AIR QUALITY & GREENHOUSE GAS IMPACT ASSESSMENT

FOR THE PROPOSED

OLSEN-CHANDLER SPECIFIC PLAN

PASO ROBLES, CA

AUGUST 2019

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LIST OF COMMON TERMS & ACRONYMS

AAM	Annual Arithmetic Mean
ARB	California Air Resources Board
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
DPM	Diesel-Exhaust Particulate Matter or Diesel-Exhaust PM
FCAA	Federal Clean Air Act
GHG	Greenhouse Gases
HAP	Hazardous Air Pollutant
LOS	Level of Service
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards or National AAQS
NESHAPs	National Emission Standards for HAPs
NO_x	Oxides of Nitrogen
OAP	Ozone Attainment Plan
O_3	Ozone
Pb	Lead
PM	Particulate Matter
PM_{10}	Particulate Matter (less than 10 µm)
$PM_{2.5}$	Particulate Matter (less than 2.5 µm)
ppb	Parts per Billion
ppm	Parts per Million
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
SCCAB	South Central Coast Air Basin
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLOAPCD	San Luis Obispo County Air Pollution Control District
SLOCOG	San Luis Obispo Council of Governments
SCS	Sustainable Communities Strategy
SO_2	Sulfur Dioxide
TAC	Toxic Air Contaminant
$\mu g/m^3$	Micrograms per cubic meter
U.S. EPA	United State Environmental Protection Agency

INTRODUCTION

This report provides an analysis of air quality and greenhouse gas impacts associated with the proposed Olsen-Chandler Specific Plan Project. This report also provides a summary of existing conditions in the project area and the applicable regulatory framework pertaining to air quality and climate change.

PROPOSED PROJECT SUMMARY

The proposed Olsen-Chandler Specific Plan will provide a combination of land uses that include residential, commercial, park/open space, private recreation, and school. The plan will include 1,293 residential dwelling units (comprised of 1,065 single-family units and 228 multi-family units), 10,659 square feet (sq.ft.) of a shopping center, 29,335 sq.ft. of private recreation, and 495-student elementary school. The project site is generally located to the north and south of Linne Road, between Fontana Road and Hanson Road. The proposed Olsen-Chandler Specific Plan is depicted in Figure 1.

AIR QUALITY

Existing Setting

The project is located in the City of Paso Robles, within the South Central Coast Air Basin (SCCAB) and within the jurisdiction of the San Luis Obispo County Air Pollution Control District (SLOAPCD). Air quality in the SCCAB is influenced by a variety of factors, including topography, local and regional meteorology.

Topography

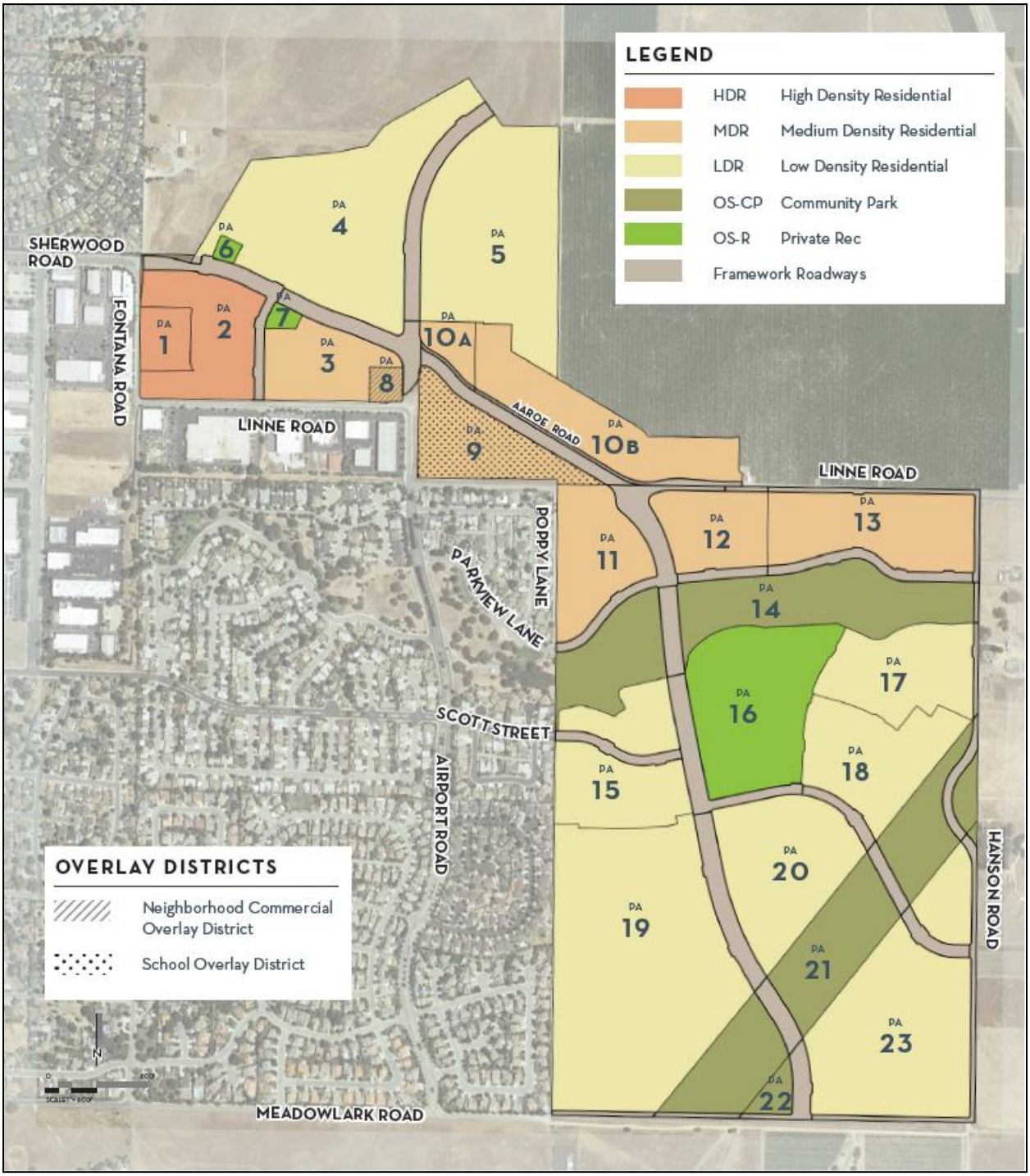
The City of Paso Robles is in the upper Salinas River Valley. The area is bordered on the south and west by the rugged mountainous ridges of the Santa Lucia Coastal Range, to the east by the low hills of the La Panza and Temblor ranges, and to the north by the low hills and flat-topped mesas of the Diablo Range. The highest elevations in the vicinity are in the Santa Lucia Coastal Range, where many peaks are 2,000 to 3,400 feet above mean sea level. Substantial ridgelines are distributed throughout the western, southern, and eastern portions of the City. The effects of the Pacific Ocean are diminished inland and by these major intervening terrain features.

Local and Regional Meteorology

The climate of the county can be generally characterized as Mediterranean, with warm, dry summers and cooler, relatively damp winters. Along the coast, mild temperatures are the rule throughout the year due to the moderating influence of the Pacific Ocean. This effect is diminished inland in proportion to the distance from the ocean or by major intervening terrain features, such as the coastal mountain ranges. As a result, inland areas are characterized by a considerably wider range of temperature conditions. Maximum summer temperatures average about 70 degrees Fahrenheit near the coast, while inland valleys are often in the high 90s. Minimum winter temperatures average from the low 30s along the coast to the low 20s inland (SLOAPCD 2001).

Regional meteorology is largely dominated by a persistent high-pressure area which commonly resides over the eastern Pacific Ocean. Seasonal variations in the strength and position of this pressure cell cause seasonal changes in the weather patterns of the area. The Pacific High remains generally fixed several hundred miles offshore from May through September, enhancing onshore winds and opposing offshore winds. During spring and early summer, as the onshore breezes pass over the cool water of the ocean, fog and low clouds often form in the marine air layer along the coast. Surface heating in the interior valleys dissipates the marine layer as it moves inland (SLOAPCD 2001).

Figure 1. Proposed Olsen-Chandler Specific Plan



Note: Low Density and Medium Density Residential consist of single-family units. High-Density Residential consists of multi-family units.
Source: Rincon Consultants 2019

From November through April the Pacific High tends to migrate southward, allowing northern storms to move across the county. About 90 percent of the total annual rainfall is received during this period. Winter conditions are usually mild, with intermittent periods of precipitation followed by mostly clear days. Rainfall amounts can vary considerably among different regions in the county. In the Coastal Plain, annual rainfall averages 16 to 28 inches, while the Upper Salinas River Valley generally receives about 12 to 20 inches of rain. The Carrizo Plain is the driest area of the county with less than 12 inches of rain in a typical year (SLOAPCD 2001).

Airflow around the county plays an important role in the movement and dispersion of pollutants. The speed and direction of local winds are controlled by the location and strength of the Pacific High-pressure system and other global patterns, by topographical factors, and by circulation patterns resulting from temperature differences between the land and sea. In spring and summer months, when the Pacific High attains its greatest strength, onshore winds from the northwest generally prevail during the day. At night, as the sea breeze dies, weak drainage winds flow down the coastal mountains and valleys to form a light, easterly land breeze (SLOAPCD 2001).

In the Fall, onshore surface winds decline and the marine layer grows shallow, allowing an occasional reversal to a weak offshore flow. This, along with the diurnal alternation of land-sea breeze circulation, can sometimes produce a "sloshing" effect. Under these conditions, pollutants may accumulate over the ocean for a period of one or more days and are subsequently carried back onshore with the return of the sea breeze. Strong inversions can form at this time, "trapping" pollutants near the surface (SLOAPCD 2001).

This effect is intensified when the Pacific High weakens or moves inland to the east. This may produce a "Santa Ana" condition in which air, often pollutant-laden, is transported into the county from the east and southeast. This can occur over a period of several days until the high-pressure system returns to its normal location, breaking the pattern. The breakup of a Santa Ana condition may result in relatively stagnant conditions and a buildup of pollutants offshore. The onset of the typical daytime sea breeze can bring these pollutants back onshore, where they combine with local emissions to cause high pollutant concentrations. Not all occurrences of the "post-Santa Ana" condition lead to high ambient pollutant levels, but it does play an important role in the air pollution meteorology of the county (SLOAPCD 2001).

Atmospheric Stability and Dispersion

Air pollutant concentrations are primarily determined by the amount of pollutant emissions in an area and the degree to which these pollutants are dispersed into the atmosphere. The stability of the atmosphere is one of the key factors affecting pollutant dispersion. Atmospheric stability regulates the amount of vertical and horizontal air exchange or mixing, that can occur within a given air basin. Restricted mixing and low wind speeds are generally associated with a high degree of stability in the atmosphere. These conditions are characteristic of temperature inversions (SLOAPCD 2001).

In the atmosphere, air temperatures normally decrease as altitude increases. At varying distances above the earth's surface, however, a reversal of this gradient can occur. This condition termed an inversion, is simply a warm layer of air above a layer of cooler air, and it has the effect of limiting the vertical dispersion of pollutants. The height of the inversion determines the size of the mixing volume trapped below. Inversion strength or intensity is measured by the thickness of the layer and the difference in temperature between the base and the top of the inversion. The strength of the inversion determines how easily it can be broken by winds or solar heating (SLOAPCD 2001).

Several types of inversions are common to this area. Weak, surface inversions are caused by radiational cooling of air in contact with the cold surface of the earth at night. In valleys and low lying areas, this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Surface inversions are a common occurrence throughout the county during the winter, particularly on cold mornings when the inversion is strongest. As the morning sun warms the earth and the air near the ground, the inversion lifts, gradually dissipating as the day progresses. During the late spring and early summer months, cool air over the ocean can intrude under the relatively warmer air over land, causing a marine inversion. These inversions can restrict dispersion along the coast, but they are typically shallow and will dissipate with surface heating (SLOAPCD 2001).

In contrast, in the summertime, the presence of the Pacific high-pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, is common to all of coastal California and can act as a nearly impenetrable lid to the vertical mixing of pollutants. The base of the inversion typically ranges from 1000 to 2500 feet above sea level; however, levels as low as 250 feet, among the lowest anywhere in the state, have been recorded on the coastal plateau in San Luis Obispo county. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest or worst-case ozone levels are often associated with the presence of this type of inversion (SLOAPCD 2001).

Criteria Air Pollutants

For the protection of public health and welfare, the Clean Air Act (CAA) required that the United States Environmental Protection Agency (U.S. EPA) establish National Ambient Air Quality Standards (NAAQS) for various pollutants. These pollutants are referred to as "criteria" pollutants because the US EPA publishes criteria documents to justify the choice of standards. These standards define the maximum amount of an air pollutant that can be present in ambient air without harm to the public's health. An ambient air quality standard is generally specified as a concentration averaged over a specific time period, such as one hour, eight hours, 24 hours, or one year. The different averaging times and concentrations are meant to protect against different exposure effects. The CAA allows states to adopt additional or more health-protective standards. The air quality regulatory framework and ambient air quality standards are discussed in greater detail later in this report.

Human Health & Welfare Effects

Common air pollutants and associated adverse health and welfare effects are summarized in Table 1. Within the SCCAB, the air pollutants of primary concern, with regard to human health, include ozone, particulate matter (PM) and carbon monoxide (CO). As depicted in Table 1, exposure to increased pollutant concentrations of ozone, PM and CO can result in various heart and lung ailments, cardiovascular and nervous system impairment, and death.

Table 1. Common Pollutants & Adverse Effects

Pollutant	Human Health & Welfare Effects
Particulate Matter (PM_{10} & $PM_{2.5}$)	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
Ozone (O_3)	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield. Damages rubber, some textiles, and dyes.
Sulfur Dioxide (SO_2)	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel; damage crops and natural vegetation. Impairs visibility. A precursor to acid rain.
Carbon Monoxide (CO)	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO_2)	Respiratory irritant; aggravates lung and heart problems. A precursor to ozone and acid rain. Contributes to global warming, and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Lead	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: ARB 2018b

Odors

Typically, odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from the psychological (i.e. irritation, anger, or anxiety) to the physiological, including circulatory and respiratory effects, nausea, vomiting, and headache.

