454			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**7.7233**	**2.1974**	**9.9207**	**4.2454**	**2.0216**	**6.2670**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

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	0.0157	0.4507	0.1275	1.0700e-003	0.0253	2.2500e-003	0.0276	7.3700e-003	2.1500e-003	9.5200e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0748	0.0500	0.4810	1.4300e-003	0.1363	1.0400e-003	0.1373	0.0364	9.6000e-004	0.0373		142.4038	142.4038	4.2900e-003		142.5109
Total	**0.0905**	**0.5006**	**0.6086**	**2.5000e-003**	**0.1616**	**3.2900e-003**	**0.1649**	**0.0438**	**3.1100e-003**	**0.0469**		**256.9886**	**256.9886**	**0.0135**		**257.3263**

3.5 Grading - 2020

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					6.5571	0.0000	6.5571	3.3682	0.0000	3.3682			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5571**	**1.2734**	**7.8306**	**3.3682**	**1.1716**	**4.5398**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

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	0.0347	1.2024	0.2883	3.2800e-003	0.0746	3.8800e-003	0.0785	0.0204	3.7100e-003	0.0242		359.3136	359.3136	0.0333		360.1462
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0271	2.2500e-003	0.0293	7.8000e-003	2.1500e-003	9.9500e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1232	8.6000e-004	0.1241	0.0327	8.0000e-004	0.0335		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.1127**	**1.6947**	**0.8167**	**5.5400e-003**	**0.2249**	**6.9900e-003**	**0.2319**	**0.0609**	**6.6600e-003**	**0.0676**		**592.5683**	**592.5683**	**0.0461**		**593.7207**

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					2.8032	0.0000	2.8032	1.4399	0.0000	1.4399			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**2.8032**	**1.2734**	**4.0766**	**1.4399**	**1.1716**	**2.6115**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

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	0.0347	1.2024	0.2883	3.2800e-003	0.0695	3.8800e-003	0.0734	0.0192	3.7100e-003	0.0229		359.3136	359.3136	0.0333		360.1462
Vendor	0.0157	0.4507	0.1275	1.0700e-003	0.0253	2.2500e-003	0.0276	7.3700e-003	2.1500e-003	9.5200e-003		114.5849	114.5849	9.2200e-003		114.8154
Worker	0.0623	0.0416	0.4009	1.1900e-003	0.1136	8.6000e-004	0.1145	0.0303	8.0000e-004	0.0311		118.6698	118.6698	3.5700e-003		118.7591
Total	**0.1127**	**1.6947**	**0.8167**	**5.5400e-003**	**0.2084**	**6.9900e-003**	**0.2154**	**0.0569**	**6.6600e-003**	**0.0636**		**592.5683**	**592.5683**	**0.0461**		**593.7207**

3.6 Building Construction - 2020

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0978	2.8167	0.7970	6.6700e-003	0.1692	0.0141	0.1833	0.0487	0.0134	0.0622		716.1555	716.1555	0.0576		717.5962
Worker	0.2660	0.1777	1.7104	5.0800e-003	0.5257	3.6900e-003	0.5294	0.1395	3.4000e-003	0.1429		506.3245	506.3245	0.0152		506.7056
Total	**0.3638**	**2.9943**	**2.5074**	**0.0118**	**0.6950**	**0.0177**	**0.7127**	**0.1882**	**0.0168**	**0.2050**		**1,222.4800**	**1,222.4800**	**0.0729**		**1,224.3018**

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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

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	0.0978	2.8167	0.7970	6.6700e-003	0.1584	0.0141	0.1724	0.0461	0.0134	0.0595		716.1555	716.1555	0.0576		717.5962
Worker	0.2660	0.1777	1.7104	5.0800e-003	0.4846	3.6900e-003	0.4883	0.1294	3.4000e-003	0.1328		506.3245	506.3245	0.0152		506.7056
Total	**0.3638**	**2.9943**	**2.5074**	**0.0118**	**0.6430**	**0.0177**	**0.6608**	**0.1754**	**0.0168**	**0.1923**		**1,222.4800**	**1,222.4800**	**0.0729**		**1,224.3018**

3.6 Building Construction - 2021

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0797	2.5390	0.7224	6.6000e-003	0.1692	5.5600e-003	0.1748	0.0487	5.3200e-003	0.0540		709.5483	709.5483	0.0553		710.9302
Worker	0.2510	0.1614	1.5957	4.9100e-003	0.5257	3.6300e-003	0.5294	0.1395	3.3500e-003	0.1428		489.3105	489.3105	0.0141		489.6619
Total	**0.3307**	**2.7004**	**2.3180**	**0.0115**	**0.6950**	**9.1900e-003**	**0.7042**	**0.1882**	**8.6700e-003**	**0.1968**		**1,198.8587**	**1,198.8587**	**0.0693**		**1,200.5920**

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	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

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	0.0797	2.5390	0.7224	6.6000e-003	0.1584	5.5600e-003	0.1639	0.0461	5.3200e-003	0.0514		709.5483	709.5483	0.0553		710.9302
Worker	0.2510	0.1614	1.5957	4.9100e-003	0.4846	3.6300e-003	0.4883	0.1294	3.3500e-003	0.1327		489.3105	489.3105	0.0141		489.6619
Total	**0.3307**	**2.7004**	**2.3180**	**0.0115**	**0.6430**	**9.1900e-003**	**0.6522**	**0.1754**	**8.6700e-003**	**0.1841**		**1,198.8587**	**1,198.8587**	**0.0693**		**1,200.5920**

3.7 Paving - 2021

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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5528**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

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	0.0588	0.0378	0.3740	1.1500e-003	0.1232	8.5000e-004	0.1241	0.0327	7.8000e-004	0.0335		114.6821	114.6821	3.2900e-003		114.7645
Total	**0.0588**	**0.0378**	**0.3740**	**1.1500e-003**	**0.1232**	**8.5000e-004**	**0.1241**	**0.0327**	**7.8000e-004**	**0.0335**		**114.6821**	**114.6821**	**3.2900e-003**		**114.7645**

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	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.2973					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5528**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

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	0.0588	0.0378	0.3740	1.1500e-003	0.1136	8.5000e-004	0.1144	0.0303	7.8000e-004	0.0311		114.6821	114.6821	3.2900e-003		114.7645
Total	**0.0588**	**0.0378**	**0.3740**	**1.1500e-003**	**0.1136**	**8.5000e-004**	**0.1144**	**0.0303**	**7.8000e-004**	**0.0311**		**114.6821**	**114.6821**	**3.2900e-003**		**114.7645**

3.8 Architectural Coating - 2021

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	23.1647					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**23.3836**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	0.0510	0.0328	0.3241	1.0000e-003	0.1068	7.4000e-004	0.1075	0.0283	6.8000e-004	0.0290		99.3912	99.3912	2.8600e-003		99.4626
Total	**0.0510**	**0.0328**	**0.3241**	**1.0000e-003**	**0.1068**	**7.4000e-004**	**0.1075**	**0.0283**	**6.8000e-004**	**0.0290**		**99.3912**	**99.3912**	**2.8600e-003**		**99.4626**

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	23.1647					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**23.3836**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	0.0510	0.0328	0.3241	1.0000e-003	0.0984	7.4000e-004	0.0992	0.0263	6.8000e-004	0.0270		99.3912	99.3912	2.8600e-003		99.4626
Total	**0.0510**	**0.0328**	**0.3241**	**1.0000e-003**	**0.0984**	**7.4000e-004**	**0.0992**	**0.0263**	**6.8000e-004**	**0.0270**		**99.3912**	**99.3912**	**2.8600e-003**		**99.4626**

Construction - San Diego County, Annual

Construction

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	57.96	1000sqft	1.33	57,963.00	0
Parking Lot	49.55	1000sqft	1.14	49,550.00	0
Other Asphalt Surfaces	78.98	1000sqft	1.81	43,880.00	0
Other Non-Asphalt Surfaces	248.46	1000sqft	5.70	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2022
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See assumptions file for details. Assumes hardscapes and landscaping not painted.

Construction Phase - Based on provided general construction schedule.

Grading -

Demolition -

Trips and VMT - Based on information provided. See assumpstion file for details.

Architectural Coating - Based SDAPCD Rule 67.0.1

Construction Off-road Equipment Mitigation - Per SDAPCD Rule 55

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	9
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	230.00	350.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	20.00	26.00
tblConstructionPhase	NumDays	10.00	13.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	PhaseEndDate	8/20/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	6/25/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	6/26/2020	7/3/2020
tblConstructionPhase	PhaseEndDate	8/7/2020	8/27/2020
tblConstructionPhase	PhaseEndDate	7/23/2021	12/30/2021
tblConstructionPhase	PhaseEndDate	7/10/2020	7/22/2020
tblConstructionPhase	PhaseStartDate	7/24/2021	11/25/2021
tblConstructionPhase	PhaseStartDate	8/8/2020	8/28/2020
tblConstructionPhase	PhaseStartDate	7/11/2020	7/23/2020

tblConstructionPhase	PhaseStartDate	6/26/2021	11/25/2021
tblConstructionPhase	PhaseStartDate	6/27/2020	7/6/2020
tblGrading	MaterialExported	0.00	885.00
tblLandUse	LandUseSquareFeet	78,980.00	43,880.00
tblLandUse	LandUseSquareFeet	248,460.00	0.00
tblTripsAndVMT	HaulingTripNumber	197.00	198.00
tblTripsAndVMT	HaulingTripNumber	168.00	170.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

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					
2020	0.2563	2.5385	1.8011	3.6400e-003	0.2840	0.1237	0.4078	0.1256	0.1153	0.2409	0.0000	323.5362	323.5362	0.0725	0.0000	325.3482
2021	0.6115	2.8095	2.6749	5.3800e-003	0.0912	0.1359	0.2271	0.0247	0.1276	0.1524	0.0000	476.2796	476.2796	0.0894	0.0000	478.5133
Maximum	**0.6115**	**2.8095**	**2.6749**	**5.3800e-003**	**0.2840**	**0.1359**	**0.4078**	**0.1256**	**0.1276**	**0.2409**	**0.0000**	**476.2796**	**476.2796**	**0.0894**	**0.0000**	**478.5133**

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					
2020	0.2563	2.5385	1.8011	3.6400e-003	0.1420	0.1237	0.2658	0.0594	0.1153	0.1747	0.0000	323.5359	323.5359	0.0725	0.0000	325.3479
2021	0.6115	2.8095	2.6749	5.3800e-003	0.0844	0.1359	0.2203	0.0231	0.1276	0.1507	0.0000	476.2792	476.2792	0.0894	0.0000	478.5129
Maximum	**0.6115**	**2.8095**	**2.6749**	**5.3800e-003**	**0.1420**	**0.1359**	**0.2658**	**0.0594**	**0.1276**	**0.1747**	**0.0000**	**476.2792**	**476.2792**	**0.0894**	**0.0000**	**478.5129**

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**39.65**	**0.00**	**23.44**	**45.17**	**0.00**	**17.27**	**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)
1	**6-1-2020**	**8-31-2020**	1.6379	1.6379
2	**9-1-2020**	**11-30-2020**	0.8010	0.8010
3	**12-1-2020**	**2-28-2021**	0.7443	0.7443
4	**3-1-2021**	**5-31-2021**	0.7339	0.7339
5	**6-1-2021**	**8-31-2021**	0.7334	0.7334
6	**9-1-2021**	**9-30-2021**	0.2391	0.2391
		Highest	1.6379	1.6379

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Demolition	Demolition	6/1/2020	7/3/2020	5	25	
2	Asphalt Demolition	Demolition	6/1/2020	7/3/2020	5	25	
3	Site Preparation	Site Preparation	7/6/2020	7/22/2020	5	13	
4	Grading	Grading	7/23/2020	8/27/2020	5	26	
5	Building Construction	Building Construction	8/28/2020	12/30/2021	5	350	
6	Paving	Paving	11/25/2021	12/30/2021	5	26	
7	Architectural Coating	Architectural Coating	11/25/2021	12/30/2021	5	26	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 13

Acres of Paving: 8.65

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 86,945; Non-Residential Outdoor: 28,982; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Building Demolition	Excavators	3	8.00	158	0.38
Building Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42

Paving	Rollers	2	8.00	80	0.38
Building Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Asphalt Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Asphalt Demolition	Excavators	3	8.00	158	0.38
Asphalt Demolition	Rubber Tired Dozers	2	8.00	247	0.40

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
Building Demolition	6	15.00	4.00	198.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	111.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	64.00	25.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Asphalt Demolition	6	15.00	4.00	170.00	10.80	7.30	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 Building Demolition - 2020

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					0.0216	0.0000	0.0216	3.2700e-003	0.0000	3.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0414	0.4150	0.2719	4.9000e-004		0.0207	0.0207		0.0193	0.0193	0.0000	42.4983	42.4983	0.0120	0.0000	42.7982
Total	**0.0414**	**0.4150**	**0.2719**	**4.9000e-004**	**0.0216**	**0.0207**	**0.0423**	**3.2700e-003**	**0.0193**	**0.0225**	**0.0000**	**42.4983**	**42.4983**	**0.0120**	**0.0000**	**42.7982**