Neither the state nor the federal governments have adopted rules or regulations for the control of odor sources. The SLOAPCD does not have an individual rule or regulation that specifically addresses odors; however, odors would be applicable to SLOAPCD's Rule 204, Nuisance. Any actions related to odors would be based on citizen complaints to local governments and the SLOAPCD. The SLOAPCD recommends that odor impacts be addressed in a qualitative manner. Such analysis shall determine if the project results in excessive nuisance odors, as defined under the California Code of Regulations, Health & Safety Code Section 41700, air quality public nuisance.

Toxic Air Contaminants

Toxic air contaminants (TACs) are air pollutants that may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air, but due to their high toxicity, they may pose a threat to public health even at very low concentrations. Because there is no threshold level below which adverse health impacts are not expected to occur, TACs differ from criteria pollutants for which acceptable levels of exposure can be determined and for which state and federal governments have set ambient air quality standards. TACs, therefore, are not considered "criteria pollutants" under either the Federal Clean Air Act (FCAA) or the California Clean Air Act (CCAA) and are thus not subject to National or State AAQS. TACs are not considered criteria pollutants in that the federal and California Clean Air Acts do not address them specifically through the setting of National or State AAQS. Instead, the U.S. EPA and ARB regulate Hazardous Air Pollutants (HAPs) and TACs, respectively, through statutes and regulations that generally require the use of the maximum or best available control technology to limit emissions. In conjunction with District rules, these federal and state statutes and regulations establish the regulatory framework for TACs. At the national levels, the U.S. EPA has established National Emission Standards for HAPs (NESHAPs), in accordance with the requirements of the FCAA and subsequent amendments. These are technology-based source-specific regulations that limit allowable emissions of HAPs.

Within California, TACs are regulated primarily through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588). The Tanner Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

At the state level, the ARB has authority for the regulation of emissions from motor vehicles, fuels, and consumer products. Most recently, Diesel-exhaust particulate matter (DPM) was added to the ARB list of TACs. DPM is the primary TACs of concern for mobile sources. Of all controlled TACs, emissions of DPM are estimated to be responsible for about 70 percent of the total ambient TAC risk. The ARB has made the reduction of the public's exposure to DPM one of its highest priorities, with an aggressive plan to require cleaner diesel fuel and cleaner diesel engines and vehicles (ARB 2005).

At the local level, air districts have authority over stationary or industrial sources. All projects that require air quality permits from the SLOAPCD are evaluated for TAC emissions. The SLOAPCD limits emissions and public exposure to TACs through a number of programs. The SLOAPCD prioritizes TAC-emitting stationary sources, based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors. The SLOAPCD requires a comprehensive health risk assessment for facilities that are classified in the significant-risk category, pursuant to AB 2588. No major existing sources of TACs have been identified in the project area.

Asbestos

Asbestos is the common name for a group of naturally-occurring fibrous silicate minerals that can separate into thin but strong and durable fibers. Naturally-occurring asbestos, which was identified as a TAC in 1986 by ARB, is located in many parts of California and is commonly associated with ultramafic rock. The project site is not located within an area identified as having a potential for naturally-occurring ultramafic rock and serpentine soils.

Asbestos-containing material may be present in existing structures. The demolition of existing structures may be subject to regulatory requirements for the control of ACM. A summary of applicable regulatory requirements is included in Appendix A.

Ambient Air Quality

Air pollutant concentrations are measured at several monitoring stations in the SCCAB. The Paso Robles-Santa Fe Avenue and Atascadero-Lewis Avenue Monitoring Stations are the closest representative monitoring station with sufficient data to meet U.S. EPA and/or ARB criteria for quality assurance. The monitoring stations record ambient concentrations of ozone, nitrogen dioxide, $PM_{2.5}$, and PM_{10}. Ambient monitoring data was obtained for the last three years of available measurement data (i.e., 2015 through 2017) and is summarized in Table 2. As depicted, the state and federal 8-hour ozone standards were exceeded for two days and one day in 2017, respectively. Measured 1-hour ozone, NO_2, $PM_{2.5}$, and PM_{10} concentrations did not exceed the state and federal ambient air quality standards in the last three years of monitoring.

Table 2. Summary of Ambient Air Quality Monitoring Data

Pollutant	Monitoring Year		
	2015	2016	2017
Ozone (O_3)(1)			
Maximum concentration (1-hour/8-hour average; ppm)	0.073/0.068	0.091/0.067	0.083/0.075
Number of days state/national 1-hour standard exceeded	0/0	0/0	0/0
Number of days state/national 8-hour standard exceeded	0/0	0/0	2/1
Nitrogen Dioxide (NO_2)(2)			
Maximum concentration (1-hour average; ppb)	31	NA	NA
Annual average (ppb)	NA	NA	NA
Number of days state/national standard exceeded	0/0	0/0	0/0
Suspended Particulate Matter ($PM_{2.5}$)(2)			
Maximum 24-hour concentration (national/state; µg/m3)	29.1	NA	NA
Annual average national/state (µg/m3)	NA/NA	NA/NA	NA/NA
Number of days national standard exceeded (measured/calculated)(3)	0/NA	0/NA	0/NA
Suspended Particulate Matter (PM_{10})(1)			
Maximum concentration (national/state; µg/m3)	37.2	44.8	57.0
Number of days state standard exceeded (measured/calculated)(3)	0/0	0/NA	6/NA
Number of days national standard exceeded (measured/calculated)(3)	0/0	0/0	0/NA

ppm = parts per million by volume, µg/m^3 = micrograms per cubic meter, NA=Not Available
1. Based on ambient concentrations obtained from the Paso Robles-Santa Fe Avenue Monitoring Station.
2. Based on ambient concentrations obtained from the Atascadero-Lewis Avenue Monitoring Station.
3. Measured days are those days that an actual measurement was greater than the standard. Calculated days are estimated days that measurement would have exceeded the standard had measurements been collected every day.
Source: ARB 2019c

Regulatory Framework

Air quality within the SCCAB is regulated by several jurisdictions including the U.S. EPA, ARB, and the SLOAPCD. Each of these jurisdictions develops rules, regulations, and policies to attain the goals or directives imposed upon them through legislation.

Federal

U.S. ENVIRONMENTAL PROTECTION AGENCY

At the federal level, the U.S. EPA has been charged with implementing national air quality programs. The U.S. EPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990.

FEDERAL CLEAN AIR ACT

The FCAA required the US EPA to establish National Ambient Air Quality Standards (NAAQS or National AAQS), and also set deadlines for their attainment. Two types of NAAQS have been established: primary standards, which protect public health, and secondary standards, which protect public welfare from non-health-related adverse effects, such as visibility restrictions. NAAQS are summarized in Table 3.

State

CALIFORNIA AIR RESOURCES BOARD

The California Air Resources Board (ARB) is the agency responsible for coordination and oversight of state and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA) of 1988. Other ARB duties include monitoring air quality (in conjunction with air monitoring networks maintained by air pollution control districts and air quality management districts, establishing California Ambient Air Quality Standards (CAAQS), which in many cases are more stringent than the NAAQS, and setting emissions standards for new motor vehicles. The CAAQS are summarized in Table 3. The emission standards established for motor vehicles differ depending on various factors including the model year, and the type of vehicle, fuel, and engine used.

CALIFORNIA CLEAN AIR ACT

The CCAA requires that all air districts in the state endeavor to achieve and maintain CAAQS for Ozone, CO, SO_2, and NO_2 by the earliest practicable date. The CCAA specifies that districts focus particular attention on reducing the emissions from transportation and area-wide emission sources, and the act provides districts with authority to regulate indirect sources. Each district plan is required to either (1) achieve a five percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each non-attainment pollutant or its precursors, or (2) to provide for the implementation of all feasible measures to reduce emissions. Any planning effort for air quality attainment would thus need to consider both state and federal planning requirements.

ASSEMBLY BILLS 1807 & 2588 - TOXIC AIR CONTAMINANTS

Within California, TACs are regulated primarily through AB 1807 (Tanner Air Toxics Act) and AB 2588 (Air Toxics Hot Spots Information and Assessment Act of 1987). The Tanner Air Toxics Act sets forth a formal procedure for ARB to designate substances as TACs. This includes research, public participation, and scientific peer review before ARB designates a substance as a TAC. Existing sources of TACs that are subject to the Air Toxics Hot Spots Information and Assessment Act are required to: (1) prepare a toxic emissions inventory; (2) prepare a risk assessment if emissions are significant; (3) notify the public of significant risk levels; and (4) prepare and implement risk reduction measures.

Table 3. Summary of Ambient Air Quality Standards & Attainment Designations

Pollutant	Averaging Time	California Standards*		National Standards*	
		Concentration*	Attainment Status	Primary[a]	Attainment Status
Ozone (O_3)	1-hour	0.09 ppm	Non-Attainment	–	Attainment Western SLO County
	8-hour	0.070 ppm		0.070 ppm	
Particulate Matter (PM_{10})	AAM	20 µg/m3	Non-Attainment	–	Unclassified/ Attainment
	24-hour	50 µg/m3		150 µg/m3	
Fine Particulate Matter ($PM_{2.5}$)	AAM	12 µg/m3	Attainment	12 µg/m3	Unclassified/ Attainment
	24-hour	No Standard		35 µg/m3	
Carbon Monoxide (CO)	1-hour	20 ppm	Attainment	35 ppm	Attainment/ Maintenance
	8-hour	9 ppm		9 ppm	
Nitrogen Dioxide (NO_2)	AAM	0.030 ppm	Attainment	0.053 ppm	Unclassified
	1-hour	0.18 ppm		100 ppm	
Sulfur Dioxide (SO_2)	AAM	–	Attainment	0.03 ppm	Unclassified
	24-hour	0.04 ppm		0.14 ppm	
	3-hour	–		0.5 ppm (1300 µg/m3)**	
	1-hour	0.25 ppm		75 ppb	
Lead	30-day Average	1.5 µg/m3	Attainment	–	No Attainment Information
	Calendar Quarter	–		1.5 µg/m3	
	Rolling 3-Month Average	–		0.15 µg/m3	
Sulfates	24-hour	25 µg/m3	Attainment	No Federal Standards	
Hydrogen Sulfide	1-hour	0.03 ppm (42 µg/m3)	Attainment		
Vinyl Chloride	24-hour	0.01 ppm (26 µg/m3)	No Information Available		
Visibility-Reducing Particle Matter	8-hour	Extinction coefficient: 0.23/kilometer-visibility of 10 miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when the relative humidity is less than 70%.	Attainment		

** For more information on standards visit: http//ww.arb.ca.gov.research/aaqs/aaqs2.pdf*
*** Secondary Standard*
Source: SLOAPCD 2018; ARB 2019b

IN-USE OFF-ROAD DIESEL VEHICLE REGULATION

On July 26, 2007, the ARB adopted a regulation to reduce diesel particulate matter (PM) and oxides of nitrogen (NOx) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. The regulation applies to self-propelled diesel-fueled vehicles that cannot be registered and licensed to drive on-road, as well as two-engine vehicles that drive on road, with the limited exception of two-engine sweepers. Examples include loaders, crawler tractors, skid steers, backhoes, forklifts, airport ground support equipment, water well drilling rigs, and two-engine cranes. Such vehicles are used in construction, mining, and industrial operations. The regulation does not apply to stationary equipment or portable equipment such as generators. The off-road vehicle regulation establishes emissions performance requirements, reporting, disclosure, and labeling requirements for off-road vehicles, and limits unnecessary idling.

CALIFORNIA BUILDING CODE

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The California Building Code is adopted every three years by the Building Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

GREEN BUILDING STANDARDS

In essence, green buildings standards are indistinguishable from any other building standards. Both standards are contained in the California Building Code and regulate the construction of new buildings and improvements. The only practical distinction between the two is that whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

AB 32, which mandates the reduction of GHG emissions in California to 1990 levels by 2020, increased the urgency around the adoption of green building standards. In its scoping plan for the implementation of AB 32, ARB identified energy use as the second largest contributor to California's GHG emissions, constituting roughly 25 percent of all such emissions. In recommending a green building strategy as one element of the scoping plan, ARB estimated that green building standards would reduce GHG emissions by approximately 26 MMT of CO_2e by 2020.

The green buildings standards are updated every three years and were most recently updated on May 2018. Referred to as the 2019 Building Energy Efficiency Standards, these most recent updates focus on four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements. The ventilation measures improve indoor air quality, protecting homeowners from air pollution originating from outdoor and indoor sources. Under the newly adopted standards, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2018).

Local

COUNTY OF SAN LUIS OBISPO AIR POLLUTION CONTROL DISTRICT

The SLOAPCD is the agency primarily responsible for ensuring that NAAQS and CAAQS are not exceeded and that air quality conditions within the region are maintained. Responsibilities of the SLOAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by the FCAA and the CCAA.

Impact Analysis

Thresholds of Significance

In accordance with Appendix G of the *State CEQA Guidelines,* air quality impacts associated with the proposed project would be considered significant if it would:

a) Conflict with or obstruct implementation of the applicable air quality plan.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

c) Expose sensitive receptors to substantial pollutant concentrations.