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	7.9000e-004	0.0282	6.4500e-003	8.0000e-005	1.6900e-003	9.0000e-005	1.7800e-003	4.7000e-004	9.0000e-005	5.5000e-004	0.0000	7.6354	7.6354	6.9000e-004	0.0000	7.6526
Vendor	1.9000e-004	5.7000e-003	1.5100e-003	1.0000e-005	3.3000e-004	3.0000e-005	3.6000e-004	1.0000e-004	3.0000e-005	1.2000e-004	0.0000	1.3193	1.3193	1.0000e-004	0.0000	1.3218
Worker	6.9000e-004	5.1000e-004	5.0200e-003	2.0000e-005	1.5000e-003	1.0000e-005	1.5100e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3591	1.3591	4.0000e-005	0.0000	1.3602
Total	**1.6700e-003**	**0.0344**	**0.0130**	**1.1000e-004**	**3.5200e-003**	**1.3000e-004**	**3.6500e-003**	**9.7000e-004**	**1.3000e-004**	**1.0800e-003**	**0.0000**	**10.3138**	**10.3138**	**8.3000e-004**	**0.0000**	**10.3346**

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					9.2300e-003	0.0000	9.2300e-003	1.4000e-003	0.0000	1.4000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0414	0.4150	0.2719	4.9000e-004		0.0207	0.0207		0.0193	0.0193	0.0000	42.4982	42.4982	0.0120	0.0000	42.7981
Total	**0.0414**	**0.4150**	**0.2719**	**4.9000e-004**	**9.2300e-003**	**0.0207**	**0.0300**	**1.4000e-003**	**0.0193**	**0.0207**	**0.0000**	**42.4982**	**42.4982**	**0.0120**	**0.0000**	**42.7981**

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	7.9000e-004	0.0282	6.4500e-003	8.0000e-005	1.5800e-003	9.0000e-005	1.6700e-003	4.4000e-004	9.0000e-005	5.2000e-004	0.0000	7.6354	7.6354	6.9000e-004	0.0000	7.6526
Vendor	1.9000e-004	5.7000e-003	1.5100e-003	1.0000e-005	3.1000e-004	3.0000e-005	3.4000e-004	9.0000e-005	3.0000e-005	1.2000e-004	0.0000	1.3193	1.3193	1.0000e-004	0.0000	1.3218
Worker	6.9000e-004	5.1000e-004	5.0200e-003	2.0000e-005	1.3900e-003	1.0000e-005	1.4000e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.3591	1.3591	4.0000e-005	0.0000	1.3602
Total	**1.6700e-003**	**0.0344**	**0.0130**	**1.1000e-004**	**3.2800e-003**	**1.3000e-004**	**3.4100e-003**	**9.0000e-004**	**1.3000e-004**	**1.0200e-003**	**0.0000**	**10.3138**	**10.3138**	**8.3000e-004**	**0.0000**	**10.3346**

3.3 Asphalt Demolition - 2020

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					0.0184	0.0000	0.0184	2.7900e-003	0.0000	2.7900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0414	0.4150	0.2719	4.9000e-004		0.0207	0.0207		0.0193	0.0193	0.0000	42.4983	42.4983	0.0120	0.0000	42.7982
Total	**0.0414**	**0.4150**	**0.2719**	**4.9000e-004**	**0.0184**	**0.0207**	**0.0392**	**2.7900e-003**	**0.0193**	**0.0221**	**0.0000**	**42.4983**	**42.4983**	**0.0120**	**0.0000**	**42.7982**

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	6.8000e-004	0.0242	5.5400e-003	7.0000e-005	1.4500e-003	8.0000e-005	1.5300e-003	4.0000e-004	7.0000e-005	4.7000e-004	0.0000	6.5556	6.5556	5.9000e-004	0.0000	6.5704
Vendor	1.9000e-004	5.7000e-003	1.5100e-003	1.0000e-005	3.3000e-004	3.0000e-005	3.6000e-004	1.0000e-004	3.0000e-005	1.2000e-004	0.0000	1.3193	1.3193	1.0000e-004	0.0000	1.3218
Worker	6.9000e-004	5.1000e-004	5.0200e-003	2.0000e-005	1.5000e-003	1.0000e-005	1.5100e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3591	1.3591	4.0000e-005	0.0000	1.3602
Total	**1.5600e-003**	**0.0304**	**0.0121**	**1.0000e-004**	**3.2800e-003**	**1.2000e-004**	**3.4000e-003**	**9.0000e-004**	**1.1000e-004**	**1.0000e-003**	**0.0000**	**9.2341**	**9.2341**	**7.3000e-004**	**0.0000**	**9.2524**

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					7.8700e-003	0.0000	7.8700e-003	1.1900e-003	0.0000	1.1900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0414	0.4150	0.2719	4.9000e-004		0.0207	0.0207		0.0193	0.0193	0.0000	42.4982	42.4982	0.0120	0.0000	42.7981
Total	**0.0414**	**0.4150**	**0.2719**	**4.9000e-004**	**7.8700e-003**	**0.0207**	**0.0286**	**1.1900e-003**	**0.0193**	**0.0205**	**0.0000**	**42.4982**	**42.4982**	**0.0120**	**0.0000**	**42.7981**

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	6.8000e-004	0.0242	5.5400e-003	7.0000e-005	1.3600e-003	8.0000e-005	1.4300e-003	3.8000e-004	7.0000e-005	4.5000e-004	0.0000	6.5556	6.5556	5.9000e-004	0.0000	6.5704
Vendor	1.9000e-004	5.7000e-003	1.5100e-003	1.0000e-005	3.1000e-004	3.0000e-005	3.4000e-004	9.0000e-005	3.0000e-005	1.2000e-004	0.0000	1.3193	1.3193	1.0000e-004	0.0000	1.3218
Worker	6.9000e-004	5.1000e-004	5.0200e-003	2.0000e-005	1.3900e-003	1.0000e-005	1.4000e-003	3.7000e-004	1.0000e-005	3.8000e-004	0.0000	1.3591	1.3591	4.0000e-005	0.0000	1.3602
Total	**1.5600e-003**	**0.0304**	**0.0121**	**1.0000e-004**	**3.0600e-003**	**1.2000e-004**	**3.1700e-003**	**8.4000e-004**	**1.1000e-004**	**9.5000e-004**	**0.0000**	**9.2341**	**9.2341**	**7.3000e-004**	**0.0000**	**9.2524**

3.4 Site Preparation - 2020

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					0.1174	0.0000	0.1174	0.0646	0.0000	0.0646	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0265	0.2757	0.1398	2.5000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	21.7299	21.7299	7.0300e-003	0.0000	21.9056
Total	**0.0265**	**0.2757**	**0.1398**	**2.5000e-004**	**0.1174**	**0.0143**	**0.1317**	**0.0646**	**0.0131**	**0.0777**	**0.0000**	**21.7299**	**21.7299**	**7.0300e-003**	**0.0000**	**21.9056**

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	2.9600e-003	7.9000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.9000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6860	0.6860	5.0000e-005	0.0000	0.6874
Worker	4.3000e-004	3.2000e-004	3.1300e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.4000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8481	0.8481	3.0000e-005	0.0000	0.8487
Total	**5.3000e-004**	**3.2800e-003**	**3.9200e-003**	**2.0000e-005**	**1.1100e-003**	**2.0000e-005**	**1.1300e-003**	**3.0000e-004**	**2.0000e-005**	**3.2000e-004**	**0.0000**	**1.5341**	**1.5341**	**8.0000e-005**	**0.0000**	**1.5361**

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					0.0502	0.0000	0.0502	0.0276	0.0000	0.0276	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0265	0.2757	0.1398	2.5000e-004		0.0143	0.0143		0.0131	0.0131	0.0000	21.7299	21.7299	7.0300e-003	0.0000	21.9056
Total	**0.0265**	**0.2757**	**0.1398**	**2.5000e-004**	**0.0502**	**0.0143**	**0.0645**	**0.0276**	**0.0131**	**0.0407**	**0.0000**	**21.7299**	**21.7299**	**7.0300e-003**	**0.0000**	**21.9056**

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	2.9600e-003	7.9000e-004	1.0000e-005	1.6000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.6860	0.6860	5.0000e-005	0.0000	0.6874
Worker	4.3000e-004	3.2000e-004	3.1300e-003	1.0000e-005	8.7000e-004	1.0000e-005	8.7000e-004	2.3000e-004	1.0000e-005	2.4000e-004	0.0000	0.8481	0.8481	3.0000e-005	0.0000	0.8487
Total	**5.3000e-004**	**3.2800e-003**	**3.9200e-003**	**2.0000e-005**	**1.0300e-003**	**2.0000e-005**	**1.0500e-003**	**2.8000e-004**	**2.0000e-005**	**3.0000e-004**	**0.0000**	**1.5341**	**1.5341**	**8.0000e-005**	**0.0000**	**1.5361**

3.5 Grading - 2020

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					0.0852	0.0000	0.0852	0.0438	0.0000	0.0438	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0316	0.3430	0.2087	3.9000e-004		0.0166	0.0166		0.0152	0.0152	0.0000	33.8764	33.8764	0.0110	0.0000	34.1503
Total	**0.0316**	**0.3430**	**0.2087**	**3.9000e-004**	**0.0852**	**0.0166**	**0.1018**	**0.0438**	**0.0152**	**0.0590**	**0.0000**	**33.8764**	**33.8764**	**0.0110**	**0.0000**	**34.1503**

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	4.4000e-004	0.0158	3.6200e-003	4.0000e-005	9.5000e-004	5.0000e-005	1.0000e-003	2.6000e-004	5.0000e-005	3.1000e-004	0.0000	4.2804	4.2804	3.9000e-004	0.0000	4.2901
Vendor	2.0000e-004	5.9300e-003	1.5700e-003	1.0000e-005	3.5000e-004	3.0000e-005	3.7000e-004	1.0000e-004	3.0000e-005	1.3000e-004	0.0000	1.3721	1.3721	1.1000e-004	0.0000	1.3747
Worker	7.2000e-004	5.3000e-004	5.2200e-003	2.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.4135	1.4135	4.0000e-005	0.0000	1.4146
Total	**1.3600e-003**	**0.0223**	**0.0104**	**7.0000e-005**	**2.8600e-003**	**9.0000e-005**	**2.9400e-003**	**7.8000e-004**	**9.0000e-005**	**8.7000e-004**	**0.0000**	**7.0660**	**7.0660**	**5.4000e-004**	**0.0000**	**7.0794**

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					0.0364	0.0000	0.0364	0.0187	0.0000	0.0187	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0316	0.3430	0.2087	3.9000e-004		0.0166	0.0166		0.0152	0.0152	0.0000	33.8763	33.8763	0.0110	0.0000	34.1502
Total	**0.0316**	**0.3430**	**0.2087**	**3.9000e-004**	**0.0364**	**0.0166**	**0.0530**	**0.0187**	**0.0152**	**0.0340**	**0.0000**	**33.8763**	**33.8763**	**0.0110**	**0.0000**	**34.1502**

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	4.4000e-004	0.0158	3.6200e-003	4.0000e-005	8.9000e-004	5.0000e-005	9.4000e-004	2.5000e-004	5.0000e-005	2.9000e-004	0.0000	4.2804	4.2804	3.9000e-004	0.0000	4.2901
Vendor	2.0000e-004	5.9300e-003	1.5700e-003	1.0000e-005	3.2000e-004	3.0000e-005	3.5000e-004	9.0000e-005	3.0000e-005	1.2000e-004	0.0000	1.3721	1.3721	1.1000e-004	0.0000	1.3747
Worker	7.2000e-004	5.3000e-004	5.2200e-003	2.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.4135	1.4135	4.0000e-005	0.0000	1.4146
Total	**1.3600e-003**	**0.0223**	**0.0104**	**7.0000e-005**	**2.6500e-003**	**9.0000e-005**	**2.7400e-003**	**7.3000e-004**	**9.0000e-005**	**8.1000e-004**	**0.0000**	**7.0660**	**7.0660**	**5.4000e-004**	**0.0000**	**7.0794**

3.6 Building Construction - 2020

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	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2245	104.2245	0.0254	0.0000	104.8602
Total	**0.0954**	**0.8634**	**0.7582**	**1.2100e-003**		**0.0503**	**0.0503**		**0.0473**	**0.0473**	**0.0000**	**104.2245**	**104.2245**	**0.0254**	**0.0000**	**104.8602**

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	4.2900e-003	0.1282	0.0341	3.0000e-004	7.4700e-003	6.3000e-004	8.0900e-003	2.1600e-003	6.0000e-004	2.7500e-003	0.0000	29.6844	29.6844	2.2800e-003	0.0000	29.7413
Worker	0.0106	7.8600e-003	0.0771	2.3000e-004	0.0231	1.7000e-004	0.0233	6.1400e-003	1.5000e-004	6.2900e-003	0.0000	20.8764	20.8764	6.3000e-004	0.0000	20.8921
Total	**0.0149**	**0.1361**	**0.1111**	**5.3000e-004**	**0.0306**	**8.0000e-004**	**0.0314**	**8.3000e-003**	**7.5000e-004**	**9.0400e-003**	**0.0000**	**50.5608**	**50.5608**	**2.9100e-003**	**0.0000**	**50.6334**

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	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2244	104.2244	0.0254	0.0000	104.8601
Total	**0.0954**	**0.8634**	**0.7582**	**1.2100e-003**		**0.0503**	**0.0503**		**0.0473**	**0.0473**	**0.0000**	**104.2244**	**104.2244**	**0.0254**	**0.0000**	**104.8601**

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	4.2900e-003	0.1282	0.0341	3.0000e-004	6.9900e-003	6.3000e-004	7.6200e-003	2.0400e-003	6.0000e-004	2.6400e-003	0.0000	29.6844	29.6844	2.2800e-003	0.0000	29.7413
Worker	0.0106	7.8600e-003	0.0771	2.3000e-004	0.0213	1.7000e-004	0.0215	5.7000e-003	1.5000e-004	5.8500e-003	0.0000	20.8764	20.8764	6.3000e-004	0.0000	20.8921
Total	**0.0149**	**0.1361**	**0.1111**	**5.3000e-004**	**0.0283**	**8.0000e-004**	**0.0291**	**7.7400e-003**	**7.5000e-004**	**8.4900e-003**	**0.0000**	**50.5608**	**50.5608**	**2.9100e-003**	**0.0000**	**50.6334**

3.6 Building Construction - 2021

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	0.2471	2.2662	2.1548	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.1285	301.1285	0.0727	0.0000	302.9447
Total	**0.2471**	**2.2662**	**2.1548**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.1285**	**301.1285**	**0.0727**	**0.0000**	**302.9447**

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	0.0101	0.3340	0.0891	8.7000e-004	0.0216	7.1000e-004	0.0223	6.2300e-003	6.8000e-004	6.9000e-003	0.0000	84.9680	84.9680	6.3100e-003	0.0000	85.1257
Worker	0.0289	0.0206	0.2079	6.4000e-004	0.0667	4.7000e-004	0.0672	0.0177	4.3000e-004	0.0182	0.0000	58.2835	58.2835	1.6700e-003	0.0000	58.3253
Total	**0.0390**	**0.3546**	**0.2969**	**1.5100e-003**	**0.0883**	**1.1800e-003**	**0.0895**	**0.0240**	**1.1100e-003**	**0.0251**	**0.0000**	**143.2515**	**143.2515**	**7.9800e-003**	**0.0000**	**143.4509**

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	0.2471	2.2662	2.1548	3.5000e-003		0.1246	0.1246		0.1172	0.1172	0.0000	301.1281	301.1281	0.0727	0.0000	302.9443
Total	**0.2471**	**2.2662**	**2.1548**	**3.5000e-003**		**0.1246**	**0.1246**		**0.1172**	**0.1172**	**0.0000**	**301.1281**	**301.1281**	**0.0727**	**0.0000**	**302.9443**

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	0.0101	0.3340	0.0891	8.7000e-004	0.0202	7.1000e-004	0.0209	5.8900e-003	6.8000e-004	6.5700e-003	0.0000	84.9680	84.9680	6.3100e-003	0.0000	85.1257
Worker	0.0289	0.0206	0.2079	6.4000e-004	0.0615	4.7000e-004	0.0620	0.0165	4.3000e-004	0.0169	0.0000	58.2835	58.2835	1.6700e-003	0.0000	58.3253
Total	**0.0390**	**0.3546**	**0.2969**	**1.5100e-003**	**0.0817**	**1.1800e-003**	**0.0829**	**0.0223**	**1.1100e-003**	**0.0235**	**0.0000**	**143.2515**	**143.2515**	**7.9800e-003**	**0.0000**	**143.4509**

3.7 Paving - 2021

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	0.0163	0.1680	0.1905	3.0000e-004		8.8100e-003	8.8100e-003		8.1100e-003	8.1100e-003	0.0000	26.0305	26.0305	8.4200e-003	0.0000	26.2410
Paving	3.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0202**	**0.1680**	**0.1905**	**3.0000e-004**		**8.8100e-003**	**8.8100e-003**		**8.1100e-003**	**8.1100e-003**	**0.0000**	**26.0305**	**26.0305**	**8.4200e-003**	**0.0000**	**26.2410**

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	6.8000e-004	4.8000e-004	4.8700e-003	2.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3660	1.3660	4.0000e-005	0.0000	1.3670
Total	**6.8000e-004**	**4.8000e-004**	**4.8700e-003**	**2.0000e-005**	**1.5600e-003**	**1.0000e-005**	**1.5700e-003**	**4.2000e-004**	**1.0000e-005**	**4.3000e-004**	**0.0000**	**1.3660**	**1.3660**	**4.0000e-005**	**0.0000**	**1.3670**

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	0.0163	0.1680	0.1905	3.0000e-004		8.8100e-003	8.8100e-003		8.1100e-003	8.1100e-003	0.0000	26.0305	26.0305	8.4200e-003	0.0000	26.2410
Paving	3.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0202**	**0.1680**	**0.1905**	**3.0000e-004**		**8.8100e-003**	**8.8100e-003**		**8.1100e-003**	**8.1100e-003**	**0.0000**	**26.0305**	**26.0305**	**8.4200e-003**	**0.0000**	**26.2410**

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	6.8000e-004	4.8000e-004	4.8700e-003	2.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.9000e-004	1.0000e-005	4.0000e-004	0.0000	1.3660	1.3660	4.0000e-005	0.0000	1.3670
Total	**6.8000e-004**	**4.8000e-004**	**4.8700e-003**	**2.0000e-005**	**1.4400e-003**	**1.0000e-005**	**1.4500e-003**	**3.9000e-004**	**1.0000e-005**	**4.0000e-004**	**0.0000**	**1.3660**	**1.3660**	**4.0000e-005**	**0.0000**	**1.3670**

3.8 Architectural Coating - 2021

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	0.3011					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8500e-003	0.0199	0.0236	4.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	3.3192	3.3192	2.3000e-004	0.0000	3.3249
Total	**0.3040**	**0.0199**	**0.0236**	**4.0000e-005**		**1.2200e-003**	**1.2200e-003**		**1.2200e-003**	**1.2200e-003**	**0.0000**	**3.3192**	**3.3192**	**2.3000e-004**	**0.0000**	**3.3249**

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	5.9000e-004	4.2000e-004	4.2200e-003	1.0000e-005	1.3600e-003	1.0000e-005	1.3600e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.1839	1.1839	3.0000e-005	0.0000	1.1847
Total	**5.9000e-004**	**4.2000e-004**	**4.2200e-003**	**1.0000e-005**	**1.3600e-003**	**1.0000e-005**	**1.3600e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.1839**	**1.1839**	**3.0000e-005**	**0.0000**	**1.1847**

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	0.3011					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.8500e-003	0.0199	0.0236	4.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	3.3192	3.3192	2.3000e-004	0.0000	3.3249
Total	**0.3040**	**0.0199**	**0.0236**	**4.0000e-005**		**1.2200e-003**	**1.2200e-003**		**1.2200e-003**	**1.2200e-003**	**0.0000**	**3.3192**	**3.3192**	**2.3000e-004**	**0.0000**	**3.3249**

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	5.9000e-004	4.2000e-004	4.2200e-003	1.0000e-005	1.2500e-003	1.0000e-005	1.2600e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.1839	1.1839	3.0000e-005	0.0000	1.1847
Total	**5.9000e-004**	**4.2000e-004**	**4.2200e-003**	**1.0000e-005**	**1.2500e-003**	**1.0000e-005**	**1.2600e-003**	**3.3000e-004**	**1.0000e-005**	**3.4000e-004**	**0.0000**	**1.1839**	**1.1839**	**3.0000e-005**	**0.0000**	**1.1847**

Construction

San Diego County, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	7	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	2	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00

Rubber Tired Dozers	Diesel	No Change	0	8	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	10	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	2.85000E-003	1.98500E-002	2.36300E-002	4.00000E-005	1.22000E-003	1.22000E-003	0.00000E+000	3.31923E+000	3.31923E+000	2.30000E-004	0.00000E+000	3.32492E+000
Concrete/Industrial Saws	1.04500E-002	8.24700E-002	9.21600E-002	1.60000E-004	4.95000E-003	4.95000E-003	0.00000E+000	1.34414E+001	1.34414E+001	8.50000E-004	0.00000E+000	1.34627E+001
Cranes	6.48200E-002	7.63900E-001	3.08840E-001	8.80000E-004	3.11500E-002	2.86600E-002	0.00000E+000	7.76177E+001	7.76177E+001	2.51000E-002	0.00000E+000	7.82453E+001
Excavators	2.15600E-002	2.12310E-001	2.87570E-001	4.50000E-004	1.02800E-002	9.46000E-003	0.00000E+000	3.99256E+001	3.99256E+001	1.29100E-002	0.00000E+000	4.02484E+001
Forklifts	6.98800E-002	6.35020E-001	6.14800E-001	8.00000E-004	4.56900E-002	4.20400E-002	0.00000E+000	7.05029E+001	7.05029E+001	2.28000E-002	0.00000E+000	7.10730E+001
Generator Sets	6.44200E-002	5.68140E-001	6.45760E-001	1.15000E-003	3.06400E-002	3.06400E-002	0.00000E+000	9.89113E+001	9.89113E+001	5.18000E-003	0.00000E+000	9.90409E+001
Graders	6.19000E-003	8.22300E-002	2.35900E-002	9.00000E-005	2.63000E-003	2.42000E-003	0.00000E+000	7.57984E+000	7.57984E+000	2.45000E-003	0.00000E+000	7.64113E+000
Pavers	6.40000E-003	6.74700E-002	7.55200E-002	1.20000E-004	3.26000E-003	3.00000E-003	0.00000E+000	1.07334E+001	1.07334E+001	3.47000E-003	0.00000E+000	1.08202E+001
Paving Equipment	4.99000E-003	5.04500E-002	6.60800E-002	1.10000E-004	2.49000E-003	2.29000E-003	0.00000E+000	9.30395E+000	9.30395E+000	3.01000E-003	0.00000E+000	9.37918E+000
Rollers	4.93000E-003	5.00300E-002	4.88900E-002	7.00000E-005	3.06000E-003	2.81000E-003	0.00000E+000	5.99314E+000	5.99314E+000	1.94000E-003	0.00000E+000	6.04160E+000
Rubber Tired Dozers	8.90600E-002	9.34910E-001	3.40860E-001	7.00000E-004	4.57900E-002	4.21200E-002	0.00000E+000	6.19206E+001	6.19206E+001	2.00300E-002	0.00000E+000	6.24212E+001
Tractors/Loaders/Backhoes	1.02270E-001	1.03245E+000	1.18878E+000	1.63000E-003	6.25200E-002	5.75200E-002	0.00000E+000	1.43118E+002	1.43118E+002	4.62900E-002	0.00000E+000	1.44275E+002
Welders	5.47400E-002	2.66870E-001	3.02960E-001	4.50000E-004	1.35400E-002	1.35400E-002	0.00000E+000	3.29386E+001	3.29386E+001	4.44000E-003	0.00000E+000	3.30496E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	2.85000E-003	1.98500E-002	2.36300E-002	4.00000E-005	1.22000E-003	1.22000E-003	0.00000E+000	3.31923E+000	3.31923E+000	2.30000E-004	0.00000E+000	3.32492E+000
Concrete/Industrial Saws	1.04500E-002	8.24700E-002	9.21600E-002	1.60000E-004	4.95000E-003	4.95000E-003	0.00000E+000	1.34414E+001	1.34414E+001	8.50000E-004	0.00000E+000	1.34627E+001
Cranes	6.48200E-002	7.63900E-001	3.08840E-001	8.80000E-004	3.11500E-002	2.86600E-002	0.00000E+000	7.76176E+001	7.76176E+001	2.51000E-002	0.00000E+000	7.82452E+001
Excavators	2.15600E-002	2.12310E-001	2.87570E-001	4.50000E-004	1.02800E-002	9.46000E-003	0.00000E+000	3.99255E+001	3.99255E+001	1.29100E-002	0.00000E+000	4.02484E+001