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

To assist in the evaluation of air quality impacts, the SLOAPCD has developed recommended significance thresholds, which are contained in the SLOAPCD's *CEQA Air Quality Handbook* (2012). For the purposes of this analysis, project emissions are considered potentially significant impacts if any of the following SLOAPCD thresholds are exceeded:

Construction Impacts

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for a project's short-term construction emissions are presented in Table 4 and discussed, as follows (SLOAPCD 2012):

Table 4. SLOAPCD Thresholds of Significance for Project-Level Construction Impacts

Pollutant	Threshold (1)		
	Daily (lbs/day)	Quarterly Tier 1 (tons)	Quarterly Tier 2 (tons)
Ozone Precursors (ROG + NO_X)	137	2.5	6.3
Diesel Particulate Matter (DPM)	7	0.13	0.32
Fugitive Particulate Matter (PM_{10}), Dust (2)	None	2.5	None

1. Daily and quarterly emissions thresholds are based on the California Health & Safety Code and the ARB Carl Moyer Guidelines.
2. Any project with a grading area greater than 4.0 acres of a worked area can exceed the 2.5 tons PM10 quarterly threshold.
Source: SLOAPCD 2012

ROG and NOx Emissions

Daily: For construction projects exceeding the 137 lbs/day threshold requires Standard Mitigation Measures;

Quarterly – Tier 1: For construction projects exceeding the 2.5 tons/quarter threshold, require Standard Mitigation Measures and Best Available Control Technology (BACT) for construction equipment. Off-site mitigation may be required if feasible mitigation measures are not implemented, or if no mitigation measures are feasible for the project.

Quarterly – Tier 2: For construction projects exceeding the 6.3 tons/quarter threshold, require Standard Mitigation Measures, BACT, implementation of a Construction Activity Management Plan (CAMP) and off-site mitigation are required.

Diesel Particulate Matter (DPM) Emissions

Daily: For construction projects exceeding the 7 lbs/day threshold, require Standard Mitigation Measures;

Quarterly - Tier 1: For construction projects exceeding the 0.13 tons/quarter threshold, require Standard Mitigation Measures, BACT for construction equipment; and,

Quarterly - Tier 2: For construction projects exceeding the 0.32 tons/quarter threshold, require Standard Mitigation Measures, BACT, implementation of a CAMP, and off-site mitigation.

Fugitive Particulate Matter (PM10), Dust Emissions

Quarterly- Tier 1: For construction projects exceeding the 2.5 tons/quarter threshold requires Fugitive PM_{10} Mitigation Measures and may require the implementation of a CAMP.

Operational Impacts

Criteria Air Pollutants

The threshold criteria established by the SLOAPCD to determine the significance and appropriate mitigation level for long-term operational emissions from a project are presented in Table 5. Projects exceeding the 25 ton/year threshold may be required to complete an Activity Management Plan (AMP), which would be constructed in a similar manner to the CAMP mitigation approach for construction-related emissions.

Table 5. SLOAPCD Thresholds of Significance for Project-Level Operational Impacts

Pollutant	Threshold (1)	
	Daily (lbs/day)	Annual (tons/year)
Ozone Precursors (ROG + NO_X)	25	25
Diesel Particulate Matter (DPM)	1.25	None
Fugitive Particulate Matter (PM_{10}), Dust	25	25
CO	550	None

1. Daily and annual emissions thresholds are based on the California Health & Safety Code Division 26, Part 3, Chapter 10, Section 40918 and the ARB Carl Moyer Guidelines for DPM.
Source: SLOAPCD 2012

Toxic Air Contaminants

If a project has the potential to emit toxic or hazardous air pollutants or is located in close proximity to sensitive receptors, impacts may be considered significant due to increased cancer risk for the affected population. The SLOAPCD has defined the excess cancer risk significance threshold at 10 in a million for projects.

Localized CO Concentrations

Localized CO concentrations associated with the proposed project would be considered a less-than-significant impact if: (1) Traffic generated by the proposed project would not result in deterioration of signalized intersection level of service (LOS) to LOS E or F; or (2) the project would not contribute additional traffic to a signalized intersection that already operates at LOS of E or F (Caltrans 1996).

Odors

Screening of potential odor impacts is typically recommended for the following two situations:

- Projects that would potentially generate odorous emissions proposed to locate near existing sensitive receptors or other land uses where people may congregate; and
- Residential or other sensitive receptor projects or other projects that may attract people locating near existing odor sources.

If the proposed project would locate receptors and known odor sources within one mile of each other, a full analysis of odor impacts is recommended. Known odor sources of primary concern, as identified by the SLOAPCD include landfills, transfer stations, asphalt batch plants, rendering plants, petroleum refineries, and painting/coating operations, as well as, composting, food processing, wastewater treatment, chemical manufacturing, and feedlot/dairy facilities.

Methodology

Short-term emissions associated with construction activities are largely dependent on the type of development proposed, area of ground disturbance, amount of buildings to be demolished, equipment required, and construction schedules. Emissions associated with the construction of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod), version 2016.3.2, computer program. Project construction is anticipated to occur over an approximately 45-month period beginning in 2020. According to project engineers, no material would be imported or exported. Approximately 3,400 sq.ft. of existing structures would be demolished. Additional construction information, such as equipment use,

worker vehicle trips, and equipment load factors were not available and were based on default parameters contained in the model. Project construction information is preliminary and is subject to change. Modeling assumptions and output files are included in Appendix C of this report.

Long-term operational increases in emissions of criteria air pollutants were calculated using the CalEEMod, version 2016.3.2. Emissions modeling included quantification of emissions associated with area sources, energy use, and mobile sources. Area sources included the use of architectural coatings and landscape maintenance activities. Energy use included emissions associated with natural gas and electricity use. Reductions in electricity use associated with the installation of solar PV systems for residential uses was calculated based on the estimated total electricity use for proposed single-family and multi-family residential land uses and assuming an average energy reduction of 50 percent (CEC 2019). Mitigated emissions associated with energy use assumes natural-gas fired appliances and building mechanical equipment (e.g., fireplaces, water heaters, space heaters) would not be installed.

Trip-generation rates for proposed residential land uses and the elementary school were derived from the City's *Travel Demand Forecasting Model* (2009), which are specific to the Paso Robles area, rather than relying on trip-generation rates based on nation-wide survey data developed by the Institute of Transportation Engineers (ITE). Although use of the ITE trip-generation rates are often used for traffic analysis purposes, the ITE rates may not be reflective of local conditions. As a result, for emissions calculation purposes, use of locally-specific trip-generation rates is preferred, when available, and approved for use by the SLOAPCD. Mobile-source emissions for land uses not identified in the City's *Travel Demand Forecasting Model*, which included the proposed commercial uses and health club, were quantified based on the trip-generation rates derived from the traffic analysis prepared for this project. Other proposed land uses (i.e., Community Supported Agriculture (CSA) maintenance shed, pool house, pool service building, event barn, community parks, neighborhood open space, and other asphalt surfaces) would not generate vehicle trips. With the exception of proposed residential land uses, the vehicle fleet mix used in the analysis was based on default assumptions contained in CalEEMod for San Luis Obispo County. It is important to note that the default fleet mix contained in CalEEMod is based largely on County-wide data and, therefore, may not be reflective of vehicle fleet mixes specific to some land uses, such as residential uses. For the proposed residential land uses, the fleet mix was adjusted based on the recommended fleet mix for residential land uses obtained from the San Joaquin Valley Air Pollution Control District (SJVAPCD) and approved for use by the SLOAPCD. The residential fleet mix was calculated by applying the SJVAPCD-recommended vehicle fleet-mix adjustments to the default fleet mix identified in CalEEMod for San Luis Obispo County. Land-use specific fleet-mix data for other land uses was not available and, therefore, were based on the default fleet mix identified in CalEEMod. Proposed land uses are summarized in Table 6. Exposure to localized pollutant concentrations was qualitatively assessed. Emission modeling files are provided in Appendix C.

Table 6. Planned Land Uses

Land Uses	Estimated Size (Acre)
Single-Family Residential Housing	147.45
Multifamily Housing (Low-Rise)	14.25
Shopping Center	0.24
Elementary School	0.95
Community Parks	45.3
Neighborhood Open Space	33.8
Private Recreational Uses (Event Barn, Pool, Health/Fitness Club)	17.1
CSA Maintenance Shed	0.01
Other Asphalt Surfaces	97.6
Total	356.7
Source: Rincon Consultants 2019	

Project Impacts and Mitigation Measures

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

SLOAPCD Clean Air Plan

As part of the CCAA, the SLOAPCD is required to develop a plan to achieve and maintain the state ozone standard by the earliest practicable date. The SLOAPCD's 2001 Clean Air Plan (CAP) addresses the attainment and maintenance of state and federal ambient air quality standards. The CAP was adopted by SLOAPCD's on March 26, 2002.

The SLOAPCD's CAP outlines the District's strategies to reduce ozone-precursor pollutants (i.e., ROG and NO_X) from a wide variety of sources. The SLOAPCD's CAP includes a stationary-source control program, which includes control measures for permitted stationary sources; as well as, transportation and land use management strategies to reduce motor vehicle emissions and use. The stationary-source control program is administered by SLOAPCD. Transportation and land use control measures are implemented at the local or regional level, by promoting and facilitating the use of alternative transportation options, increased pedestrian access and accessibility to community services and local destinations, reductions in vehicle miles traveled, and promotion of congestion management efforts. In addition, local jurisdictions also prepare population forecasts, which are used by SLOAPCD to forecast population-related emissions and air quality attainment, including those contained in the SLOAPCD's CAP. As a result, consistency with the SLOAPCD's CAP has been evaluated based on the proposed project's consistency with the land use management strategies and transportation control measures identified in the CAP. This analysis also provides an analysis of year 2050 population projections (medium growth scenario) contained in the *2050 Regional Growth Forecast for San Luis Obispo County* (2017) and projected vehicle miles traveled (VMT), which are relied upon for regional air quality planning purposes.

Transportation and Land Use Control Measures

The SLOAPCD's CAP includes multiple transportation and land use control measures intended to reduce emissions through reductions in VMT and the promotion of alternative forms of transportation. The control measures applicable to the proposed project are summarized in Table 7. As noted in Table 7 and given the conceptual nature of the proposed project, some project features that would support reductions in VMT and the promotion of alternative forms of transportation have not yet been clearly defined. As a result, the proposed project would be considered inconsistent with the SLOAPCD's regional air quality planning efforts.

Projected Population, Employment & VMT Growth

The proposed project has been designed with a mix of land uses, including single-/multi-family residential, commercial, recreational, and public land uses. In total, the project is expected to result in an increase of approximately 3,517 residents and 78 employees. Based on U.S. Census data, the City's existing population is approximately 32,212 residents (USCB 2019). Under the medium growth scenario evaluated in the *2050 Regional Growth Forecast for San Luis Obispo County* (2017) the City's population is estimated to total approximately 32,755 residents in 2025 and 37,858 in 2050. In comparison to the existing estimated population, this equate to an increase of approximately 543 residents by year 2025 and 5,103 residents by year 2050. The proposed project would result in near-term increases in population that would exceed projected year 2025 population projections, but would not exceed future year 2050 projections.

SLOCOG is currently preparing the *2019 Regional Housing Needs Assessment (RHNA)*, which is mandated by state law as part of the periodic process of updating local General Plan Housing Elements. The RHNA allows communities to anticipate and plan for future growth in ways that enhance quality of life, improve access to jobs, promote transportation mobility, and address fair share housing needs. One of the objectives of RHNAs is to improve the intraregional jobs/housing balance, with the objective of achieving a one-to-one ratio. A one-to-one ratio is desirable for supporting and promoting transportation mobility and decreased VMT. Based on the projections identified in the RHNA, the County would need to add 11,535 housing units by the end of 2028 to meet overall jobs/housing goals. This estimate is in line with SLOCOG's adopted 2050 Regional Growth Forecast (City of Paso Robles, 1018).

Table 7. Project Consistency with SLOAPCD's CAP Transportation and Land Use Control Measures

Control Measures	Project Consistency
Land Use Planning Strategies	
L-1 Planning Compact Communities. • Cities and unincorporated communities should be developed at densities that reduce trips and travel distances and encourage the use of alternative forms of transportation. • Urban growth should occur within the urban reserve lines of cities and unincorporated communities. • Local planning agencies should encourage walking and transit use by planning neighborhoods and commercial centers at densities to allow for convenient access to and use of local and regional transit systems.	**Consistent with Mitigation Incorporated**. The proposed project has been designed with a mix of land uses, including single-/multi-family residential, commercial, recreational, and public land uses. This mix of land uses would help to reduce vehicle trips. The project is located within the Urban Reserve Line of the City. Bicycle facilities in the area consist of a mix of Class I and Class II bikeways. Existing transit stops in the project area are located on Sherwood Road at Quail Run, Fontana Road at Linne Road, Airport Road near Parkview Lane, and Airport Road at Scott Street. The proposed project identifies pedestrian and bicycle facilities along some of the proposed on-site roadways, which would provide access to and promote the use of nearby existing bicycle and transit facilities. However, given the conceptual nature of the proposed project, detailed plans have not been developed for all roadways/locations. As a result, the proposed project would be inconsistent with this measure. **Mitigation Measures**: Traffic mitigation included for the proposed project would require the project to make a fair-share contribution to the City's impact fee program to fund necessary public transportation system improvements. Off-site improvements include the installation of traffic control devices and various other improvements that would reduce vehicle congestion and promote traffic calming. In addition, Mitigation Measure AQ-7 includes additional measures that would require the incorporation of features to promote alternative forms of transportation, including access to public transit. With mitigation, the proposed project would be consistent with this measure.
L-2 Providing for Mixed Land Use. • The mixing of compatible commercial and residential land uses should be encouraged when it will reduce dependence on the automobile or improve the balance between jobs and housing without creating incompatible land use relationships.	**Consistent**. As noted above, the proposed project has been designed with a mix of land uses, including single-/multi-family residential, commercial, recreational, and public land uses. This mix of land uses would help to reduce vehicle trips and provide increased balance between jobs and housing in the area. The proposed land uses are compatible with nearby existing land uses. In addition, refer to Control Measure L-1, above.
L-3 Balancing Jobs and Housing. • Within cities and unincorporated communities, the gap between the availability of jobs and housing should be narrowed and should not be allowed to expand.	
L-4 Circulation Management. • Jurisdictions should adopt the concept of improved accessibility as a planning goal and as a means to coordinate land use and transportation planning efforts. • Agencies should focus transportation funds on facilities and promotional programs that support transit, ridesharing, bicycling, and walking before focusing funds on capacity expansion for congestion relief.	**Consistent with Mitigation Incorporated**. The proposed project has been designed to provide efficient access to nearby major transportation systems through the development of a proposed on-site roadway network. However, given the conceptual nature of the project, detailed information is not available for all roadways. As a result, the proposed project would be considered inconsistent with this measure. **Mitigation Measures**: Traffic mitigation included for the proposed project would require the project to make a fair-share contribution to the City's impact fee program to fund necessary public transportation system improvements, including those that would reduce vehicle congestion and promote traffic calming. In addition, Mitigation Measure AQ-7 includes additional measures that would require the incorporation of features to promote alternative forms of transportation, including pedestrian, bicycle, ridesharing, and increased access to public transit. With mitigation, the proposed project would be consistent with this measure.