Forklifts	6.98800E-002	6.35020E-001	6.14800E-001	8.00000E-004	4.56900E-002	4.20400E-002	0.00000E+000	7.05029E+001	7.05029E+001	2.28000E-002	0.00000E+000	7.10729E+001
Generator Sets	6.44200E-002	5.68140E-001	6.45760E-001	1.15000E-003	3.06400E-002	3.06400E-002	0.00000E+000	9.89112E+001	9.89112E+001	5.18000E-003	0.00000E+000	9.90407E+001
Graders	6.19000E-003	8.22300E-002	2.35900E-002	9.00000E-005	2.63000E-003	2.42000E-003	0.00000E+000	7.57983E+000	7.57983E+000	2.45000E-003	0.00000E+000	7.64112E+000
Pavers	6.40000E-003	6.74700E-002	7.55200E-002	1.20000E-004	3.26000E-003	3.00000E-003	0.00000E+000	1.07334E+001	1.07334E+001	3.47000E-003	0.00000E+000	1.08202E+001
Paving Equipment	4.99000E-003	5.04500E-002	6.60800E-002	1.10000E-004	2.49000E-003	2.29000E-003	0.00000E+000	9.30394E+000	9.30394E+000	3.01000E-003	0.00000E+000	9.37917E+000
Rollers	4.93000E-003	5.00300E-002	4.88900E-002	7.00000E-005	3.06000E-003	2.81000E-003	0.00000E+000	5.99314E+000	5.99314E+000	1.94000E-003	0.00000E+000	6.04159E+000
Rubber Tired Dozers	8.90600E-002	9.34910E-001	3.40860E-001	7.00000E-004	4.57900E-002	4.21200E-002	0.00000E+000	6.19205E+001	6.19205E+001	2.00300E-002	0.00000E+000	6.24212E+001
Tractors/Loaders/Backhoes	1.02270E-001	1.03245E+000	1.18877E+000	1.63000E-003	6.25200E-002	5.75200E-002	0.00000E+000	1.43118E+002	1.43118E+002	4.62900E-002	0.00000E+000	1.44275E+002
Welders	5.47400E-002	2.66870E-001	3.02960E-001	4.50000E-004	1.35400E-002	1.35400E-002	0.00000E+000	3.29386E+001	3.29386E+001	4.44000E-003	0.00000E+000	3.30495E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.48794E-006	1.48794E-006	0.00000E+000	0.00000E+000	7.42794E-007
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.28837E-006	1.28837E-006	0.00000E+000	0.00000E+000	1.27803E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25233E-006	1.25233E-006	0.00000E+000	0.00000E+000	1.24229E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.27654E-006	1.27654E-006	0.00000E+000	0.00000E+000	1.12560E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.11211E-006	1.11211E-006	0.00000E+000	0.00000E+000	1.21162E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.31929E-006	1.31929E-006	0.00000E+000	0.00000E+000	1.30871E-006
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.31669E-007	9.31669E-007	0.00000E+000	0.00000E+000	1.84839E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.07481E-006	1.07481E-006	0.00000E+000	0.00000E+000	1.06619E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.65519E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13048E-006	1.13048E-006	0.00000E+000	0.00000E+000	1.12141E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	8.41199E-006	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.18783E-006	1.18783E-006	0.00000E+000	0.00000E+000	1.17831E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21438E-006	1.21438E-006	0.00000E+000	0.00000E+000	1.21030E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Replace Ground Cover of Area Disturbed	PM10 Reduction	5.00	PM2.5 Reduction	5.00		
Yes	Water Exposed Area	PM10 Reduction	55.00	PM2.5 Reduction	55.00	Frequency (per day)	2.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	15.00		
Yes	Clean Paved Road	% PM Reduction	9.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.00	0.00	0.00	0.00	0.08	0.08
Asphalt Demolition	Fugitive Dust	0.02	0.00	0.01	0.00	0.57	0.57
Asphalt Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.12	0.03	0.11	0.03	0.07	0.07
Building Demolition	Fugitive Dust	0.02	0.00	0.01	0.00	0.57	0.57
Building Demolition	Roads	0.00	0.00	0.00	0.00	0.07	0.07
Grading	Fugitive Dust	0.09	0.04	0.04	0.02	0.57	0.57
Grading	Roads	0.00	0.00	0.00	0.00	0.07	0.06
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.08	0.07
Site Preparation	Fugitive Dust	0.12	0.06	0.05	0.03	0.57	0.57
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.07	0.07

CalEEMod Output: Operation – Existing 2019

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Existing_2019

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	30.00	Student	9.99	43,329.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Construction Phase - Operation run only

Vehicle Trips - Based on information provided by IBI Group

Energy Use -

Water And Wastewater - See assumptions file for details.

Solid Waste - See assumptions file for details.

Fleet Mix - Assumes 100 percent passenger vehicles.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.58	0.71
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.6000e-003	0.00
tblFleetMix	MCY	6.2790e-003	8.3190e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.3570e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.8880e-003	0.00
tblFleetMix	SBUS	7.4200e-004	0.00
tblFleetMix	UBUS	2.0880e-003	0.00
tblLandUse	LandUseSquareFeet	2,508.10	43,329.00
tblLandUse	LotAcreage	0.06	9.99
tblSolidWaste	SolidWasteGenerationRate	5.47	2.70
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	72,727.20	87,600.00

tblWater	OutdoorWaterUseRate	187,012.80	21,900.00
tblWater	SepticTankPercent	10.33	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	1.2027	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Energy	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Mobile	0.0813	0.0720	0.8696	2.2500e-003	0.2207	1.5100e-003	0.2223	0.0585	1.3900e-003	0.0599		224.1178	224.1178	9.3200e-003		224.3508
Total	**1.2927**	**0.1521**	**0.9400**	**2.7300e-003**	**0.2207**	**7.6100e-003**	**0.2284**	**0.0585**	**7.4900e-003**	**0.0660**		**320.2094**	**320.2094**	**0.0112**	**1.7600e-003**	**321.0138**

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	1.2027	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Energy	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Mobile	0.0813	0.0720	0.8696	2.2500e-003	0.2207	1.5100e-003	0.2223	0.0585	1.3900e-003	0.0599		224.1178	224.1178	9.3200e-003		224.3508
Total	**1.2927**	**0.1521**	**0.9400**	**2.7300e-003**	**0.2207**	**7.6100e-003**	**0.2284**	**0.0585**	**7.4900e-003**	**0.0660**		**320.2094**	**320.2094**	**0.0112**	**1.7600e-003**	**321.0138**

	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	N20	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	0.0813	0.0720	0.8696	2.2500e-003	0.2207	1.5100e-003	0.2223	0.0585	1.3900e-003	0.0599		224.1178	224.1178	9.3200e-003		224.3508
Unmitigated	0.0813	0.0720	0.8696	2.2500e-003	0.2207	1.5100e-003	0.2223	0.0585	1.3900e-003	0.0599		224.1178	224.1178	9.3200e-003		224.3508

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	48.00	0.00	0.00	75,598	75,598
Total	48.00	0.00	0.00	75,598	75,598

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.709953	0.053867	0.227861	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.008319	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

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	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
NaturalGas Unmitigated	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559

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					
Elementary School	816.722	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Total		**8.8100e-003**	**0.0801**	**0.0673**	**4.8000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**		**96.0849**	**96.0849**	**1.8400e-003**	**1.7600e-003**	**96.6559**

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					
Elementary School	0.816722	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Total		**8.8100e-003**	**0.0801**	**0.0673**	**4.8000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**		**96.0849**	**96.0849**	**1.8400e-003**	**1.7600e-003**	**96.6559**

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	1.2027	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Unmitigated	1.2027	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003

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	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e-004	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Total	**1.2026**	**3.0000e-005**	**3.0900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**7.0100e-003**

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	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e-004	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Total	**1.2026**	**3.0000e-005**	**3.0900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**7.0100e-003**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Existing_2019 - San Diego County, Winter

Existing_2019

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	30.00	Student	9.99	43,329.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Construction Phase - Operation run only

Vehicle Trips - Based on information provided by IBI Group

Energy Use -

Water And Wastewater - See assumptions file for details.

Solid Waste - See assumptions file for details.

Fleet Mix - Assumes 100 percent passenger vehicles.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.58	0.71
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.6000e-003	0.00
tblFleetMix	MCY	6.2790e-003	8.3190e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.3570e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.8880e-003	0.00
tblFleetMix	SBUS	7.4200e-004	0.00
tblFleetMix	UBUS	2.0880e-003	0.00
tblLandUse	LandUseSquareFeet	2,508.10	43,329.00
tblLandUse	LotAcreage	0.06	9.99
tblSolidWaste	SolidWasteGenerationRate	5.47	2.70
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	72,727.20	87,600.00

tblWater	OutdoorWaterUseRate	187,012.80	21,900.00
tblWater	SepticTankPercent	10.33	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	1.2027	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Energy	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Mobile	0.0785	0.0808	0.8643	2.1200e-003	0.2207	1.5100e-003	0.2223	0.0585	1.3900e-003	0.0599		210.4992	210.4992	9.2000e-003		210.7292
Total	**1.2899**	**0.1609**	**0.9346**	**2.6000e-003**	**0.2207**	**7.6100e-003**	**0.2284**	**0.0585**	**7.4900e-003**	**0.0660**		**306.5907**	**306.5907**	**0.0111**	**1.7600e-003**	**307.3922**

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	1.2027	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Energy	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Mobile	0.0785	0.0808	0.8643	2.1200e-003	0.2207	1.5100e-003	0.2223	0.0585	1.3900e-003	0.0599		210.4992	210.4992	9.2000e-003		210.7292
Total	**1.2899**	**0.1609**	**0.9346**	**2.6000e-003**	**0.2207**	**7.6100e-003**	**0.2284**	**0.0585**	**7.4900e-003**	**0.0660**		**306.5907**	**306.5907**	**0.0111**	**1.7600e-003**	**307.3922**

	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	N20	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	0.0785	0.0808	0.8643	2.1200e-003	0.2207	1.5100e-003	0.2223	0.0585	1.3900e-003	0.0599		210.4992	210.4992	9.2000e-003		210.7292
Unmitigated	0.0785	0.0808	0.8643	2.1200e-003	0.2207	1.5100e-003	0.2223	0.0585	1.3900e-003	0.0599		210.4992	210.4992	9.2000e-003		210.7292

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	48.00	0.00	0.00	75,598	75,598
Total	48.00	0.00	0.00	75,598	75,598

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.709953	0.053867	0.227861	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.008319	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

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	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
NaturalGas Unmitigated	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559

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					
Elementary School	816.722	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Total		**8.8100e-003**	**0.0801**	**0.0673**	**4.8000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**		**96.0849**	**96.0849**	**1.8400e-003**	**1.7600e-003**	**96.6559**

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					
Elementary School	0.816722	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Total		**8.8100e-003**	**0.0801**	**0.0673**	**4.8000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**		**96.0849**	**96.0849**	**1.8400e-003**	**1.7600e-003**	**96.6559**

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	1.2027	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Unmitigated	1.2027	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003

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	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e-004	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Total	**1.2026**	**3.0000e-005**	**3.0900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**7.0100e-003**

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	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e-004	3.0000e-005	3.0900e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0100e-003
Total	**1.2026**	**3.0000e-005**	**3.0900e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**7.0100e-003**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Existing_2019

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	30.00	Student	9.99	43,329.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2019
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Construction Phase - Operation run only

Vehicle Trips - Based on information provided by IBI Group

Energy Use -

Water And Wastewater - See assumptions file for details.

Solid Waste - See assumptions file for details.

Fleet Mix - Assumes 100 percent passenger vehicles.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.58	0.71
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.19	0.23
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.6000e-003	0.00
tblFleetMix	MCY	6.2790e-003	8.3190e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.3570e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.8880e-003	0.00
tblFleetMix	SBUS	7.4200e-004	0.00
tblFleetMix	UBUS	2.0880e-003	0.00
tblLandUse	LandUseSquareFeet	2,508.10	43,329.00
tblLandUse	LotAcreage	0.06	9.99
tblSolidWaste	SolidWasteGenerationRate	5.47	2.70
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00

tblWater	IndoorWaterUseRate	72,727.20	87,600.00
tblWater	OutdoorWaterUseRate	187,012.80	21,900.00
tblWater	SepticTankPercent	10.33	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	0.2195	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Energy	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	105.8258	105.8258	3.9200e-003	1.0400e-003	106.2340
Mobile	9.9000e-003	0.0103	0.1109	2.8000e-004	0.0280	2.0000e-004	0.0282	7.4400e-003	1.8000e-004	7.6200e-003	0.0000	25.0412	25.0412	1.0800e-003	0.0000	25.0682
Waste						0.0000	0.0000		0.0000	0.0000	0.5481	0.0000	0.5481	0.0324	0.0000	1.3578
Water						0.0000	0.0000		0.0000	0.0000	0.0310	0.4523	0.4833	1.2000e-004	7.0000e-005	0.5076
Total	**0.2310**	**0.0249**	**0.1234**	**3.7000e-004**	**0.0280**	**1.3100e-003**	**0.0293**	**7.4400e-003**	**1.2900e-003**	**8.7300e-003**	**0.5791**	**131.3199**	**131.8990**	**0.0375**	**1.1100e-003**	**133.1682**

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	0.2195	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Energy	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	105.8258	105.8258	3.9200e-003	1.0400e-003	106.2340
Mobile	9.9000e-003	0.0103	0.1109	2.8000e-004	0.0280	2.0000e-004	0.0282	7.4400e-003	1.8000e-004	7.6200e-003	0.0000	25.0412	25.0412	1.0800e-003	0.0000	25.0682
Waste						0.0000	0.0000		0.0000	0.0000	0.5481	0.0000	0.5481	0.0324	0.0000	1.3578
Water						0.0000	0.0000		0.0000	0.0000	0.0310	0.4523	0.4833	1.2000e-004	7.0000e-005	0.5076
Total	**0.2310**	**0.0249**	**0.1234**	**3.7000e-004**	**0.0280**	**1.3100e-003**	**0.0293**	**7.4400e-003**	**1.2900e-003**	**8.7300e-003**	**0.5791**	**131.3199**	**131.8990**	**0.0375**	**1.1100e-003**	**133.1682**

	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	N20	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	9.9000e-003	0.0103	0.1109	2.8000e-004	0.0280	2.0000e-004	0.0282	7.4400e-003	1.8000e-004	7.6200e-003	0.0000	25.0412	25.0412	1.0800e-003	0.0000	25.0682
Unmitigated	9.9000e-003	0.0103	0.1109	2.8000e-004	0.0280	2.0000e-004	0.0282	7.4400e-003	1.8000e-004	7.6200e-003	0.0000	25.0412	25.0412	1.0800e-003	0.0000	25.0682

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	48.00	0.00	0.00	75,598	75,598
Total	48.00	0.00	0.00	75,598	75,598

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.709953	0.053867	0.227861	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.008319	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	89.9179	89.9179	3.6200e-003	7.5000e-004	90.2315
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	89.9179	89.9179	3.6200e-003	7.5000e-004	90.2315
NaturalGas Mitigated	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	15.9079	15.9079	3.0000e-004	2.9000e-004	16.0025
NaturalGas Unmitigated	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	15.9079	15.9079	3.0000e-004	2.9000e-004	16.0025

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	tons/yr										MT/yr					
Elementary School	298104	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	15.9079	15.9079	3.0000e-004	2.9000e-004	16.0025
Total		**1.6100e-003**	**0.0146**	**0.0123**	**9.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**15.9079**	**15.9079**	**3.0000e-004**	**2.9000e-004**	**16.0025**

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	tons/yr										MT/yr					
Elementary School	298104	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	15.9079	15.9079	3.0000e-004	2.9000e-004	16.0025
Total		**1.6100e-003**	**0.0146**	**0.0123**	**9.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**15.9079**	**15.9079**	**3.0000e-004**	**2.9000e-004**	**16.0025**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	275139	89.9179	3.6200e-003	7.5000e-004	90.2315
Total		**89.9179**	**3.6200e-003**	**7.5000e-004**	**90.2315**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	275139	89.9179	3.6200e-003	7.5000e-004	90.2315
Total		**89.9179**	**3.6200e-003**	**7.5000e-004**	**90.2315**

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	0.2195	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Unmitigated	0.2195	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004

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	0.0502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1692					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Total	**0.2195**	**0.0000**	**2.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.4000e-004**	**5.4000e-004**	**0.0000**	**0.0000**	**5.7000e-004**

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	0.0502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1692					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Total	**0.2195**	**0.0000**	**2.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.4000e-004**	**5.4000e-004**	**0.0000**	**0.0000**	**5.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.4833	1.2000e-004	7.0000e-005	0.5076
Unmitigated	0.4833	1.2000e-004	7.0000e-005	0.5076

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.0876 / 0.0219	0.4833	1.2000e-004	7.0000e-005	0.5076
Total		**0.4833**	**1.2000e-004**	**7.0000e-005**	**0.5076**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.0876 / 0.0219	0.4833	1.2000e-004	7.0000e-005	0.5076
Total		**0.4833**	**1.2000e-004**	**7.0000e-005**	**0.5076**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.5481	0.0324	0.0000	1.3578
Unmitigated	0.5481	0.0324	0.0000	1.3578

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	2.7	0.5481	0.0324	0.0000	1.3578
Total		**0.5481**	**0.0324**	**0.0000**	**1.3578**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	2.7	0.5481	0.0324	0.0000	1.3578
Total		**0.5481**	**0.0324**	**0.0000**	**1.3578**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Output: Operation – Existing 2021

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Existing

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	30.00	Student	9.99	43,329.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Energy Use -

Vehicle Trips - Based on information provided by IBI Group

Fleet Mix - Assumes 100 percent passenger vehicles.

Water And Wastewater - See assumptions file for details.

Solid Waste - See assumptions file for details.

Construction Phase - Operation run only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	6/10/2019	5/14/2019
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.72
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.18	0.22
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5130e-003	0.00
tblFleetMix	MCY	6.0900e-003	7.9850e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.1930e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9120e-003	0.00
tblFleetMix	SBUS	7.4800e-004	0.00
tblFleetMix	UBUS	1.9720e-003	0.00
tblLandUse	LandUseSquareFeet	2,508.10	43,329.00
tblLandUse	LotAcreage	0.06	9.99
tblSolidWaste	SolidWasteGenerationRate	5.47	2.70
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	72,727.20	87,600.00
tblWater	OutdoorWaterUseRate	187,012.80	21,900.00
tblWater	SepticTankPercent	10.33	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	1.2026	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Energy	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Mobile	0.0704	0.0597	0.7551	2.0900e-003	0.2208	1.4900e-003	0.2222	0.0585	1.3700e-003	0.0599		208.0465	208.0465	8.2200e-003		208.2520
Total	**1.2818**	**0.1398**	**0.8254**	**2.5700e-003**	**0.2208**	**7.5900e-003**	**0.2283**	**0.0585**	**7.4700e-003**	**0.0660**		**304.1380**	**304.1380**	**0.0101**	**1.7600e-003**	**304.9149**

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	1.2026	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Energy	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Mobile	0.0704	0.0597	0.7551	2.0900e-003	0.2208	1.4900e-003	0.2222	0.0585	1.3700e-003	0.0599		208.0465	208.0465	8.2200e-003		208.2520
Total	**1.2818**	**0.1398**	**0.8254**	**2.5700e-003**	**0.2208**	**7.5900e-003**	**0.2283**	**0.0585**	**7.4700e-003**	**0.0660**		**304.1380**	**304.1380**	**0.0101**	**1.7600e-003**	**304.9149**

	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	N20	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	0.0704	0.0597	0.7551	2.0900e-003	0.2208	1.4900e-003	0.2222	0.0585	1.3700e-003	0.0599		208.0465	208.0465	8.2200e-003		208.2520
Unmitigated	0.0704	0.0597	0.7551	2.0900e-003	0.2208	1.4900e-003	0.2222	0.0585	1.3700e-003	0.0599		208.0465	208.0465	8.2200e-003		208.2520

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	48.00	0.00	0.00	75,598	75,598
Total	48.00	0.00	0.00	75,598	75,598

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.719979	0.050723	0.221313	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007985	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

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	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
NaturalGas Unmitigated	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559

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					
Elementary School	816.722	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Total		**8.8100e-003**	**0.0801**	**0.0673**	**4.8000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**		**96.0849**	**96.0849**	**1.8400e-003**	**1.7600e-003**	**96.6559**

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					
Elementary School	0.816722	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Total		**8.8100e-003**	**0.0801**	**0.0673**	**4.8000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**		**96.0849**	**96.0849**	**1.8400e-003**	**1.7600e-003**	**96.6559**

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	1.2026	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Unmitigated	1.2026	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003

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	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e-004	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Total	**1.2026**	**3.0000e-005**	**3.0700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**7.0000e-003**

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	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e-004	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Total	**1.2026**	**3.0000e-005**	**3.0700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**7.0000e-003**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Existing

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	30.00	Student	9.99	43,329.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Energy Use -

Vehicle Trips - Based on information provided by IBI Group

Fleet Mix - Assumes 100 percent passenger vehicles.

Water And Wastewater - See assumptions file for details.

Solid Waste - See assumptions file for details.

Construction Phase - Operation run only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	6/10/2019	5/14/2019
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.72
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.18	0.22
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5130e-003	0.00
tblFleetMix	MCY	6.0900e-003	7.9850e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.1930e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9120e-003	0.00
tblFleetMix	SBUS	7.4800e-004	0.00
tblFleetMix	UBUS	1.9720e-003	0.00
tblLandUse	LandUseSquareFeet	2,508.10	43,329.00
tblLandUse	LotAcreage	0.06	9.99
tblSolidWaste	SolidWasteGenerationRate	5.47	2.70
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	72,727.20	87,600.00
tblWater	OutdoorWaterUseRate	187,012.80	21,900.00
tblWater	SepticTankPercent	10.33	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	1.2026	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Energy	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Mobile	0.0677	0.0669	0.7466	1.9600e-003	0.2208	1.4900e-003	0.2222	0.0585	1.3700e-003	0.0599		195.4152	195.4152	8.1100e-003		195.6178
Total	**1.2792**	**0.1470**	**0.8170**	**2.4400e-003**	**0.2208**	**7.5900e-003**	**0.2283**	**0.0585**	**7.4700e-003**	**0.0660**		**291.5067**	**291.5067**	**9.9700e-003**	**1.7600e-003**	**292.2807**

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	1.2026	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Energy	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Mobile	0.0677	0.0669	0.7466	1.9600e-003	0.2208	1.4900e-003	0.2222	0.0585	1.3700e-003	0.0599		195.4152	195.4152	8.1100e-003		195.6178
Total	**1.2792**	**0.1470**	**0.8170**	**2.4400e-003**	**0.2208**	**7.5900e-003**	**0.2283**	**0.0585**	**7.4700e-003**	**0.0660**		**291.5067**	**291.5067**	**9.9700e-003**	**1.7600e-003**	**292.2807**

	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	N20	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	0.0677	0.0669	0.7466	1.9600e-003	0.2208	1.4900e-003	0.2222	0.0585	1.3700e-003	0.0599		195.4152	195.4152	8.1100e-003		195.6178
Unmitigated	0.0677	0.0669	0.7466	1.9600e-003	0.2208	1.4900e-003	0.2222	0.0585	1.3700e-003	0.0599		195.4152	195.4152	8.1100e-003		195.6178

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	48.00	0.00	0.00	75,598	75,598
Total	48.00	0.00	0.00	75,598	75,598

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.719979	0.050723	0.221313	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007985	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

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	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
NaturalGas Unmitigated	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559

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					
Elementary School	816.722	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Total		**8.8100e-003**	**0.0801**	**0.0673**	**4.8000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**		**96.0849**	**96.0849**	**1.8400e-003**	**1.7600e-003**	**96.6559**

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					
Elementary School	0.816722	8.8100e-003	0.0801	0.0673	4.8000e-004		6.0900e-003	6.0900e-003		6.0900e-003	6.0900e-003		96.0849	96.0849	1.8400e-003	1.7600e-003	96.6559
Total		**8.8100e-003**	**0.0801**	**0.0673**	**4.8000e-004**		**6.0900e-003**	**6.0900e-003**		**6.0900e-003**	**6.0900e-003**		**96.0849**	**96.0849**	**1.8400e-003**	**1.7600e-003**	**96.6559**

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	1.2026	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Unmitigated	1.2026	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003

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	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e-004	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Total	**1.2026**	**3.0000e-005**	**3.0700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**7.0000e-003**

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	0.2751					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9272					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.9000e-004	3.0000e-005	3.0700e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		6.5700e-003	6.5700e-003	2.0000e-005		7.0000e-003
Total	**1.2026**	**3.0000e-005**	**3.0700e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**6.5700e-003**	**6.5700e-003**	**2.0000e-005**		**7.0000e-003**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Existing

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	30.00	Student	9.99	43,329.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - .

Energy Use -

Vehicle Trips - Based on information provided by IBI Group

Fleet Mix - Assumes 100 percent passenger vehicles.

Water And Wastewater - See assumptions file for details.

Solid Waste - See assumptions file for details.

Construction Phase - Operation run only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	6/10/2019	5/14/2019
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.72
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.18	0.22
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5130e-003	0.00
tblFleetMix	MCY	6.0900e-003	7.9850e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.1930e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9120e-003	0.00
tblFleetMix	SBUS	7.4800e-004	0.00
tblFleetMix	UBUS	1.9720e-003	0.00
tblLandUse	LandUseSquareFeet	2,508.10	43,329.00
tblLandUse	LotAcreage	0.06	9.99
tblSolidWaste	SolidWasteGenerationRate	5.47	2.70
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	IndoorWaterUseRate	72,727.20	87,600.00
tblWater	OutdoorWaterUseRate	187,012.80	21,900.00

tblWater	SepticTankPercent	10.33	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	0.2195	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Energy	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	105.8258	105.8258	3.9200e-003	1.0400e-003	106.2340
Mobile	8.5600e-003	8.5400e-003	0.0959	2.6000e-004	0.0280	1.9000e-004	0.0282	7.4400e-003	1.8000e-004	7.6100e-003	0.0000	23.2467	23.2467	9.5000e-004	0.0000	23.2705
Waste						0.0000	0.0000		0.0000	0.0000	0.5481	0.0000	0.5481	0.0324	0.0000	1.3578
Water						0.0000	0.0000		0.0000	0.0000	0.0310	0.4523	0.4833	1.2000e-004	7.0000e-005	0.5076
Total	**0.2296**	**0.0232**	**0.1084**	**3.5000e-004**	**0.0280**	**1.3000e-003**	**0.0293**	**7.4400e-003**	**1.2900e-003**	**8.7200e-003**	**0.5791**	**129.5254**	**130.1044**	**0.0374**	**1.1100e-003**	**131.3705**

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	0.2195	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Energy	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	105.8258	105.8258	3.9200e-003	1.0400e-003	106.2340
Mobile	8.5600e-003	8.5400e-003	0.0959	2.6000e-004	0.0280	1.9000e-004	0.0282	7.4400e-003	1.8000e-004	7.6100e-003	0.0000	23.2467	23.2467	9.5000e-004	0.0000	23.2705
Waste						0.0000	0.0000		0.0000	0.0000	0.5481	0.0000	0.5481	0.0324	0.0000	1.3578
Water						0.0000	0.0000		0.0000	0.0000	0.0310	0.4523	0.4833	1.2000e-004	7.0000e-005	0.5076
Total	**0.2296**	**0.0232**	**0.1084**	**3.5000e-004**	**0.0280**	**1.3000e-003**	**0.0293**	**7.4400e-003**	**1.2900e-003**	**8.7200e-003**	**0.5791**	**129.5254**	**130.1044**	**0.0374**	**1.1100e-003**	**131.3705**

	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	N20	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	8.5600e-003	8.5400e-003	0.0959	2.6000e-004	0.0280	1.9000e-004	0.0282	7.4400e-003	1.8000e-004	7.6100e-003	0.0000	23.2467	23.2467	9.5000e-004	0.0000	23.2705
Unmitigated	8.5600e-003	8.5400e-003	0.0959	2.6000e-004	0.0280	1.9000e-004	0.0282	7.4400e-003	1.8000e-004	7.6100e-003	0.0000	23.2467	23.2467	9.5000e-004	0.0000	23.2705

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	48.00	0.00	0.00	75,598	75,598
Total	48.00	0.00	0.00	75,598	75,598

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.719979	0.050723	0.221313	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007985	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: Y