Table 7. Project Consistency with SLOAPCD's CAP Transportation and Land Use Control Measures

Control Measures	Project Consistency
Transportation Control Measures	
T-2B Regional Public Transit Improvements. • The goal of this measure is to improve transit service and facilities that will promote increased public transit use instead of a private automobile.	**Consistent with Mitigation Incorporated**. Existing transit stops in the project area are located on Sherwood Road at Quail Run, Fontana Road at Linne Road, Airport Road near Parkview Lane, and Airport Road at Scott Street. The proposed project identifies pedestrian and bicycle facilities along some of the proposed on-site roadways, which would provide access to and promote the use of nearby existing transit facilities. However, given the conceptual nature of the proposed project, detailed plans have not been developed for all roadways/locations. As a result, the proposed project would be inconsistent with this measure. **Mitigation Measures**: Traffic mitigation included for the proposed project would require the project to make a fair-share contribution to the City's impact fee program to fund necessary public transportation system improvement, including those that would reduce vehicle congestion and promote traffic calming. In addition, Mitigation Measure AQ-7 includes additional measures that would require the incorporation of features to promote alternative forms of transportation, including pedestrian, bicycle, ridesharing, and increased access to public transit. With mitigation, the project would be consistent with this measure.
T-3 Bicycling and Bikeway Enhancements. • The goal of this measure is to encourage a modal shift to bicycles through implementation of infrastructure improvements and administrative actions that provide inexpensive commute options and increased safety and convenience for commuters.	**Consistent with Mitigation Incorporated**. Refer to Control Measure L-1, above.
T-6 Traffic-Flow Improvements. • This measure focuses on implementation of measures that would promote traffic calming and decreased vehicle congestion.	
T-8 Teleworking, Teleconferencing, and Telelearning. • The objective of this measure is to reduce the number of trips and miles traveled by employees and students by promoting teleworking, tele-conferencing and telelearning.	**Consistent with Mitigation Incorporated**. As noted above, the proposed project has been designed with a mix of land uses, including single-/multi-family residential, commercial, recreational, and public land uses. This mix of land uses would help to reduce vehicle trips and provide increased balance between jobs and housing in the area. However, the proposed project does not include specific measures or design elements that would promote or encourage programs that would reduce VMT, such as ridesharing, alternative work schedules, or teleworking. **Mitigation Measures**: As noted above, various mitigation measures have been incorporated to promote the use of alternative forms of transportation, which would be anticipated to contribute to reductions in worker commute trips and VMT. In addition, Mitigation Measure AQ-7,t. would also encourage non-residential land uses to implement and promote programs to reduce employee vehicle miles traveled (e.g. incentives, SLO Regional Rideshare trip reduction program, vanpools, on-site employee housing, alternative schedules (e.g. 9–80s, 4–10s, telecommuting, satellite work sites, etc.). With mitigation, the project would be consistent with this measure.

According to the RHNA, Paso Robles has about 27 percent more jobs than housing units, indicative of a "jobs-rich" community. The City's jobs to housing ratio is estimated to improve from a year 2015 ratio of 1.27 to a ratio of 1.19 by year 2030 (refer to Table 8). To achieve this improvement in jobs/housing balance, the City will need to add approximately 946 jobs and 1,606 housing units, in comparison to 2015 estimates (City of Paso Robles 2018). The proposed project would contribute to this need by adding approximately 78 jobs and 1,293 housing units. When adding the project's contribution to baseline year 2015 jobs/housing ratio identified in the RHNA, total jobs in the City would increase to 15,149 and total housing units would increase to 13,139. With implementation of the proposed project, the jobs/housing ratio for the City would improve from 1.27 to 1.15, which would help to support and promote local and regional improvements related to increased transportation mobility and reductions in VMT.

Table 8. Jobs and Housing Summary of the City of Paso Robles

Year	Jobs	Housing Units	Jobs/Housing Ratio
2015	15,071	11,846	1.27
2030	16,017	13,452	1.19
Year 2030 Compared to Year 2015:	+946	+1,606	-0.08
Source: City of Paso Robles. 2018.			

As noted above, the proposed project would not be inconsistent with projected 2030 population, employment, or VMT growth for the region. However, given the conceptual nature of the project, some features that would support reductions in VMT and the promotion of alternative forms of transportation have not yet been clearly defined or incorporated as part of the proposed project. In addition, as noted in Impact AQ-B, construction-generated emissions of ROG+NO_X and daily operational emissions of ROG+NO_X, as well as, fugitive PM_{10} would exceed SLOAPCD's recommended significance thresholds. For these reasons, the proposed project would be considered to potentially conflict with regional air quality planning efforts. This impact is considered ***potentially significant.***

Particulate Matter Report – Implementation of SB 656 Requirements

In July 2005, SLOAPCD adopted the *Particulate Matter Report* (PM Report). The PM Report identifies various measures and strategies to reduce public exposure to PM emitted from a wide variety of sources, including emissions from permitted stationary sources and fugitive sources, such as construction activities. As discussed in Impact AQ-B, uncontrolled fugitive dust generated during construction may result in localized pollutant concentrations that may result in increased nuisance concerns to nearby land uses. Therefore, construction-generated emissions of PM would be considered to have a ***potentially significant*** impact with regard to air quality planning efforts.

Mitigation Measures

Implement Mitigation Measures AQ-1 through AQ-7 (refer to Impact AQ-B).

Significance After Mitigation

Implementation of Mitigation Measures AQ-1, AQ-2, AQ-3, AQ-4, AQ-5, and AQ-6 would include measures to reduce construction-generated emissions of NOx, ROG, and PM. Mitigation Measures AQ-7 would include measures to reduce operational emissions of ROG, NO_x, and PM. Together these measures would help to provide consistency with the measures identified in the SLOAPCD's CAP. Construction emissions of ROG+NO_x would not exceed SLOAPCD's recommended significant thresholds after mitigation. However, daily operational emissions of ROG+NO_X and fugitive PM_{10} would exceed SLOAPCD's recommended significant thresholds after mitigation. As a result, the operational phase of the project would conflict with regional air quality planning efforts. With mitigation, this impact would be considered ***significant and unavoidable.***

Impact AQ-B. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Construction Phase.

Short-term Construction Emissions

Construction-generated emissions are of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact. Construction of the proposed project would result in the temporary generation of emissions associated with site grading and excavation, paving, motor vehicle exhaust associated with construction equipment and worker trips, as well as the movement of construction equipment on unpaved surfaces. Short-term construction emissions would result in increased emissions of ozone-precursor pollutants (i.e., ROG and NO_X) and emissions of PM. Emissions of ozone-precursors would result from the operation of on- and off-road motorized vehicles and equipment. Emissions of airborne PM are largely dependent on the amount of ground disturbance associated with site preparation activities and can result in increased concentrations of PM that can adversely affect nearby sensitive land uses.

Estimated maximum daily and quarterly emissions associated with construction of the proposed project are presented in Table 9 and Table 10, respectively, and summarized in Table 11. Construction generated emissions were compared to SLOAPCD's recommended significant thresholds (Daily, Quarterly Tier 1, and Quarterly Tier 2). As depicted in Table 9, maximum daily emissions associated with the construction of the proposed project would total approximately 235.2 lbs/day of ROG+NO_X and 2.3 lbs/day of exhaust PM_{10}. As depicted in Table 10, the maximum quarterly construction-generated emissions would total approximately 7.4 tons/quarter of ROG+NO_X, 1.7 tons/quarter of fugitive PM_{10}, and 0.07 tons/quarter of exhaust PM_{10}.

Table 9. Daily Construction Emissions Without Mitigation

Construction Activity	Construction Year	Maximum Daily Emissions (lbs/day)[1]	
		ROG+NO_X	Exhaust PM_{10}
Demolition	2020	37.6	1.7
Site Preparation	2020	46.6	2.2
Grading/Excavation	2020	54.8	2.2
Building Construction	2020	204.1	2.1
Architectural Coatings	2020	31.1	0.2
Building Construction	2021	188.0	1.6
Architectural Coatings	2021	31.3	0.1
Building Construction	2022	175.9	1.4
Architectural Coatings	2022	30.6	0.1
Building Construction	2023	149.0	1.1
Architectural Coatings	2023	30.1	0.1
Paving	2023	17.0	0.5
SLOAPCD Daily Thresholds (pounds/day)		***137***	***7***
Maximum Daily Emissions-Year 2020		235.2	2.3
Exceed SLOAPCD Thresholds?		**Yes**	No
Maximum Daily Emissions-Year 2021		219.3	1.7
Exceed SLOAPCD Thresholds?		**Yes**	No
Maximum Daily Emissions-Year 2022		206.5	1.5
Exceed SLOAPCD Thresholds?		**Yes**	No
Maximum Daily Emissions-Year 2023		196.1	1.7
Exceed SLOAPCD Thresholds?		No	No

Maximum Daily Emissions: Assumes that facility construction, paving, and application of architectural coatings could potentially occur simultaneously on any given day. To be conservative, exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix C for modeling assumptions and results.
1 Maximum daily emissions include on-site and off-site emissions.

Table 10. Quarterly Construction Emissions Without Mitigation

Quarter	Maximum Quarterly Emissions (tons)[1]			
	ROG+NO_X	PM_{10}[2]		
		Fugitive	Exhaust	Total
Year 2020 - Quarter 1	1.7	0.7	0.07	0.8
Year 2020 - Quarter 2	2.9	1.0	0.07	1.1
Year 2020 - Quarter 3	6.6	1.4	0.07	1.5
Year 2020 - Quarter 4	7.4	1.6	0.07	1.7
Year 2021 - Quarter 1	7.1	1.7	0.06	1.8
Year 2021 - Quarter 2	7.0	1.7	0.06	1.8
Year 2021 - Quarter 3	7.1	1.7	0.06	1.8
Year 2021 - Quarter 4	7.2	1.7	0.06	1.8
Year 2022 - Quarter 1	6.7	1.7	0.05	1.8
Year 2022 - Quarter 2	6.6	1.7	0.05	1.8
Year 2022 - Quarter 3	6.7	1.7	0.05	1.8
Year 2022 - Quarter 4	6.8	1.7	0.05	1.8
Year 2023 - Quarter 1	5.9	1.7	0.04	1.8
Year 2023 - Quarter 2	4.9	1.4	0.03	1.5
Year 2023 - Quarter 3	0.3	0.0	0.01	<0.1
SLOAPCD Quarterly Tier 1/Tier 2 Thresholds (tons/quarter)	**2.5/6.3**	**2.5/None**	**0.13/0.32**	**None**
Maximum Quarterly Emissions:	7.4	1.7	0.07	1.8
Exceed SLOAPCD Tier 1/Tier 2 Thresholds?	**Yes/Yes**	**No/NA**	**No/No**	**NA**

Maximum Quarterly Emissions: Assumes that facility construction, paving, and application of architectural coatings could potentially occur simultaneously on any given day. To be conservative, total exhaust PM_{10} emissions were compared to SLOAPCD's DPM threshold. Totals may not sum due to rounding. Refer to Appendix C for modeling assumptions and results. NA=Not Applicable
1. Maximum daily emissions include on-site and off-site emissions..

Table 11. Summary of Construction Emissions Without Mitigation

Criteria	Project Emissions	SLOAPCD Significance Threshold		Exceeds Significance Threshold?	
Maximum Daily Emissions of ROG+NO_X	235.2 lbs/day	137 lbs/day		**Yes**	
Maximum Daily Emissions of DPM	2.3 lbs/day	7 lbs/day		No	
		Tier 1	**Tier 2**	**Tier 1**	**Tier 2**
Maximum Quarterly Emissions of ROG+NO_X	7.4 tons/qtr	2.5 tons/qtr	6.3 tons/qtr	**Yes**	**Yes**
Maximum Quarterly Emissions of DPM	0.07 tons/qtr	0.13 tons/qtr	0.32 tons/qtr	No	No
Maximum Quarterly Emissions of Fugitive PM	1.49 tons/qtr	2.5 tons/qtr	None	No	No

Refer to Appendix C for modeling assumptions and results.

Maximum daily and quarterly construction emissions of ROG+NO_X would exceed SLOAPCD's daily, quarterly Tier 1, and quarterly Tier 2 significance thresholds. Emissions would be largely a result of mobile-source emissions associated with construction vehicle and equipment operations anticipated to occur during the building construction phase. Estimated emissions of fugitive PM and DPM would not exceed SLOAPCD's significance thresholds. However, if uncontrolled, fugitive dust generated during construction may result in localized pollutant concentrations that could exceed ambient air quality standards and result in increased nuisance concerns to nearby land uses. For these reasons, construction-generated emissions would be considered to have a ***potentially significant*** impact

Mitigation Measures

AQ-1: A Construction Activity Management Plan (CAMP) shall be prepared to reduce construction generated emissions. At a minimum, the CAMP shall include SLOAPCD-recommended measures for the control of construction-generated emissions (refer to Mitigation Measures AQ-2 through AQ-6) and be submitted to SLOAPCD for review and approval at least three months prior to start of construction. If implementation of the SLOAPCD-recommended Standard and Best Available Control Technology (BACT) measures cannot reduce emissions below applicable thresholds, off-site mitigation may be required in coordination with SLOAPCD. The CAMP should include the following the following elements:

a. A Dust Control Management Plan that encompasses all, but is not limited to, dust control measures;
b. Tabulation of on and off-road construction equipment (age, horse-power and miles and/or hours of operation);
c. Schedule construction truck trips during non-peak hours to reduce peak-hour emissions;
d. Limit the length of the construction work-day period, if necessary; and,
e. Phase construction activities, if appropriate.

AQ-2: Standard Mitigation measures shall be implemented to reduce construction generated NO_x, ROG, and DPM.

a. Maintain all construction equipment in proper tune according to manufacturer's specifications;
b. Fuel all off-road and portable diesel-powered equipment with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road);
c. Diesel-fueled construction equipment shall meet, at a minimum, ARB's Tier 2 certified engines or cleaner off-road heavy-duty diesel engines, and comply with the State Off-Road Regulation;
d. Use on-road heavy-duty trucks that meet the ARB's 2007 or cleaner certification standard for on-road heavy-duty diesel engines, and comply with the State On-Road Regulation;
e. Construction or trucking companies with fleets that do not have engines in their fleet that meet the engine standards identified in the above two measures (e.g. captive or NOx exempt area fleets) may be eligible by proving alternative compliance;
f. All on and off-road diesel equipment shall not idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5-minute idling limit;
g. Diesel idling within 1,000 feet of sensitive receptors is not permitted;
h. Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
i. Electrify equipment when feasible;
j. Substitute gasoline-powered in place of diesel-powered equipment, where feasible; and,
k. Use alternative-fueled construction equipment on-site where feasible, such as compressed natural gas (CNG), liquefied natural gas (LNG), propane or biodiesel.

AQ-3: The following BACT measures shall be implemented to reduce construction generated ozone-precursor emissions.

a. Further reducing emissions by expanding the Standard Mitigation requirements (MM AQ-2) to incorporate the use of Tier 3 and Tier 4 off-road equipment; repowered off-road equipment using cleaner engines; heavy-duty trucks meeting ARB's 2010, or cleaner, certification standard for on-road heavy-duty diesel engines; and installing California Verified Diesel Emission Control Strategies.

AQ-4: To the extent deemed necessary, based on the estimated emissions to be included in the CAMP, off-site mitigation shall be implemented to reduce construction generated emissions by stationary and mobile sources. It should include the following measures, but not be limited to, the following elements:

a. Fund a program to buy and scrap older heavy-duty diesel vehicles or equipment;
b. Replace/repower transit buses;
c. Replace/repower heavy-duty diesel school vehicles (i.e. bus, passenger or maintenance vehicles);

d. Retrofit or repower heavy-duty construction equipment, or on-road vehicles;
e. Repower or contribute to funding clean diesel locomotive main or auxiliary engines;
f. Purchase VDECs for local school buses, transit buses or construction fleets;
g. Install or contribute to funding alternative fueling infrastructure (i.e. fueling stations for CNG, LPG, conductive and inductive electric vehicle charging, etc.);
h. Fund expansion of existing transit services; and,
i. Replace/repower marine diesel engines.

AQ-5: The following measures shall be implemented to reduce construction generated fugitive dust. These measures shall be shown on grading and building plans.

a. Reduce the amount of disturbed area where possible.
b. Use water trucks, APCD approved dust suppressants (see Section 4.3 in the CEQA Air Quality Handbook), or sprinkler systems in sufficient quantities to prevent airborne dust from leaving the site and from exceeding the District's limit of 20% opacity for greater than 3 minutes in any 60-minute period. Increased watering frequency would be required whenever wind speeds exceed 15 mph. Reclaimed (non-potable) water should be used whenever possible. Please note that since water use is a concern due to drought conditions, the contractor or builder shall consider the use of an APCD-approved dust suppressant where feasible to reduce the amount of water used for dust control. For a list of suppressants, see Section 4.3 of the CEQA Air Quality Handbook.
c. All dirt stockpile areas should be sprayed daily as needed.
d. Permanent dust control measures identified in the approved project revegetation and landscape plans should be implemented as soon as possible following completion of any soil disturbing activities;
e. Exposed ground areas that are planned to be reworked at dates greater than one month after initial grading should be sown with a fast germinating, non-invasive grass seed and watered until vegetation is established.
f. All disturbed soil areas not subject to revegetation should be stabilized using approved chemical soil binders, jute netting, or other methods approved in advance by the SLOAPCD.
g. All roadways, driveways, sidewalks, etc. to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
h. Vehicle speed for all construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site.
i. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (minimum vertical distance between the top of load and top of trailer) in accordance with CVC Section 23114.
j. Install wheel washers at the construction site entrance/exit, wash off the tires or tracks of all trucks and equipment leaving the site, or implement other SLOAPCD-approved track-out prevention devices sufficient to minimize the track-out of soil onto paved roadways.
k. Sweep streets at the end of each day if visible soil material is carried onto adjacent paved roads. Water sweepers with reclaimed water should be used where feasible.
l. The burning of vegetative material shall be prohibited. Effective February 25, 2000, the APCD prohibited developmental burning of vegetative material within San Luis Obispo County. If you have any questions regarding these requirements, contact the SLOAPCD Engineering & Compliance Division at (805) 781-5912.
m. The contractor or builder shall designate a person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures as necessary to minimize dust complaints, reduce visible emissions below 20% opacity, and to prevent the transport of dust off-site. Their duties shall include holidays and weekend periods when work may not be in progress. The name and telephone number of such persons shall be provided to the SLOAPCD Compliance Division prior to the start of any grading, earthwork or demolition.
n. When applicable, portable equipment, 50 horsepower (hp) or greater, used during construction activities shall be registered with the California statewide portable equipment registration program (issued by the California Air Resources Board) or be permitted by the APCD. Such equipment may include power screens, conveyors, internal combustion engines, crushers, portable generators, tub grinders, trammel screens, and portable plants (e.g, aggregate plant,

asphalt plant, concrete plant). For more information, contact the SLOAPCD Engineering & Compliance Division at (805) 781-5912.

o. Construction of the proposed project shall use low-VOC content paints not exceeding 50 grams per liter.

p. To the extent locally available, use prefinished building materials or materials that do not require the application of architectural coatings.

AQ-6: The following measures shall be implemented to reduce construction emissions from on and off-road construction equipment (NOx, ROG, and DPM) These measures shall be shown on grading and building plans:

a. Idling Restrictions Near Sensitive Receptors for Both On and off-Road Equipment
   1) Staging and queuing areas shall not be located within 1,000 feet of sensitive receptors;
   2) Diesel idling within 1,000 feet of sensitive receptors is not permitted;
   3) Use of alternative fueled equipment is recommended whenever possible; and,
   4) Signs that specify the no-idling requirements must be posted and enforced at the construction site.

b. Idling Restrictions for On-road Vehicles

   Section 2485 of Title 13, the California Code of Regulations limits diesel-fueled commercial motor vehicles that operate in the State of California with gross vehicular weight ratings of greater than 10,000 pounds and licensed for operation on highways. It applies to California and non-California based vehicles. In general, the regulation specifies that drivers of said vehicles:
   1) Shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location, except as noted in Subsection (d) of the regulation; and,
   2) Shall not operate a diesel-fueled auxiliary power system (APS) to power a heater, air conditioner, or any ancillary equipment on that vehicle during sleeping or resting in a sleeper berth for greater than 5.0 minutes at any location when within 100 feet of a restricted area, except as noted in Subsection (d) of the regulation.
   3) Signs must be posted in the designated queuing areas and job sites to remind drivers of the 5-minute idling limit. The specific requirements and exceptions in the regulation can be reviewed at the following web site: www.arb.ca.gov/msprog/truck-idling/2485.pdf.

c. Idling Restrictions for off-Road Equipment

   Off-road diesel equipment shall comply with the 5-minute idling restriction identified in Section 2449(d)(3) of the California Air Resources Board's In-Use Off-Road Diesel regulation: www.arb.ca.gov/regact/2007/ordiesl07/frooal.pdf.

   1) Signs shall be posted in the designated queuing areas and job sites to remind off-road equipment operators of the 5-minute idling limit.

Significance After Mitigation

Implementation of Mitigation Measures AQ-1, AQ-2, AQ-3, AQ-4, AQ-5, and AQ-6 would include measures to reduce construction-generated emissions of fugitive dust, as well as, mobile-source emissions associated with construction vehicles (e.g. Tier 3 and Tier 4 off-road engines) and equipment operations and evaporative emissions from architectural coasting (e.g. low VOC-emission paint). Together these measures would assist with the compliance of SLOAPCD's 20-percent opacity limit (APCD Rule 401), nuisance rule (APCD Rule 402), and minimize potential nuisance impacts to nearby receptors. To the extent necessary, off-site mitigation may also be required as part of the CAMP to be prepared (Mitigation Measure AQ-1) to ensure that construction-generated emissions would not exceed applicable SLOAPCD thresholds. As a result, daily and quarterly construction emissions of ROG + NO_X would not exceed SLOAPCD's construction emission thresholds. With mitigation, this impact would be considered ***less than significant.***

Long-term Operational Emissions

Long-term operational emissions associated with the proposed project would be predominantly associated with mobile sources. To a lesser extent, emissions associated with area sources, such as landscape maintenance activities, as well as, use of electricity and natural gas would also contribute to increased operational emissions.

Unmitigated operational emissions associated with the proposed project are summarized in Table 12. As shown, maximum daily operational emissions of ROG+NO_x would total approximately 133.2 lbs/day and 72.1 lbs/day of fugitive PM_{10}. Daily emissions of ROG+NO_x and fugitive PM_{10} would exceed SLOAPCD's corresponding significance thresholds. It is also important to note that the proposed project is not anticipated to include the installation of stationary or mobile sources that would result in daily emissions in excess of SLOAPCD's DPM threshold. Annual emissions of ROG+NO_x would total approximately 22.3 tons/year and fugitive PM_{10} would total approximately 10.3 tons/year. Estimated annual operational emissions would not exceed SLOAPCD's recommended significance thresholds. The proposed project would result in increased emissions in excess of applicable significance thresholds for pollutants for which the region is designated non-attainment. As a result, this impact would be considered ***potentially significant***.

Table 12. Operational Emissions Without Mitigation

Operational Period/Source	Emissions[1]						
	ROG	NO_X	ROG+NO_X	CO	PM_{10}		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Area Source	71.9	1.2	73.1	106.7	0	0.6	0.6
Energy Use	1.0	8.8	9.8	3.9	0	0.7	0.7
Mobile	16.4	33.9	50.3	202.4	72.1	0.6	72.7
Total Project Emissions	89.3	43.9	133.2	313.0	72.1	1.9	74.0
SLOAPCD Significance Thresholds	--	--	25	550	25	1.25[2]	--
Exceeds SLOAPCD Thresholds?	--	--	**Yes**	No	**Yes**	No[2]	--
Annual Emissions (tons/year)							
Total Project Emissions	15.6	6.7	22.3	15.0	10.3	0.3	10.6
SLOAPCD Significance Thresholds	--	--	25	--	25	--	--
Exceeds SLOAPCD Thresholds?	--	--	No	--	No	--	--

1. *Daily emissions are based on the highest emissions for summer or winter operational conditions for buildout year 2024 conditions. Totals may not sum due to rounding. Refer to Appendix C for modeling output files and assumptions.*
2. *The SLOAPCD-recommended DPM significance threshold applies to on-site emission sources. The proposed project is not anticipated to include the installation of on-site stationary or mobile sources of DPM emissions that would be projected to exceed the SLOAPCD's significance threshold of 1.25 lbs/day.*

Mitigation Measures

AQ-7: The following mitigation measures shall be implemented, to the extent possible, to minimize long-term operational emissions of ROG, NO_x, CO, and PM_{10} to the extent locally available.

a. Install electric fireplaces in place of EPA certified Tier 2 residential wood-burning and natural gas appliances.
b. Provide a pedestrian-friendly and interconnected streetscape with good access to/from the development for pedestrians, bicyclists, and transit users to make alternative transportation more convenient, comfortable and safe. Features may include: appropriate signalization and signage; safe routes to school; linking cul-de-sacs and dead ends; orienting buildings toward streets with automobile parking in the rear, etc.
c. Provide shade over 50% of parking spaces to reduce evaporative emissions from parked vehicles, excluding areas where increased shade would affect the performance of solar PV systems.
d. Reduce fugitive dust from roads and parking areas with the use of paving or other materials.