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	89.9179	89.9179	3.6200e-003	7.5000e-004	90.2315
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	89.9179	89.9179	3.6200e-003	7.5000e-004	90.2315
NaturalGas Mitigated	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	15.9079	15.9079	3.0000e-004	2.9000e-004	16.0025
NaturalGas Unmitigated	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	15.9079	15.9079	3.0000e-004	2.9000e-004	16.0025

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	tons/yr										MT/yr					
Elementary School	298104	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	15.9079	15.9079	3.0000e-004	2.9000e-004	16.0025
Total		**1.6100e-003**	**0.0146**	**0.0123**	**9.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**15.9079**	**15.9079**	**3.0000e-004**	**2.9000e-004**	**16.0025**

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	tons/yr										MT/yr					
Elementary School	298104	1.6100e-003	0.0146	0.0123	9.0000e-005		1.1100e-003	1.1100e-003		1.1100e-003	1.1100e-003	0.0000	15.9079	15.9079	3.0000e-004	2.9000e-004	16.0025
Total		**1.6100e-003**	**0.0146**	**0.0123**	**9.0000e-005**		**1.1100e-003**	**1.1100e-003**		**1.1100e-003**	**1.1100e-003**	**0.0000**	**15.9079**	**15.9079**	**3.0000e-004**	**2.9000e-004**	**16.0025**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	275139	89.9179	3.6200e-003	7.5000e-004	90.2315
Total		**89.9179**	**3.6200e-003**	**7.5000e-004**	**90.2315**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	275139	89.9179	3.6200e-003	7.5000e-004	90.2315
Total		**89.9179**	**3.6200e-003**	**7.5000e-004**	**90.2315**

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	0.2195	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Unmitigated	0.2195	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004

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	0.0502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1692					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Total	**0.2195**	**0.0000**	**2.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.4000e-004**	**5.4000e-004**	**0.0000**	**0.0000**	**5.7000e-004**

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	0.0502					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1692					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	2.8000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	5.4000e-004	5.4000e-004	0.0000	0.0000	5.7000e-004
Total	**0.2195**	**0.0000**	**2.8000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**5.4000e-004**	**5.4000e-004**	**0.0000**	**0.0000**	**5.7000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.4833	1.2000e-004	7.0000e-005	0.5076
Unmitigated	0.4833	1.2000e-004	7.0000e-005	0.5076

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.0876 / 0.0219	0.4833	1.2000e-004	7.0000e-005	0.5076
Total		**0.4833**	**1.2000e-004**	**7.0000e-005**	**0.5076**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0.0876 / 0.0219	0.4833	1.2000e-004	7.0000e-005	0.5076
Total		**0.4833**	**1.2000e-004**	**7.0000e-005**	**0.5076**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.5481	0.0324	0.0000	1.3578
Unmitigated	0.5481	0.0324	0.0000	1.3578

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	2.7	0.5481	0.0324	0.0000	1.3578
Total		**0.5481**	**0.0324**	**0.0000**	**1.3578**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	2.7	0.5481	0.0324	0.0000	1.3578
Total		**0.5481**	**0.0324**	**0.0000**	**1.3578**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Output: Operation – Interim Skyline ES

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Interim_Skyline ES

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	109.00	Student	0.21	9,112.77	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operational run only.

Vehicle Trips - See assumptions file for details.

Fleet Mix - Assumes 100 percent passenger vehicles.

Area Coating - For mobile source emissions only.

Water And Wastewater - For mobile source emissions only.

Energy Use - For mobile source emissions only.

Solid Waste - For mobile source emissions only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	4556	0
tblAreaCoating	Area_Nonresidential_Interior	13669	0
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	5/27/2019	5/14/2019
tblEnergyUse	LightingElect	2.54	0.00
tblEnergyUse	NT24E	1.18	0.00
tblEnergyUse	NT24NG	0.48	0.00
tblEnergyUse	T24E	1.52	0.00
tblEnergyUse	T24NG	5.44	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.72
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.18	0.22
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5580e-003	0.00
tblFleetMix	MCY	6.1810e-003	7.5210e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.2710e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9020e-003	0.00
tblFleetMix	SBUS	7.4500e-004	0.00
tblFleetMix	UBUS	2.0240e-003	0.00
tblSolidWaste	SolidWasteGenerationRate	19.89	0.00

tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	9.50	1.10
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	IndoorWaterUseRate	264,242.16	0.00
tblWater	OutdoorWaterUseRate	679,479.84	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	0.1961	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1904	0.0671	0.9037	1.2400e-003	0.1025	1.4900e-003	0.1039	0.0272	1.3700e-003	0.0285		122.6946	122.6946	7.2000e-003		122.8746
Total	**0.3865**	**0.0672**	**0.9149**	**1.2400e-003**	**0.1025**	**1.5300e-003**	**0.1040**	**0.0272**	**1.4100e-003**	**0.0286**		**122.7185**	**122.7185**	**7.2600e-003**	**0.0000**	**122.9000**

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	0.1961	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1904	0.0671	0.9037	1.2400e-003	0.1025	1.4900e-003	0.1039	0.0272	1.3700e-003	0.0285		122.6946	122.6946	7.2000e-003		122.8746
Total	**0.3865**	**0.0672**	**0.9149**	**1.2400e-003**	**0.1025**	**1.5300e-003**	**0.1040**	**0.0272**	**1.4100e-003**	**0.0286**		**122.7185**	**122.7185**	**7.2600e-003**	**0.0000**	**122.9000**

	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	N20	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	0.1904	0.0671	0.9037	1.2400e-003	0.1025	1.4900e-003	0.1039	0.0272	1.3700e-003	0.0285		122.6946	122.6946	7.2000e-003		122.8746
Unmitigated	0.1904	0.0671	0.9037	1.2400e-003	0.1025	1.4900e-003	0.1039	0.0272	1.3700e-003	0.0285		122.6946	122.6946	7.2000e-003		122.8746

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	174.40	0.00	0.00	35,085	35,085
Total	174.40	0.00	0.00	35,085	35,085

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	1.10	7.30	7.30	100.00	0.00	0.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.715914	0.052215	0.224429	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007521	0.000000	0.000000

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.1961	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Unmitigated	0.1961	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Total	**0.1961**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0239**	**0.0239**	**6.0000e-005**		**0.0255**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Total	**0.1961**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0239**	**0.0239**	**6.0000e-005**		**0.0255**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Interim_Skyline ES

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	109.00	Student	0.21	9,112.77	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operational run only.

Vehicle Trips - See assumptions file for details.

Fleet Mix - Assumes 100 percent passenger vehicles.

Area Coating - For mobile source emissions only.

Water And Wastewater - For mobile source emissions only.

Energy Use - For mobile source emissions only.

Solid Waste - For mobile source emissions only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	4556	0
tblAreaCoating	Area_Nonresidential_Interior	13669	0
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	5/27/2019	5/14/2019
tblEnergyUse	LightingElect	2.54	0.00
tblEnergyUse	NT24E	1.18	0.00
tblEnergyUse	NT24NG	0.48	0.00
tblEnergyUse	T24E	1.52	0.00
tblEnergyUse	T24NG	5.44	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.72
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.18	0.22
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5580e-003	0.00
tblFleetMix	MCY	6.1810e-003	7.5210e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.2710e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9020e-003	0.00
tblFleetMix	SBUS	7.4500e-004	0.00
tblFleetMix	UBUS	2.0240e-003	0.00
tblSolidWaste	SolidWasteGenerationRate	19.89	0.00

tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	9.50	1.10
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	IndoorWaterUseRate	264,242.16	0.00
tblWater	OutdoorWaterUseRate	679,479.84	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	0.1961	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1819	0.0758	1.0560	1.1800e-003	0.1025	1.4900e-003	0.1039	0.0272	1.3700e-003	0.0285		116.5995	116.5995	7.8300e-003		116.7952
Total	**0.3780**	**0.0759**	**1.0672**	**1.1800e-003**	**0.1025**	**1.5300e-003**	**0.1040**	**0.0272**	**1.4100e-003**	**0.0286**		**116.6233**	**116.6233**	**7.8900e-003**	**0.0000**	**116.8207**

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	0.1961	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1819	0.0758	1.0560	1.1800e-003	0.1025	1.4900e-003	0.1039	0.0272	1.3700e-003	0.0285		116.5995	116.5995	7.8300e-003		116.7952
Total	**0.3780**	**0.0759**	**1.0672**	**1.1800e-003**	**0.1025**	**1.5300e-003**	**0.1040**	**0.0272**	**1.4100e-003**	**0.0286**		**116.6233**	**116.6233**	**7.8900e-003**	**0.0000**	**116.8207**

	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	N20	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	0.1819	0.0758	1.0560	1.1800e-003	0.1025	1.4900e-003	0.1039	0.0272	1.3700e-003	0.0285		116.5995	116.5995	7.8300e-003		116.7952
Unmitigated	0.1819	0.0758	1.0560	1.1800e-003	0.1025	1.4900e-003	0.1039	0.0272	1.3700e-003	0.0285		116.5995	116.5995	7.8300e-003		116.7952

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	174.40	0.00	0.00	35,085	35,085
Total	174.40	0.00	0.00	35,085	35,085

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	1.10	7.30	7.30	100.00	0.00	0.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.715914	0.052215	0.224429	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007521	0.000000	0.000000

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.1961	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Unmitigated	0.1961	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Total	**0.1961**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0239**	**0.0239**	**6.0000e-005**		**0.0255**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1950					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0500e-003	1.0000e-004	0.0112	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005		0.0239	0.0239	6.0000e-005		0.0255
Total	**0.1961**	**1.0000e-004**	**0.0112**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**		**0.0239**	**0.0239**	**6.0000e-005**		**0.0255**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Interim_Skyline ES

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	109.00	Student	0.21	9,112.77	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operational run only.

Vehicle Trips - See assumptions file for details.

Fleet Mix - Assumes 100 percent passenger vehicles.

Area Coating - For mobile source emissions only.

Water And Wastewater - For mobile source emissions only.

Energy Use - For mobile source emissions only.

Solid Waste - For mobile source emissions only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	4556	0
tblAreaCoating	Area_Nonresidential_Interior	13669	0
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	PhaseEndDate	5/27/2019	5/14/2019
tblEnergyUse	LightingElect	2.54	0.00
tblEnergyUse	NT24E	1.18	0.00
tblEnergyUse	NT24NG	0.48	0.00
tblEnergyUse	T24E	1.52	0.00
tblEnergyUse	T24NG	5.44	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.72
tblFleetMix	LDT1	0.04	0.05
tblFleetMix	LDT2	0.18	0.22
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5580e-003	0.00
tblFleetMix	MCY	6.1810e-003	7.5210e-003
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.2710e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9020e-003	0.00
tblFleetMix	SBUS	7.4500e-004	0.00
tblFleetMix	UBUS	2.0240e-003	0.00

tblSolidWaste	SolidWasteGenerationRate	19.89	0.00
tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	9.50	1.10
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	WD_TR	1.29	1.60
tblWater	IndoorWaterUseRate	264,242.16	0.00
tblWater	OutdoorWaterUseRate	679,479.84	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	0.0357	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0227	9.5800e-003	0.1305	1.5000e-004	0.0130	1.9000e-004	0.0132	3.4500e-003	1.8000e-004	3.6300e-003	0.0000	13.8447	13.8447	9.0000e-004	0.0000	13.8671
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0584**	**9.5900e-003**	**0.1315**	**1.5000e-004**	**0.0130**	**1.9000e-004**	**0.0132**	**3.4500e-003**	**1.8000e-004**	**3.6300e-003**	**0.0000**	**13.8466**	**13.8466**	**9.1000e-004**	**0.0000**	**13.8692**

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	0.0357	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0227	9.5800e-003	0.1305	1.5000e-004	0.0130	1.9000e-004	0.0132	3.4500e-003	1.8000e-004	3.6300e-003	0.0000	13.8447	13.8447	9.0000e-004	0.0000	13.8671
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0584**	**9.5900e-003**	**0.1315**	**1.5000e-004**	**0.0130**	**1.9000e-004**	**0.0132**	**3.4500e-003**	**1.8000e-004**	**3.6300e-003**	**0.0000**	**13.8466**	**13.8466**	**9.1000e-004**	**0.0000**	**13.8692**

	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	N20	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	0.0227	9.5800e-003	0.1305	1.5000e-004	0.0130	1.9000e-004	0.0132	3.4500e-003	1.8000e-004	3.6300e-003	0.0000	13.8447	13.8447	9.0000e-004	0.0000	13.8671
Unmitigated	0.0227	9.5800e-003	0.1305	1.5000e-004	0.0130	1.9000e-004	0.0132	3.4500e-003	1.8000e-004	3.6300e-003	0.0000	13.8447	13.8447	9.0000e-004	0.0000	13.8671

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	174.40	0.00	0.00	35,085	35,085
Total	174.40	0.00	0.00	35,085	35,085

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	1.10	7.30	7.30	100.00	0.00	0.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.715914	0.052215	0.224429	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.007521	0.000000	0.000000

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	tons/yr										MT/yr					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	tons/yr										MT/yr					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0357	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Unmitigated	0.0357	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0356					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Total	**0.0357**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.9500e-003**	**1.9500e-003**	**1.0000e-005**	**0.0000**	**2.0800e-003**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0356					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	9.0000e-005	1.0000e-005	1.0100e-003	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.9500e-003	1.9500e-003	1.0000e-005	0.0000	2.0800e-003
Total	**0.0357**	**1.0000e-005**	**1.0100e-003**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.9500e-003**	**1.9500e-003**	**1.0000e-005**	**0.0000**	**2.0800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Output: Operation – Interim Solana Highland ES

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Interim_Solana Highland ES

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	240.00	Student	0.46	20,064.81	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operational run only.