e. Implement driveway design standards (e.g., speed bumps, curved driveway) for self-enforcement of reduced speed limits on unpaved driveways.
f. Use an SLOAPCD-approved suppressant on private unpaved roads leading to the site, unpaved driveways and parking areas applied at a rate and frequency that ensures compliance with SLOAPCD Rule 401: Visible Emissions, and ensures off-site nuisance impacts do not occur.
g. Incorporate traffic calming modifications to project roads to reduce vehicle speeds and increase pedestrian and bicycle usage and safety.
h. Work with SLOCOG to create, improve, or expand a nearby 'Park and Ride' lot with car parking and bike lockers in proportion to the size of the project.
i. Implement on-site circulation design elements in parking lots to reduce vehicle queuing and improve the pedestrian environment.
j. Encourage future non-commercial land uses to provide employee lockers and showers to promote bicycle and pedestrian use. One shower and 5 lockers for every 25 employees is recommended.
k. Increase bicycle accessibility and safety in the vicinity of the project; for example: provide interconnected bicycle routes/lanes or construction of bikeways.
l. Exceed Cal Green standards by 25% for providing on-site bicycle parking: both short term racks and long term lockers, or a locked room with standard racks and access limited to bicyclists only.
m. If the project is located on an established transit route, provide improved public transit amenities (e.g.: covered transit turnouts, direct pedestrian access, bicycle racks, covered bench, smart signage, route information displays, lighting, etc.).
n. Encourage non-commercial land uses to provide a bicycle-share program.
o. Encourage 15% of fleet vehicles owned by non-commercial land uses to be zero-emission vehicles.
p. Encourage neighborhood electric vehicles/car-share program for the development.
q. Provide dedicated parking for carpools, vanpools, and/or high-efficiency vehicles to meet or exceed Cal Green Tier 2 for non-residential land uses.
r. Encourage non-residential land uses to provide vanpool, shuttle, minibus service (alternative fueled preferred), where appropriate.
s. Encourage non-residential land uses to provide childcare facility on site.
t. Encourage non-residential land uses to implement and promote programs to reduce employee vehicle miles traveled (e.g. incentives, SLO Regional Rideshare trip reduction program, vanpools, on-site employee housing, alternative schedules (e.g. 9–80s, 4–10s, telecommuting, satellite work sites, etc.).
u. Encourage non-residential land uses to provide a lunchtime shuttle to reduce single-occupant vehicle trips and/or coordinate regular food truck visits.
v. Meet or exceed applicable building standards at the time of development for providing electric vehicle charging infrastructure.
w. Meet or exceed applicable building standards at the time of development for building energy efficiency with a goal of achieving zero net energy (ZNE) buildings.
x. Meet or exceed applicable building standards at the time of development for utilizing recycled content materials.
y. Meet or exceed applicable building standards at the time of development for reducing cement use in the concrete mix as allowed by local ordinance and conditions.
z. Meet or exceed applicable building standards at the time of development for the use of greywater, rainwater or recycled water.
aa. Meet or exceed applicable building standards at the time of development for using shading, trees, plants, cool roofs, etc. to reduce the "heat island" effect.
bb. All built-in appliances shall comply with California Title 20, Appliance Efficiency Regulation.
cc. Utilize on-site renewable energy systems (e.g. solar, wind, geothermal, biomass and/or biogas) sufficient to meet or exceed applicable building standards at the time of development with a goal of achieving zero net energy (ZNE) buildings.
dd. Design roof trusses to handle dead weight loads of standard solar-heated water and photovoltaic panels.

Significance After Mitigation

Mitigated operational emissions associated with the proposed project are summarized in Table 13. With the implementation of Mitigation Measures AQ-7, operational daily and annual emissions would be reduced. However, operational emissions would still exceed SLOAPCD's recommended significant thresholds and result in a cumulatively considerable net increase of ozone and PM_{10} for which the area is designated non-attainment under CAAQS. With mitigation, this impact would be considered ***significant and unavoidable***.

Table 13. Operational Emissions With Mitigation

Operational Period/Source	Emissions						
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}		
					Fugitive	Exhaust	Total
Daily Emissions (lbs/day)							
Total Project Emissions	87.8	32.6	120.5	292.5	63.6	1.1	64.7
SLOAPCD Significance Thresholds	--	--	25	550	25	1.25	--
Exceeds SLOAPCD Thresholds?	--	--	**Yes**	No	**Yes**	No	--
Annual Emissions (tons/year)							
Total Project Emissions	15.4	4.8	20.2	44.4	9.1	0.2	9.3
SLOAPCD Significance Thresholds	--	--	25	--	25	--	--
Exceeds SLOAPCD Thresholds?	--	--	No	--	No	--	--

Note: Based on year 2024 operational conditions. Totals may not sum due to rounding. Refer to Appendix C for modeling output files and assumptions.

Impact AQ-D. Expose sensitive receptors to substantial pollutant concentrations.

The project site is bound by Fontana Road to the west and Hanson Road to the east. Nearby land uses consist predominantly of residential dwellings. The nearest Paso Express Bus Stop is located adjacent to the project site along Linne Road near Fontana Road. The nearest sensitive land uses include residential dwellings located across Poppy Lane, approximately 20 feet west of the project site.

Naturally-Occurring Asbestos

Naturally-occurring asbestos (NOA) has been identified as a toxic air contaminant by the ARB. In accordance with ARB Air Toxics Control Measure (ATCM), prior to any grading activities, a geologic evaluation should be conducted to determine if NOA is present within the area that will be disturbed. If NOA is not present, an exemption request form, along with a copy of the geologic report, must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM.

Based on a review of the SLOAPCD's map depicting potential areas of NOA, the project site is not located in or near an area that has been identified as having a potential for NOA (refer to Appendix B). However, there is a potential for NOA could potentially be discovered during the grading process. As a result, this impact would be considered ***potentially significant***.

Localized CO Concentrations

Localized concentrations of CO are of primary concern in areas located near congested roadway intersections. Of particular concern are signalized intersections that are projected to operate at unacceptable levels of service (LOS) E or F (Caltrans 1996).

Based on the traffic analysis prepared for this project, the project would result in or contribute to unacceptable levels of service (i.e., LOS E or F) at three primarily affected signalized intersections (CCTC 2019). These affected signalized intersections include SR46E/Golden Hill Rd, 13th St/Riverside Ave, and Niblick Rd/South River Rd. Localized 1-hour and 8-hour CO concentrations at these intersections were modeled using

the Caline4 computer program in accordance with Caltrans-recommended methodologies. Predicted CO concentrations at primarily affected signalized intersections are summarized in Table 14. As depicted in Table 14, the highest predicted 1-hour and 8-hour CO concentrations at these intersections would be 3.0 and 2.9 ppm, respectively. Predicted CO concentrations at these intersections would not exceed the 1-hour and 8-hour CAAQS of 20 and 9 parts per million (ppm), respectively. As a result, this impact is considered ***less than significant***.

Table 14. Localized Mobile-Source CO Concentrations

Roadway Intersection	Predicted CO Concentration (ppm)	
	1-Hour	8-Hour
SR 46 East/Golden Hill Road	3.0	1.7
13th Street/Riverside Avenue	2.9	1.7
Niblick Road/South River Road	3.0	1.7
California Ambient Air Quality Standards (CAAQS):	20	9
Exceeds CAAQS/Significant Impact?	No	No

Notes: Localized mobile-source CO concentrations were calculated using the Caline4 computer program based on peak-hour traffic volumes derived from the traffic analysis prepared for this project. Predicted 1-hour CO concentrations were converted to 8-hour concentrations assuming a persistence factor of 0.8. Modeled 1-hour and 8-hour receiver locations were placed at 3 and 7 meters from the roadway edge, respectively. Ambient background 1-hour and 8-hour CO concentrations (2.6 and 1.5, respectively) were based on the highest measured CO concentrations obtained from the nearest monitoring stations for the last three years of available data (2004-2006). Refer to Appendix C for emissions modeling assumptions and results.

Asbestos-Containing Materials

Demolition activities can have potential negative air quality impacts, including issues surrounding the proper handling, demolition, and disposal of asbestos-containing material (ACM). ACM could be encountered during the demolition of existing buildings, particularly older structures constructed prior to 1970. Asbestos can also be found in various building products, including (but not limited to) utility pipes/pipelines (transit pipes or insulation on pipes). If a project will involve the disturbance or potential disturbance of ACM, various regulatory requirements may apply, including the requirements stipulated in the National Emission Standard for Hazardous Air Pollutants (40CFR61, Subpart M-Asbestos NESHAP). These requirements include but are not limited to: 1) notification, within at least 10 business days of activities commencing, to the APCD, 2) an asbestos survey conducted by a Certified Asbestos Consultant, and, 3) applicable removal and disposal requirements of identified ACM.

The proposed project would include the demolition of approximately 2,400 sq.ft. of existing on-site structures. The demolition of existing structures may result in disturbance of ACM. This impact is considered ***potentially significant***.

Lead-Coated Materials

Demolition of structures coated with lead-based paint can have potential negative air quality impacts and may adversely affect the health of nearby individuals. Improper demolition can result in the release of lead-containing particles from the site. Sandblasting or removal of paint by heating with a heat gun can result in significant emissions of lead. In such instances, proper abatement of lead before demolition of these structures must be performed in order to prevent the release of lead from the site. Depending on the removal method, a SLOAPCD permit may be required. The demolition of existing structures may result in the disturbance of lead-containing materials. This impact is considered ***potentially significant***.

Localized PM Concentrations

Fugitive dust emissions would be primarily associated with building demolition, site preparation, grading, and vehicle travel on unpaved and paved surfaces. On-site off-road equipment and trucks would also result in short-term emissions of diesel-exhaust PM, which could contribute to elevated localized concentration at nearby receptors. Uncontrolled emissions of fugitive dust may also contribute to potential increases in nuisance impacts to nearby receptors. For these reasons, localized uncontrolled concentrations of construction-generated PM would be considered to have a ***potentially significant*** impact.

Mitigation Measures

Implement Mitigation Measure AQ-1 through AQ-6, AQ-7,d, AQ-7,f, and the following:

AQ-8: The following mitigation measures shall be implemented to reduce the disturbance of asbestos and lead. Strategies include but are not limited to the following:

a. Demolition of on-site structures shall comply with the National Emission Standards for Hazardous Air Emissions requirements (NESHAP, 40 CFR, Part 61, Subpart M) for the demolition of existing structures. The SLOAPCD is delegated authority by the Environmental Protection Agency (EPA) to implement the Federal Asbestos NESHAP. Prior to demolition of on-site structures, the SLOAPCD shall be notified, per NESHAP requirements. SLOAPCD notification form and reporting requirements are included in Appendix A. Additional information may be obtained at website URL: http://slocleanair.org/ business/asbestos.php.

b. If during the demolition of existing structures, paint is separated from the construction materials (e.g. chemically or physically), the paint waste will be evaluated independently from the building material by a qualified hazardous materials inspector to determine its proper management. All hazardous materials shall be handled and disposed of in accordance with local, state and federal regulations. According to the Department of Toxic Substances Control (DTSC), if the paint is not removed from the building material during demolition (and is not chipping or peeling), the material can be disposed of as construction debris (a non-hazardous waste). The landfill operator will be contacted prior to disposal of building material debris to determine any specific requirements the landfill may have regarding the disposal of lead-based paint materials. The disposal of demolition debris shall comply with any such requirements. Contact the SLOAPCD Enforcement Division at (805) 781-5912 for more information. Approval of a lead work plan and permit may be required. Lead work plans, if required, will need to be submitted to SLOAPCD ten days prior to the start of demolition.

c. Prior to any grading activities, a geologic evaluation shall be conducted to determine if naturally occurring asbestos (NOA) is present within the area that will be disturbed. If NOA is not present, an exemption request must be filed with the SLOAPCD. If NOA is found at the site, the applicant must comply with all requirements outlined in the Asbestos ATCM. These requirements may include but are not limited to:

   1) Development of an Asbestos Dust Mitigation Plan which must be approved by the SLOAPCD before operations begin, and,
   2) Development and approval of an Asbestos Health and Safety Program (required for some projects).

Significance After Mitigation

With the implementation of Mitigation Measure AQ-1 through AQ-6, AQ-7d, and AQ-7,f, fugitive dust emitted during project construction, as well as any fugitive dust generated during project operations, would be substantially reduced. Mitigation Measure AQ-8 would ensure compliance with applicable regulatory requirements pertaining to exposure to asbestos and lead-based paints. With mitigation, this impact would be considered ***less than significant.***

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

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose members of the public to objectionable odors would be deemed to have a significant impact.

The proposed project would not result in the installation of any equipment or processes that would be considered major odor-emission sources. In addition, no known odor sources are within one mile of the project site. However, construction of the proposed project would involve the use of a variety of gasoline or diesel-powered equipment that would emit exhaust fumes. Exhaust fumes, particularly diesel-exhaust, may be considered objectionable by some people. In addition, pavement coatings and architectural coatings used during project construction would also emit temporary odors. However, construction-generated emissions would occur intermittently throughout the workday and would dissipate rapidly with increasing distance from the source. As a result, short-term construction activities would not expose a substantial number of people to frequent odorous emissions. For these reasons, potential exposure of sensitive receptors to odorous emissions would be considered ***less than significant***.

GREENHOUSE GASES AND CLIMATE CHANGE

Existing Setting

To fully understand global climate change, it is important to recognize the naturally occurring "greenhouse effect" and to define the greenhouse gases (GHGs) that contribute to this phenomenon. Various gases in the earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. Greenhouse gases, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, this radiation that otherwise would have escaped back into space is now retained, resulting in a warming of the atmosphere. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Primary GHGs attributed to global climate change, are discussed, as follows:

- **Carbon Dioxide**. Carbon dioxide (CO_2) is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere (U.S. EPA 2018).

- **Methane**. Methane (CH_4) is a colorless, odorless gas that is not flammable under most circumstances. CH_4 is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (enteric fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of methane to the atmosphere. Natural sources of methane include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. Methane's atmospheric lifetime is about 12 years (U.S. EPA 2018).

- **Nitrous Oxide**. Nitrous oxide (N_2O) is a clear, colorless gas with a slightly sweet odor. N_2O is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 114 years (U.S. EPA 2018).

- **Hydrofluorocarbons.** Hydrofluorocarbons (HFCs) are man-made chemicals, many of which have been developed as alternatives to ozone-depleting substances for industrial, commercial, and consumer products. The only significant emissions of HFCs before 1990 were of the chemical HFC-23, which is generated as a byproduct of the production of HCFC-22 (or Freon 22, used in air conditioning applications). The atmospheric lifetime for HFCs varies from just over a year for HFC-152a to 270 years for HFC-23. Most of the commercially used HFCs have atmospheric lifetimes of less than 15 years (e.g., HFC-134a, which is used in automobile air conditioning and refrigeration, has an atmospheric life of 14 years) (U.S. EPA 2018).

- **Perfluorocarbons.** Perfluorocarbons (PFCs) are colorless, highly dense, chemically inert, and non-toxic. There are seven PFC gases: perfluoromethane (CF_4), perfluoroethane (C_2F_6), perfluoropropane (C_3F_8), perfluorobutane (C_4F_{10}), perfluorocyclobutane (C_4F_8), perfluoropentane (C_5F_{12}), and perfluorohexane (C_6F1_4). Natural geological emissions have been responsible for the PFCs that have accumulated in the atmosphere in the past; however, the largest current source is aluminum production, which releases CF_4 and C_2F_6 as byproducts. The estimated atmospheric lifetimes for PFCs ranges from 2,600 to 50,000 years (U.S. EPA 2018).

- **Nitrogen Trifluoride**. Nitrogen trifluoride (NF_3) is an inorganic, colorless, odorless, toxic, nonflammable gas used as an etchant in microelectronics. Nitrogen trifluoride is predominantly employed in the cleaning of the plasma-enhanced chemical vapor deposition chambers in the production of liquid crystal displays and silicon-based thin-film solar cells. It has a global warming potential of 16,100 carbon dioxide equivalents (CO_2e). While NF_3 may have a lower global warming potential than other chemical etchants, it is still a potent GHG. In 2009, NF_3 was listed by California as a high global warming potential GHG to be listed and regulated under Assembly Bill (AB) 32 (Section 38505 Health and Safety Code).

- **Sulfur Hexafluoride**. Sulfur hexafluoride (SF_6) is an inorganic compound that is colorless, odorless, non-toxic, and generally non-flammable. SF_6 is primarily used as an electrical insulator in high voltage equipment. The electric power industry uses roughly 80 percent of all SF_6 produced worldwide. Leaks of SF_6 occur from aging equipment and during equipment maintenance and servicing. SF_6 has an atmospheric life of 3,200 years (U.S. EPA 2018).

- **Black Carbon**. Black carbon is the strongest light-absorbing component of particulate matter (PM) emitted from burning fuels such as coal, diesel, and biomass. Black carbon contributes to climate change both directly by absorbing sunlight and indirectly by depositing on snow and by interacting with clouds and affecting cloud formation. Black carbon is considered a short-lived species, which can vary spatially and, consequently, it is very difficult to quantify associated global-warming potentials. The main sources of black carbon in California are wildfires, off-road vehicles (locomotives, marine vessels, tractors, excavators, dozers, etc.), on-road vehicles (cars, trucks, and buses), fireplaces, agricultural waste burning, and prescribed burning (planned burns of forest or wildlands) (CCAC 2018, U.S. EPA 2018).

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. Often, estimates of GHG emissions are presented in CO_2e, which weight each gas by its global warming potential (GWP). Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted. Table 15 provides a summary of the GWP for GHG emissions of typical concern with regard to community development projects, based on a 100-year time horizon. As indicated, Methane traps over 25 times more heat per molecule than CO_2, and N_2O absorbs roughly 298 times more heat per molecule than CO_2. Additional GHG with high GWP includes Nitrogen trifluoride, Sulfur hexafluoride, Perfluorocarbons, and black carbon.

Table 15. Global Warming Potential for Greenhouse Gases

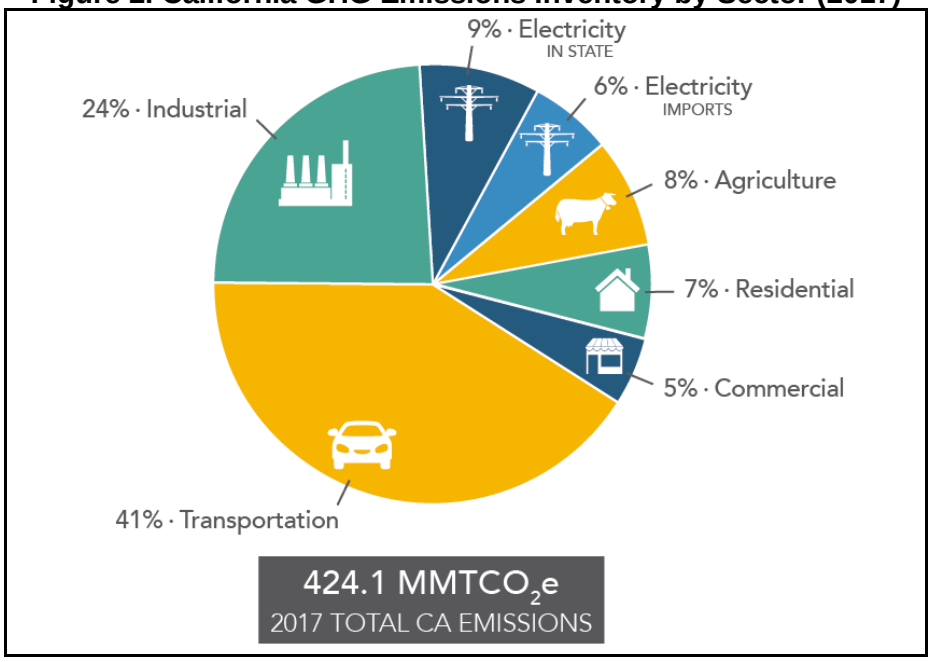
Greenhouse Gas	Global Warming Potential (100-year)
Carbon Dioxide (CO_2)	1
Methane (CH_4)	25
Nitrous Dioxide (N_2O)	298

Based on IPCC GWP values for 100-year time horizon.
Source: IPCC 2007

Statewide GHG Emissions

In 2017, GHG emissions within California totaled 424.1 million metric tons (MMT) of CO_2e. GHG emissions, by sector, are summarized in Figure 2. Within California, the transportation sector is the largest contributor, accounting for approximately 41 percent of the total state-wide GHG emissions. Emissions associated with industrial uses are the second-largest contributor, totaling roughly 24 percent. Electricity generation totaled roughly 15 percent. Other major emission sources included commercial uses, residential uses, agriculture, recycling and waste (ARB 2019a).

Figure 2. California GHG Emissions Inventory by Sector (2017)



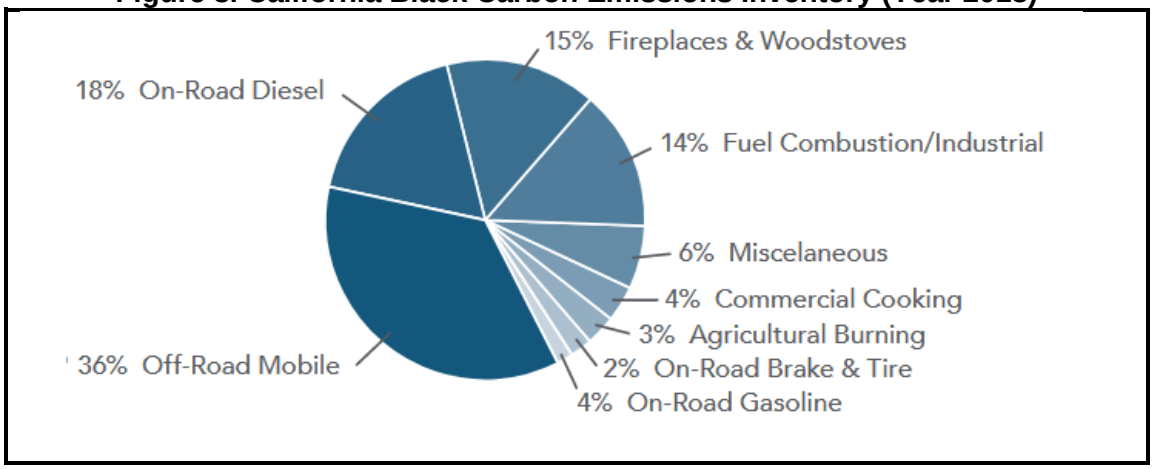
Source: ARB 2019a

Short-Lived Climate Pollutants

Short-lived climate pollutants (SLCPs), such as black carbon, fluorinated gases, and methane also have a dramatic effect on climate change. Though short-lived, these pollutants create a warming influence on the climate that is many times more potent than that of carbon dioxide.

As part of the ARB's efforts to address SLCPs, the ARB has developed a statewide emission inventory for black carbon. The black carbon inventory will help support the implementation of the SLCP Strategy, but it is not part of the State's GHG Inventory that tracks progress towards the State's climate targets. The most recent inventory for year 2013 conditions is depicted in Figure 3. As depicted, off-road mobile sources account for a majority of black carbon emissions totaling roughly 36 percent of the inventory. Other major anthropogenic sources of black carbon include on-road transportation, residential wood burning, fuel combustion, and industrial processes (ARB 2017).

Figure 3. California Black Carbon Emissions Inventory (Year 2013)



Source: ARB 2017

Effects of Global Climate Change

There are uncertainties as to exactly what the climate changes will be in various local areas of the earth. There are also uncertainties associated with the magnitude and timing of other consequences of a warmer planet: sea-level rise, spread of certain diseases out of their usual geographic range, the effect on agricultural production, water supply, sustainability of ecosystems, increased strength and frequency of storms, extreme heat events, increased air pollution episodes, and the consequence of these effects on the economy.

Within California, climate changes would likely alter the ecological characteristics of many ecosystems throughout the state. Such alterations would likely include increases in surface temperatures and changes in the form, timing, and intensity of the precipitation. For instance, historical records are depicting an increasing trend toward earlier snowmelt in the Sierra Nevada. This snowpack is a principal supply of water for the state, providing roughly 50 percent of the state's annual runoff. If this trend continues, some areas of the state may experience an increased danger of floods during the winter months and possible exhaustion of the snowpack during spring and summer months. Earlier snowmelt would also impact the State's energy resources. Currently, approximately 20 percent of California's electricity comes from hydropower. Early exhaustion of the Sierra snowpack, may force electricity producers to switch to more costly or non-renewable forms of electricity generation during spring and summer months. A changing climate may also impact agricultural crop yields, coastal structures, and biodiversity. As a result, resultant changes in climate will likely have detrimental effects on some of California's largest industries, including agriculture, wine, tourism, skiing, recreational and commercial fishing, and forestry (PCL 2018).

Regulatory Framework

Federal

EXECUTIVE ORDER 13514

Executive Order 13514 is focused on reducing GHGs internally in federal agency missions, programs, and operations. In addition, the executive order directs federal agencies to participate in the Interagency Climate Change Adaptation Task Force, which is engaged in developing a national strategy for adaptation to climate change.

On April 2, 2007, in Massachusetts v. U.S. EPA, 549 U.S. 497 (2007), the Supreme Court found that GHGs are air pollutants covered by the FCAA and that the U.S. EPA has the authority to regulate GHG. The Court held that the U.S. EPA Administrator must determine whether or not emissions of GHGs from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.

On December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the Clean Air Act:

- Endangerment Finding: The Administrator found that the current and projected concentrations of the six key well-mixed GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6) in the atmosphere threaten the public health and welfare of current and future generations.
- Cause or Contribute Finding: The Administrator found that the combined emissions of these well-mixed GHGs from new motor vehicles and new motor vehicle engines contribute to the GHG pollution which threatens public health and welfare.

Although these findings did not themselves impose any requirements on industry or other entities, this action was a prerequisite to finalizing the U.S. EPA's Proposed Greenhouse Gas Emission Standards for Light-Duty Vehicles, which was published on September 15, 2009. On May 7, 2010, the final Light-Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards was published in the Federal Register.

The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) are taking coordinated steps to enable the production of a new generation of clean vehicles with reduced GHG emissions and improved fuel efficiency from on-road vehicles and engines. These next steps include developing the first-ever GHG regulations for heavy-duty engines and vehicles, as well as additional light-duty vehicle GHG regulations. These steps were outlined by President Obama in a Presidential Memorandum on May 21, 2010.

The final combined U.S. EPA and NHTSA standards that make up the first phase of this national program apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. The standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile (the equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements). Together, these standards will cut GHG emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012-2016). On August 28, 2012, U.S. EPA and NHTSA issued their joint rule to extend this national program of coordinated GHG and fuel economy standards to model years 2017 through 2025 passenger vehicles.

State

ASSEMBLY BILL 1493

AB 1493 (Pavley) of 2002 (Health and Safety Code Sections 42823 and 43018.5) requires the ARB to develop and adopt the nation's first GHG emission standards for automobiles. These standards are also known as Pavley I. The California Legislature declared in AB 1493 that global warming is a matter of increasing concern for public health and the environment. It cites several risks that California faces from climate change, including a reduction in the state's water supply; an increase in air pollution caused by higher temperatures; harm to agriculture; an increase in wildfires; damage to the coastline; and economic losses caused by higher food, water, energy, and insurance prices. The bill also states that technological solutions to reduce GHG emissions would stimulate California's economy and provide jobs. In 2004, the State of California submitted a request for a waiver from federal clean air regulations, as the State is authorized to do under the FCAA, to allow the State to require reduced tailpipe emissions of CO_2. In late 2007, the U.S. EPA denied California's waiver request and declined to promulgate adequate federal regulations limiting GHG emissions. In early 2008, the State brought suit against the U.S. EPA related to this denial.

In January 2009, President Obama instructed the U.S. EPA to reconsider the Bush Administration's denial of California's and 13 other states' requests to implement global warming pollution standards for cars and trucks. In June 2009, the U.S. EPA granted California's waiver request, enabling the State to enforce its GHG emissions standards for new motor vehicles beginning with the current model year.

In 2009, President Obama announced a national policy aimed at both increasing fuel economy and reducing GHG pollution for all new cars and trucks sold in the US. The new standards would cover model years 2012 to 2016 and would raise passenger vehicle fuel economy to a fleet average of 35.5 miles per gallon by 2016. When the national program takes effect, California has committed to allowing automakers who show compliance with the national program to also be deemed in compliance with state requirements. California is committed to further strengthening these standards beginning in 2017 to obtain a 45 percent GHG reduction from the 2020 model year vehicles.