Vehicle Trips - See assumptions file for details.

Fleet Mix - Assumes 10 bus trips per day. See assumptions file for details.

Area Coating - For mobile source emissions only.

Water And Wastewater - For mobile source emissions only.

Energy Use - For mobile source emissions only.

Solid Waste - For mobile source emissions only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	10032	0
tblAreaCoating	Area_Nonresidential_Interior	30097	0
tblConstructionPhase	NumDays	10.00	1.00
tblEnergyUse	LightingElect	2.54	0.00
tblEnergyUse	NT24E	1.18	0.00
tblEnergyUse	NT24NG	0.48	0.00
tblEnergyUse	T24E	1.52	0.00
tblEnergyUse	T24NG	5.44	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5580e-003	0.00
tblFleetMix	MCY	6.1810e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.2710e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9020e-003	0.00
tblFleetMix	SBUS	7.4500e-004	1.00
tblFleetMix	UBUS	2.0240e-003	0.00
tblSolidWaste	SolidWasteGenerationRate	43.80	0.00
tblVehicleTrips	CC_TTP	30.00	0.00

tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	9.50	5.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	WD_TR	1.29	0.04
tblWater	IndoorWaterUseRate	581,817.60	0.00
tblWater	OutdoorWaterUseRate	1,496,102.40	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	0.4317	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0340	0.9563	0.3423	1.0800e-003	0.0776	2.4200e-003	0.0801	0.0291	2.3100e-003	0.0314		111.6343	111.6343	0.0219		112.1814
Total	**0.4657**	**0.9565**	**0.3669**	**1.0800e-003**	**0.0776**	**2.5100e-003**	**0.0801**	**0.0291**	**2.4000e-003**	**0.0315**		**111.6869**	**111.6869**	**0.0220**	**0.0000**	**112.2375**

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	0.4317	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0340	0.9563	0.3423	1.0800e-003	0.0776	2.4200e-003	0.0801	0.0291	2.3100e-003	0.0314		111.6343	111.6343	0.0219		112.1814
Total	**0.4657**	**0.9565**	**0.3669**	**1.0800e-003**	**0.0776**	**2.5100e-003**	**0.0801**	**0.0291**	**2.4000e-003**	**0.0315**		**111.6869**	**111.6869**	**0.0220**	**0.0000**	**112.2375**

	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	N20	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	0.0340	0.9563	0.3423	1.0800e-003	0.0776	2.4200e-003	0.0801	0.0291	2.3100e-003	0.0314		111.6343	111.6343	0.0219		112.1814
Unmitigated	0.0340	0.9563	0.3423	1.0800e-003	0.0776	2.4200e-003	0.0801	0.0291	2.3100e-003	0.0314		111.6343	111.6343	0.0219		112.1814

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	9.60	0.00	0.00	8,672	8,672
Total	9.60	0.00	0.00	8,672	8,672

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	5.00	7.30	7.30	100.00	0.00	0.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.4317	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Unmitigated	0.4317	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3200e-003	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Total	**0.4317**	**2.3000e-004**	**0.0247**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0525**	**0.0525**	**1.4000e-004**		**0.0561**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3200e-003	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Total	**0.4317**	**2.3000e-004**	**0.0247**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0525**	**0.0525**	**1.4000e-004**		**0.0561**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Interim_Solana Highland ES

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	240.00	Student	0.46	20,064.81	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operational run only.

Vehicle Trips - See assumptions file for details.

Fleet Mix - Assumes 10 bus trips per day. See assumptions file for details.

Area Coating - For mobile source emissions only.

Water And Wastewater - For mobile source emissions only.

Energy Use - For mobile source emissions only.

Solid Waste - For mobile source emissions only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	10032	0
tblAreaCoating	Area_Nonresidential_Interior	30097	0
tblConstructionPhase	NumDays	10.00	1.00
tblEnergyUse	LightingElect	2.54	0.00
tblEnergyUse	NT24E	1.18	0.00
tblEnergyUse	NT24NG	0.48	0.00
tblEnergyUse	T24E	1.52	0.00
tblEnergyUse	T24NG	5.44	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5580e-003	0.00
tblFleetMix	MCY	6.1810e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.2710e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9020e-003	0.00
tblFleetMix	SBUS	7.4500e-004	1.00
tblFleetMix	UBUS	2.0240e-003	0.00
tblSolidWaste	SolidWasteGenerationRate	43.80	0.00
tblVehicleTrips	CC_TTP	30.00	0.00

tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	9.50	5.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	WD_TR	1.29	0.04
tblWater	IndoorWaterUseRate	581,817.60	0.00
tblWater	OutdoorWaterUseRate	1,496,102.40	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	0.4317	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0358	0.9505	0.4007	1.0500e-003	0.0776	2.5300e-003	0.0802	0.0291	2.4200e-003	0.0315		108.4764	108.4764	0.0223		109.0325
Total	**0.4675**	**0.9508**	**0.4254**	**1.0500e-003**	**0.0776**	**2.6200e-003**	**0.0803**	**0.0291**	**2.5100e-003**	**0.0316**		**108.5289**	**108.5289**	**0.0224**	**0.0000**	**109.0886**

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	0.4317	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0358	0.9505	0.4007	1.0500e-003	0.0776	2.5300e-003	0.0802	0.0291	2.4200e-003	0.0315		108.4764	108.4764	0.0223		109.0325
Total	**0.4675**	**0.9508**	**0.4254**	**1.0500e-003**	**0.0776**	**2.6200e-003**	**0.0803**	**0.0291**	**2.5100e-003**	**0.0316**		**108.5289**	**108.5289**	**0.0224**	**0.0000**	**109.0886**

	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	N20	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	0.0358	0.9505	0.4007	1.0500e-003	0.0776	2.5300e-003	0.0802	0.0291	2.4200e-003	0.0315		108.4764	108.4764	0.0223		109.0325
Unmitigated	0.0358	0.9505	0.4007	1.0500e-003	0.0776	2.5300e-003	0.0802	0.0291	2.4200e-003	0.0315		108.4764	108.4764	0.0223		109.0325

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	9.60	0.00	0.00	8,672	8,672
Total	9.60	0.00	0.00	8,672	8,672

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	5.00	7.30	7.30	100.00	0.00	0.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

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					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.4317	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Unmitigated	0.4317	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3200e-003	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Total	**0.4317**	**2.3000e-004**	**0.0247**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0525**	**0.0525**	**1.4000e-004**		**0.0561**

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.4294					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.3200e-003	2.3000e-004	0.0247	0.0000		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005		0.0525	0.0525	1.4000e-004		0.0561
Total	**0.4317**	**2.3000e-004**	**0.0247**	**0.0000**		**9.0000e-005**	**9.0000e-005**		**9.0000e-005**	**9.0000e-005**		**0.0525**	**0.0525**	**1.4000e-004**		**0.0561**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Interim_Solana Highland ES

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	240.00	Student	0.46	20,064.81	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2020
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operational run only.

Vehicle Trips - See assumptions file for details.

Fleet Mix - Assumes 10 bus trips per day. See assumptions file for details.

Area Coating - For mobile source emissions only.

Water And Wastewater - For mobile source emissions only.

Energy Use - For mobile source emissions only.

Solid Waste - For mobile source emissions only.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	10032	0
tblAreaCoating	Area_Nonresidential_Interior	30097	0
tblConstructionPhase	NumDays	10.00	1.00
tblEnergyUse	LightingElect	2.54	0.00
tblEnergyUse	NT24E	1.18	0.00
tblEnergyUse	NT24NG	0.48	0.00
tblEnergyUse	T24E	1.52	0.00
tblEnergyUse	T24NG	5.44	0.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.59	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.5580e-003	0.00
tblFleetMix	MCY	6.1810e-003	0.00
tblFleetMix	MDV	0.11	0.00
tblFleetMix	MH	1.2710e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.9020e-003	0.00
tblFleetMix	SBUS	7.4500e-004	1.00
tblFleetMix	UBUS	2.0240e-003	0.00
tblSolidWaste	SolidWasteGenerationRate	43.80	0.00

tblVehicleTrips	CC_TTP	30.00	0.00
tblVehicleTrips	CNW_TTP	5.00	0.00
tblVehicleTrips	CW_TL	9.50	5.00
tblVehicleTrips	CW_TTP	65.00	100.00
tblVehicleTrips	WD_TR	1.29	0.04
tblWater	IndoorWaterUseRate	581,817.60	0.00
tblWater	OutdoorWaterUseRate	1,496,102.40	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	0.0786	2.0000e-005	2.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2900e-003	4.2900e-003	1.0000e-005	0.0000	4.5800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	4.5600e-003	0.1251	0.0493	1.4000e-004	0.0100	3.2000e-004	0.0103	3.7600e-003	3.1000e-004	4.0700e-003	0.0000	12.9936	12.9936	2.6100e-003	0.0000	13.0587
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0831**	**0.1251**	**0.0515**	**1.4000e-004**	**0.0100**	**3.3000e-004**	**0.0103**	**3.7600e-003**	**3.2000e-004**	**4.0800e-003**	**0.0000**	**12.9979**	**12.9979**	**2.6200e-003**	**0.0000**	**13.0633**

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	0.0786	2.0000e-005	2.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2900e-003	4.2900e-003	1.0000e-005	0.0000	4.5800e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	4.5600e-003	0.1251	0.0493	1.4000e-004	0.0100	3.2000e-004	0.0103	3.7600e-003	3.1000e-004	4.0700e-003	0.0000	12.9936	12.9936	2.6100e-003	0.0000	13.0587
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0831**	**0.1251**	**0.0515**	**1.4000e-004**	**0.0100**	**3.3000e-004**	**0.0103**	**3.7600e-003**	**3.2000e-004**	**4.0800e-003**	**0.0000**	**12.9979**	**12.9979**	**2.6200e-003**	**0.0000**	**13.0633**

	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	N20	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	4.5600e-003	0.1251	0.0493	1.4000e-004	0.0100	3.2000e-004	0.0103	3.7600e-003	3.1000e-004	4.0700e-003	0.0000	12.9936	12.9936	2.6100e-003	0.0000	13.0587
Unmitigated	4.5600e-003	0.1251	0.0493	1.4000e-004	0.0100	3.2000e-004	0.0103	3.7600e-003	3.1000e-004	4.0700e-003	0.0000	12.9936	12.9936	2.6100e-003	0.0000	13.0587

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	9.60	0.00	0.00	8,672	8,672
Total	9.60	0.00	0.00	8,672	8,672

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	5.00	7.30	7.30	100.00	0.00	0.00	63	25	12

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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	tons/yr										MT/yr					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	tons/yr										MT/yr					
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0786	2.0000e-005	2.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2900e-003	4.2900e-003	1.0000e-005	0.0000	4.5800e-003
Unmitigated	0.0786	2.0000e-005	2.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2900e-003	4.2900e-003	1.0000e-005	0.0000	4.5800e-003

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0784					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2900e-003	4.2900e-003	1.0000e-005	0.0000	4.5800e-003
Total	**0.0786**	**2.0000e-005**	**2.2200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.2900e-003**	**4.2900e-003**	**1.0000e-005**	**0.0000**	**4.5800e-003**

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0784					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.1000e-004	2.0000e-005	2.2200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	4.2900e-003	4.2900e-003	1.0000e-005	0.0000	4.5800e-003
Total	**0.0786**	**2.0000e-005**	**2.2200e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**4.2900e-003**	**4.2900e-003**	**1.0000e-005**	**0.0000**	**4.5800e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Output: Operation – Proposed Project

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New Proposed Operation - San Diego County, Summer

New Proposed Operation

San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	57.96	1000sqft	1.33	57,963.00	0
Parking Lot	49.55	1000sqft	1.14	49,550.00	0
Other Asphalt Surfaces	78.98	1000sqft	1.81	43,880.00	0
Other Non-Asphalt Surfaces	248.46	1000sqft	5.70	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See assumptions for for details.

Vehicle Trips - No additional students added. Project would result in the reduction of 30 seats.

Water And Wastewater - Project would result in a decrease of 30 students.

Solid Waste - Project would result in the reduction in 30 seats/students.

Water Mitigation -

Energy Mitigation -

Construction Phase - Operation run only.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	6/10/2019	5/14/2019
tblLandUse	LandUseSquareFeet	78,980.00	43,880.00
tblLandUse	LandUseSquareFeet	248,460.00	0.00
tblSolidWaste	SolidWasteGenerationRate	75.35	0.00
tblVehicleTrips	WD_TR	15.43	0.00
tblWater	IndoorWaterUseRate	1,680,661.32	0.00
tblWater	OutdoorWaterUseRate	4,321,700.54	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	1.6635	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Energy	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003		110.6014	110.6014	2.1200e-003	2.0300e-003	111.2587
Mobile	0.0000	0.0000	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	**1.6736**	**0.0926**	**0.1220**	**5.5000e-004**	**0.0000**	**7.1600e-003**	**7.1600e-003**	**0.0000**	**7.1600e-003**	**7.1600e-003**		**110.6966**	**110.6966**	**2.3700e-003**	**2.0300e-003**	**111.3602**

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	1.6635	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Energy	7.3400e-003	0.0668	0.0561	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003		80.1113	80.1113	1.5400e-003	1.4700e-003	80.5874
Mobile	0.0000	0.0000	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	**1.6708**	**0.0672**	**0.1007**	**4.0000e-004**	**0.0000**	**5.2300e-003**	**5.2300e-003**	**0.0000**	**5.2300e-003**	**5.2300e-003**		**80.2065**	**80.2065**	**1.7900e-003**	**1.4700e-003**	**80.6889**

	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	N20	CO2e
Percent Reduction	**0.17**	**27.45**	**17.49**	**27.27**	**0.00**	**26.96**	**26.96**	**0.00**	**26.96**	**26.96**	**0.00**	**27.54**	**27.54**	**24.47**	**27.59**	**27.54**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	0.00	0.00	0.00		
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		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-[illegible]	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Other Asphalt Surfaces	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Other Non-Asphalt Surfaces	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Parking Lot	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	7.3400e-003	0.0668	0.0561	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003		80.1113	80.1113	1.5400e-003	1.4700e-003	80.5874
NaturalGas Unmitigated	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003		110.6014	110.6014	2.1200e-003	2.0300e-003	111.2587

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					
Elementary School	940.112	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003		110.6014	110.6014	2.1200e-003	2.0300e-003	111.2587
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
Total		**0.0101**	**0.0922**	**0.0774**	**5.5000e-004**		**7.0000e-003**	**7.0000e-003**		**7.0000e-003**	**7.0000e-003**		**110.6014**	**110.6014**	**2.1200e-003**	**2.0300e-003**	**111.2587**

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					
Elementary School	0.680946	7.3400e-003	0.0668	0.0561	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003		80.1113	80.1113	1.5400e-003	1.4700e-003	80.5874
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
Total		**7.3400e-003**	**0.0668**	**0.0561**	**4.0000e-004**		**5.0700e-003**	**5.0700e-003**		**5.0700e-003**	**5.0700e-003**		**80.1113**	**80.1113**	**1.5400e-003**	**1.4700e-003**	**80.5874**

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	1.6635	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Unmitigated	1.6635	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015

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	0.3858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2735					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.1600e-003	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Total	**1.6635**	**4.1000e-004**	**0.0446**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**0.0952**	**0.0952**	**2.5000e-004**		**0.1015**

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	0.3858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2735					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.1600e-003	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Total	**1.6635**	**4.1000e-004**	**0.0446**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**0.0952**	**0.0952**	**2.5000e-004**		**0.1015**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

New Proposed Operation

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	57.96	1000sqft	1.33	57,963.00	0
Parking Lot	49.55	1000sqft	1.14	49,550.00	0
Other Asphalt Surfaces	78.98	1000sqft	1.81	43,880.00	0
Other Non-Asphalt Surfaces	248.46	1000sqft	5.70	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See assumptions for for details.

Vehicle Trips - No additional students added. Project would result in the reduction of 30 seats.

Water And Wastewater - Project would result in a decrease of 30 students.

Solid Waste - Project would result in the reduction in 30 seats/students.

Water Mitigation -

Energy Mitigation -

Construction Phase - Operation run only.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	6/10/2019	5/14/2019
tblLandUse	LandUseSquareFeet	78,980.00	43,880.00
tblLandUse	LandUseSquareFeet	248,460.00	0.00
tblSolidWaste	SolidWasteGenerationRate	75.35	0.00
tblVehicleTrips	WD_TR	15.43	0.00
tblWater	IndoorWaterUseRate	1,680,661.32	0.00
tblWater	OutdoorWaterUseRate	4,321,700.54	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	1.6635	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Energy	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003		110.6014	110.6014	2.1200e-003	2.0300e-003	111.2587
Mobile	0.0000	0.0000	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	**1.6736**	**0.0926**	**0.1220**	**5.5000e-004**	**0.0000**	**7.1600e-003**	**7.1600e-003**	**0.0000**	**7.1600e-003**	**7.1600e-003**		**110.6966**	**110.6966**	**2.3700e-003**	**2.0300e-003**	**111.3602**

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	1.6635	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Energy	7.3400e-003	0.0668	0.0561	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003		80.1113	80.1113	1.5400e-003	1.4700e-003	80.5874
Mobile	0.0000	0.0000	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	**1.6708**	**0.0672**	**0.1007**	**4.0000e-004**	**0.0000**	**5.2300e-003**	**5.2300e-003**	**0.0000**	**5.2300e-003**	**5.2300e-003**		**80.2065**	**80.2065**	**1.7900e-003**	**1.4700e-003**	**80.6889**

	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	N20	CO2e
Percent Reduction	**0.17**	**27.45**	**17.49**	**27.27**	**0.00**	**26.96**	**26.96**	**0.00**	**26.96**	**26.96**	**0.00**	**27.54**	**27.54**	**24.47**	**27.59**	**27.54**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	0.00	0.00	0.00		
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		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-[illegible]	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Other Asphalt Surfaces	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Other Non-Asphalt Surfaces	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Parking Lot	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	7.3400e-003	0.0668	0.0561	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003		80.1113	80.1113	1.5400e-003	1.4700e-003	80.5874
NaturalGas Unmitigated	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003		110.6014	110.6014	2.1200e-003	2.0300e-003	111.2587

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					
Elementary School	940.112	0.0101	0.0922	0.0774	5.5000e-004		7.0000e-003	7.0000e-003		7.0000e-003	7.0000e-003		110.6014	110.6014	2.1200e-003	2.0300e-003	111.2587
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
Total		**0.0101**	**0.0922**	**0.0774**	**5.5000e-004**		**7.0000e-003**	**7.0000e-003**		**7.0000e-003**	**7.0000e-003**		**110.6014**	**110.6014**	**2.1200e-003**	**2.0300e-003**	**111.2587**

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					
Elementary School	0.680946	7.3400e-003	0.0668	0.0561	4.0000e-004		5.0700e-003	5.0700e-003		5.0700e-003	5.0700e-003		80.1113	80.1113	1.5400e-003	1.4700e-003	80.5874
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
Total		**7.3400e-003**	**0.0668**	**0.0561**	**4.0000e-004**		**5.0700e-003**	**5.0700e-003**		**5.0700e-003**	**5.0700e-003**		**80.1113**	**80.1113**	**1.5400e-003**	**1.4700e-003**	**80.5874**

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	1.6635	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Unmitigated	1.6635	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015

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	0.3858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2735					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.1600e-003	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Total	**1.6635**	**4.1000e-004**	**0.0446**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**0.0952**	**0.0952**	**2.5000e-004**		**0.1015**

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	0.3858					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.2735					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	4.1600e-003	4.1000e-004	0.0446	0.0000		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004		0.0952	0.0952	2.5000e-004		0.1015
Total	**1.6635**	**4.1000e-004**	**0.0446**	**0.0000**		**1.6000e-004**	**1.6000e-004**		**1.6000e-004**	**1.6000e-004**		**0.0952**	**0.0952**	**2.5000e-004**		**0.1015**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

New Proposed Operation - San Diego County, Annual

New Proposed Operation

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Elementary School	57.96	1000sqft	1.33	57,963.00	0
Parking Lot	49.55	1000sqft	1.14	49,550.00	0
Other Asphalt Surfaces	78.98	1000sqft	1.81	43,880.00	0
Other Non-Asphalt Surfaces	248.46	1000sqft	5.70	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	40
Climate Zone	13			**Operational Year**	2021
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - See assumptions for for details.

Vehicle Trips - No additional students added. Project would result in the reduction of 30 seats.

Water And Wastewater - Project would result in a decrease of 30 students.

Solid Waste - Project would result in the reduction in 30 seats/students.

Water Mitigation -

Energy Mitigation -

Construction Phase - Operation run only.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	1.00
tblConstructionPhase	PhaseEndDate	6/10/2019	5/14/2019
tblLandUse	LandUseSquareFeet	78,980.00	43,880.00
tblLandUse	LandUseSquareFeet	248,460.00	0.00
tblSolidWaste	SolidWasteGenerationRate	75.35	0.00
tblVehicleTrips	WD_TR	15.43	0.00
tblWater	IndoorWaterUseRate	1,680,661.32	0.00
tblWater	OutdoorWaterUseRate	4,321,700.54	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	0.3032	4.0000e-005	4.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7700e-003	7.7700e-003	2.0000e-005	0.0000	8.2900e-003
Energy	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	123.2394	123.2394	4.5700e-003	1.2100e-003	123.7141

Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3051**	**0.0169**	**0.0181**	**1.0000e-004**	**0.0000**	**1.2900e-003**	**1.2900e-003**	**0.0000**	**1.2900e-003**	**1.2900e-003**	**0.0000**	**123.2471**	**123.2471**	**4.5900e-003**	**1.2100e-003**	**123.7224**

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	0.3032	4.0000e-005	4.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7700e-003	7.7700e-003	2.0000e-005	0.0000	8.2900e-003
Energy	1.3400e-003	0.0122	0.0102	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	109.5534	109.5534	4.1300e-003	1.0500e-003	109.9681
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.3045**	**0.0122**	**0.0142**	**7.0000e-005**	**0.0000**	**9.4000e-004**	**9.4000e-004**	**0.0000**	**9.4000e-004**	**9.4000e-004**	**0.0000**	**109.5612**	**109.5612**	**4.1500e-003**	**1.0500e-003**	**109.9764**

	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	N20	CO2e
Percent Reduction	**0.17**	**27.52**	**21.50**	**30.00**	**0.00**	**27.13**	**27.13**	**0.00**	**27.13**	**27.13**	**0.00**	**11.10**	**11.10**	**9.59**	**13.22**	**11.11**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Elementary School	0.00	0.00	0.00		
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		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Elementary School	9.50	7.30	7.30	65.00	30.00	5.00	63	25	12
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Elementary School	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Other Asphalt Surfaces	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Other Non-Asphalt Surfaces	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193
Parking Lot	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	96.2901	96.2901	3.8800e-003	8.0000e-004	96.6260
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	104.9280	104.9280	4.2200e-003	8.7000e-004	105.2940
NaturalGas Mitigated	1.3400e-003	0.0122	0.0102	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	13.2633	13.2633	2.5000e-004	2.4000e-004	13.3421
NaturalGas Unmitigated	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3113	18.3113	3.5000e-004	3.4000e-004	18.4201

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	tons/yr										MT/yr					
Elementary School	343141	1.8500e-003	0.0168	0.0141	1.0000e-004		1.2800e-003	1.2800e-003		1.2800e-003	1.2800e-003	0.0000	18.3113	18.3113	3.5000e-004	3.4000e-004	18.4201
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
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
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
Total		**1.8500e-003**	**0.0168**	**0.0141**	**1.0000e-004**		**1.2800e-003**	**1.2800e-003**		**1.2800e-003**	**1.2800e-003**	**0.0000**	**18.3113**	**18.3113**	**3.5000e-004**	**3.4000e-004**	**18.4201**

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	tons/yr										MT/yr					
Elementary School	248545	1.3400e-003	0.0122	0.0102	7.0000e-005		9.3000e-004	9.3000e-004		9.3000e-004	9.3000e-004	0.0000	13.2633	13.2633	2.5000e-004	2.4000e-004	13.3421
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
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
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
Total		**1.3400e-003**	**0.0122**	**0.0102**	**7.0000e-005**		**9.3000e-004**	**9.3000e-004**		**9.3000e-004**	**9.3000e-004**	**0.0000**	**13.2633**	**13.2633**	**2.5000e-004**	**2.4000e-004**	**13.3421**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	303726	99.2604	4.0000e-003	8.3000e-004	99.6066
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	17342.5	5.6677	2.3000e-004	5.0000e-005	5.6875
Total		**104.9280**	**4.2300e-003**	**8.8000e-004**	**105.2940**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Elementary School	277295	90.6224	3.6500e-003	7.5000e-004	90.9385
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	17342.5	5.6677	2.3000e-004	5.0000e-005	5.6875
Total		**96.2901**	**3.8800e-003**	**8.0000e-004**	**96.6260**

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	0.3032	4.0000e-005	4.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7700e-003	7.7700e-003	2.0000e-005	0.0000	8.2900e-003
Unmitigated	0.3032	4.0000e-005	4.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7700e-003	7.7700e-003	2.0000e-005	0.0000	8.2900e-003

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	0.0704					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2324					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7000e-004	4.0000e-005	4.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7700e-003	7.7700e-003	2.0000e-005	0.0000	8.2900e-003
Total	**0.3032**	**4.0000e-005**	**4.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.7700e-003**	**7.7700e-003**	**2.0000e-005**	**0.0000**	**8.2900e-003**

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	0.0704					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2324					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.7000e-004	4.0000e-005	4.0100e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7700e-003	7.7700e-003	2.0000e-005	0.0000	8.2900e-003
Total	**0.3032**	**4.0000e-005**	**4.0100e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**7.7700e-003**	**7.7700e-003**	**2.0000e-005**	**0.0000**	**8.2900e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Elementary School	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
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

New Proposed Operation

San Diego County, Mitigation Report

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.11	0.33		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			
No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			

No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	250.00
No	Use Low VOC Paint (Residential Exterior)	250.00
No	Use Low VOC Paint (Non-residential Interior)	250.00
No	Use Low VOC Paint (Non-residential Exterior)	250.00
No	Use Low VOC Paint (Parking)	250.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	30.00	
No	Install High Efficiency Lighting		
No	On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Apply Water Conservation on Strategy	0.00	0.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
Yes	Install low-flow bathroom faucet	32.00	
Yes	Install low-flow Kitchen faucet	18.00	
Yes	Install low-flow Toilet	20.00	
Yes	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
Yes	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	