EXECUTIVE ORDER NO. S-3-05

Executive Order S-3-05 (State of California) proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra's snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the Executive Order established total GHG emission targets. Specifically, emissions are to be reduced to the 2000 level by 2010, to the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

The Executive Order directed the secretary of the California Environmental Protection Agency (CalEPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and state legislature describing (1) progress made toward reaching the emission targets, (2) impacts of global warming on California's resources, and (3) mitigation and adaptation plans to combat these impacts. To comply with the Executive Order, the secretary of CalEPA created a

Climate Action Team made up of members from various state agencies and commissions. The Climate Action Team released its first report in March 2006 and continues to release periodic reports on progress. The report proposed to achieve the targets by building on voluntary actions of California businesses, local government, and community actions, as well as through state incentive and regulatory programs.

ASSEMBLY BILL 32 - CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006

AB 32 (Health and Safety Code Sections 38500, 38501, 28510, 38530, 38550, 38560, 38561–38565, 38570, 38571, 38574, 38580, 38590, 38592–38599) requires that statewide GHG emissions be reduced to 1990 levels by the year 2020. The gases that are regulated by AB 32 include CO_2, CH_4, N_2O, HFCs, PFCs, NF_3, and SF_6. The reduction to 1990 levels will be accomplished through an enforceable statewide cap on GHG emissions that will be phased in starting in 2012. To effectively implement the cap, AB 32 directs ARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating that if the AB 1493 regulations cannot be implemented, then ARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 requires that ARB adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrives at the cap, institute a schedule to meet the emissions cap, and develop tracking, reporting, and enforcement mechanisms to ensure that the state achieves reductions in GHG emissions necessary to meet the cap. AB 32 also includes guidance to institute emissions reductions in an economically efficient manner and conditions to ensure that businesses and consumers are not unfairly affected by the reductions.

CLIMATE CHANGE SCOPING PLAN

In October 2008, ARB published its *Climate Change Proposed Scoping Plan*, which is the State's plan to achieve GHG reductions in California required by AB 32. This initial Scoping Plan contained the main strategies to be implemented in order to achieve the target emission levels identified in AB 32. The Scoping Plan included ARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The largest proposed GHG reduction recommendations were associated with improving emissions standards for light-duty vehicles, implementing the Low Carbon Fuel Standard program, implementation of energy efficiency measures in buildings and appliances, and the widespread development of combined heat and power systems, and developing a renewable portfolio standard for electricity production.

The Scoping Plan states that land use planning and urban growth decisions will play important roles in the state's GHG reductions because local governments have primary authority to plan, zone, approve, and permit how land is developed to accommodate population growth and the changing needs of their jurisdictions. ARB further acknowledges that decisions on how land is used will have large impacts on the GHG emissions that will result from the transportation, housing, industry, forestry, water, agriculture, electricity, and natural gas emissions sectors. With regard to land use planning, the Scoping Plan expects approximately 5.0 MMT CO_2e will be achieved associated with the implementation of Senate Bill 375, which is discussed further below.

The initial Scoping Plan was first approved by ARB on December 11, 2008, and is updated every five years. The first update of the Scoping Plan was approved by the ARB on May 22, 2014, which looked past 2020 to set mid-term goals (2030-2035) on the road to reaching the 2050 goals., The most recent update released by ARB is the *2017 Climate Change Scoping Plan*, which was released on November 2017. The *2017 Climate Change Scoping Plan* incorporates strategies for achieving the 2030 GHG-reduction target established in SB 32 and EO B-30-15. Most notably, the *2017 Climate Change Scoping Plan* encourages zero net increases in GHG emissions. However, the *2017 Climate Change Scoping Plan* recognizes that achieving net zero increases in GHG emissions may not be feasible or appropriate for all projects and that the inability of a project to mitigate its GHG emissions to zero would not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.

SENATE BILL 1078 AND GOVERNOR'S ORDER S-14-08

Senate Bill 1078 (Public Utilities Code Sections 387, 390.1, 399.25 and Article 16) addresses electricity supply and requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide a minimum 20 percent of their supply from renewable sources by 2017. This Senate Bill will affect statewide GHG emissions associated with electricity generation. In 2008, Governor Schwarzenegger signed Executive Order S-14-08, which set the Renewables Portfolio Standard target to 33 percent by 2020. It directed state government agencies and retail sellers of electricity to take all appropriate actions to implement this target. Executive Order S-14-08 was later superseded by Executive Order S-21-09 on September 15, 2009. Executive Order S-21-09 directed the ARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. Statute SB X1-2 superseded this Executive Order in 2011, which obligated all California electricity providers, including investor-owned utilities and publicly owned utilities, to obtain at least 33 percent of their energy from renewable electrical generation facilities by 2020.

ARB is required by current law, AB 32 of 2006, to regulate sources of GHGs to meet a state goal of reducing GHG emissions to 1990 levels by 2020 and an 80 percent reduction of 1990 levels by 2050. The California Energy Commission and California Public Utilities Commission serve in advisory roles to help ARB develop the regulations to administer the 33 percent by 2020 requirement. ARB is also authorized to increase the target and accelerate and expand the time frame.

MANDATORY REPORTING OF GHG EMISSIONS

The California Global Warming Solutions Act (AB 32, 2006) requires the reporting of GHGs by major sources to the ARB. Major sources required to report GHG emissions include industrial facilities, suppliers of transportation fuels, natural gas, natural gas liquids, liquefied petroleum gas, and carbon dioxide, operators of petroleum and natural gas systems, and electricity retail providers and marketers.

CAP-AND-TRADE REGULATION

The cap-and-trade regulation is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85 percent of California's GHG emissions and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The cap-and-trade rules came into effect on January 1, 2013, and apply to large electric power plants and large industrial plants. In 2015, fuel distributors, including distributors of heating and transportation fuels, also became subject to the cap-and-trade rules. At that stage, the program will encompass around 360 businesses throughout California and nearly 85 percent of the state's total GHG emissions.

Under the cap-and-trade regulation, companies must hold enough emission allowances to cover their emissions and are free to buy and sell allowances on the open market. California held its first auction of GHG allowances on November 14, 2012. California's GHG cap-and-trade system is projected to reduce GHG emissions to 1990 levels by the year 2020 and would achieve an approximate 80 percent reduction from 1990 levels by 2050.

SENATE BILL 32

SB 32 was signed by Governor Brown on September 8, 2016. SB 32 effectively extends California's GHG emission-reduction goals from year 2020 to year 2030. This new emission-reduction target of 40 percent below 1990 levels by 2030 is intended to promote further GHG-reductions in support of the State's ultimate goal of reducing GHG emissions by 80 percent below 1990 levels by 2050. SB 32 also directs the ARB to update the Climate Change Scoping Plan to address this interim 2030 emission-reduction target.

SENATE BILL 97

Senate Bill 97 (SB 97) was enacted in 2007. SB 97 required OPR to develop, and the Natural Resources Agency to adopt, amendments to the CEQA Guidelines addressing the analysis and mitigation of GHG emissions. Those CEQA Guidelines amendments clarified several points, including the following:

- Lead agencies must analyze the GHG emissions of proposed projects and must reach a conclusion regarding the significance of those emissions.
- When a project's GHG emissions may be significant, lead agencies must consider a range of potential mitigation measures to reduce those emissions.
- Lead agencies must analyze potentially significant impacts associated with placing projects in hazardous locations, including locations potentially affected by climate change.
- Lead agencies may significantly streamline the analysis of GHGs on a project level by using a programmatic GHG emissions reduction plan meeting certain criteria.
- CEQA mandates analysis of a proposed project's potential energy use (including transportation-related energy), sources of energy supply and ways to reduce energy demand, including through the use of efficient transportation alternatives.

As part of the administrative rulemaking process, the California Natural Resources Agency developed a Final Statement of Reasons explaining the legal and factual bases, intent, and purpose of the CEQA Guidelines amendments. The amendments to the CEQA Guidelines implementing SB 97 became effective on March 18, 2010.

SENATE BILL 100

Senate Bill 100 (SB 100) was signed by Governor Jerry Brown on September 10, 2018. SB 100 sets a goal of phasing out all fossil fuels from the state's electricity sector by 2045. SB 100 increases to 60 percent, from 50 percent, how much of California's electricity portfolio must come from renewables by 2030. It establishes a further goal to have an electric grid that is entirely powered by clean energy by 2045, which could include other carbon-free sources, like nuclear power, that are not renewable.

SENATE BILL 375

SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will address land-use allocation in that MPOs regional transportation plan. ARB, in consultation with MPOs, establishes regional reduction targets for GHGs emitted by passenger cars and light trucks for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. ARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, funding for transportation projects may be withheld. In 2018, ARB adopted updated SB 375 targets.

CALIFORNIA BUILDING CODE

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The California Building Code is adopted every three years by the Building Standards Commission (BSC). In the interim, the BSC also adopts annual updates to make necessary mid-term corrections. The CBC standards apply statewide; however, a local jurisdiction may amend a CBC standard if it makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

GREEN BUILDING STANDARDS

In essence, green buildings standards are indistinguishable from any other building standards. Both standards are contained in the California Building Code and regulate the construction of new buildings and improvements. The only practical distinction between the two is that whereas the focus of traditional building standards has been protecting public health and safety, the focus of green building standards is to improve environmental performance.

AB 32, which mandates the reduction of GHG emissions in California to 1990 levels by 2020, increased the urgency around the adoption of green building standards. In its scoping plan for the implementation of AB 32, ARB identified energy use as the second largest contributor to California's GHG emissions, constituting roughly 25 percent of all such emissions. In recommending a green building strategy as one element of the scoping plan, ARB estimated that green building standards would reduce GHG emissions by approximately 26 MMT of CO_2e by 2020.

The green buildings standards were most recently updated on May 2018. Referred to as the *2019 Building Energy Efficiency Standards*, this most recent update focus on four key areas: smart residential photovoltaic systems, updated thermal envelope standards (preventing heat transfer from the interior to the exterior and vice versa), residential and nonresidential ventilation requirements, and nonresidential lighting requirements. The ventilation measures improve indoor air quality, protecting homeowners from air pollution originating from outdoor and indoor sources. Under the newly adopted standards, nonresidential buildings will use about 30 percent less energy due mainly to lighting upgrades. The recently updated *2019 Building Energy Efficiency Standards* also require new homes built after January 1, 2020 to be equipped with solar photovoltaic (PV) systems. The solar PV systems are to be sized based on the buildings annual electricity demand, the building square footage, and the climate zone within which the home is located. However, under the *2019 Building Energy Efficiency Standards,* homes may still rely on other energy sources, such as natural gas. Compliance with the *2019 Building Energy Efficiency Standards,* including the solar PV system mandate, residential dwellings will use approximately 50 to 53 percent less energy than those under the 2016 standards. Actual reduction will vary depending on various factors (e.g., building orientation, sun exposure). Non-residential buildings will use about 30 percent less energy due mainly to lighting upgrades (CEC 2019).

SHORT-LIVED CLIMATE POLLUTANT REDUCTION STRATEGY

In March 2017, the ARB adopted the *Short-Lived Climate Pollutant Reduction Strategy* (*SLCP Strategy*) establishing a path to decrease GHG emissions and displace fossil-based natural gas use. Strategies include avoiding landfill methane emissions by reducing the disposal of organics through edible food recovery, composting, in-vessel digestion, and other processes; and recovering methane from wastewater treatment facilities, and manure methane at dairies, and using the methane as a renewable source of natural gas to fuel vehicles or generate electricity. The *SLCP Strategy* also identifies steps to reduce natural gas leaks from oil and gas wells, pipelines, valves, and pumps to improve safety, avoid energy losses, and reduce methane emissions associated with natural gas use. Lastly, the *SLCP Strategy* also identifies measures that can reduce hydrofluorocarbon (HFC) emissions at national and international levels, in addition to State-level action that includes an incentive program to encourage the use of low-GWP refrigerants, and limitations on the use of high-GWP refrigerants in new refrigeration and air-conditioning equipment (ARB 2017).

SAN LUIS OBISPO COUNTY AIR POLLUTION CONTROL DISTRICT

The SLOAPCD is a local public agency with the primary mission of realizing and preserving clean air for all county residents and businesses. Responsibilities of the SLOAPCD include, but are not limited to, preparing plans for the attainment of ambient air quality standards, adopting and enforcing rules and regulations concerning sources of air pollution, issuing permits for stationary sources of air pollution, inspecting stationary sources of air pollution and responding to citizen complaints, monitoring ambient air quality and meteorological conditions, and implementing programs and regulations required by federal and state regulatory requirements.

CITY OF PASO ROBLES CLIMATE ACTION PLAN

The City of Paso Robles Climate Action Plan (CAP) was adopted by the City Council on November 18th, 2013. The CAP is a long-range plan to reduce GHG emissions from City government operations and community activities within Paso Robles and prepare for the anticipated effects of climate change. The CAP will also help achieve multiple community goals such as lowering energy costs, reducing air pollution, supporting local economic development, and improving public health and quality of life (City of Paso Robles, 2013). It is important to note that the City's CAP was developed prior to adoption of SB 32. As a result, although the City's CAP is aligned with the emissions targets identified in AB 32, it is not necessarily reflective of the more stringent year 2030 emissions reduction target mandated by SB 32.

According to the GHG emissions inventory identified in the CAP, in 2005, the Paso Robles community emitted approximately 169,557 metric tons of carbon dioxide equivalent GHG emissions (MTCO2e), as a result of activities that took place within the transportation, residential energy use, commercial and industrial energy use, off-road vehicles and equipment, solid waste, aircraft and wastewater sectors. In 2005, the largest contributors to GHG emissions were transportation (40 percent), residential energy use (24 percent) and commercial/industrial energy use (20 percent) sectors. The remainder of emissions resulted from the solid waste (eight percent), off-road vehicles and equipment (8 percent), aircraft (less than one percent), and wastewater (less than one percent) sectors (City of Paso Robles, 2013).

Impact Analysis

In accordance with Appendix G of the *State CEQA Guidelines,* increased GHG emissions associated with the implementation of the Olsen-Chandler Specific Plan would be considered significant if may:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The SLOAPCD has adopted recommended GHG significance thresholds. These thresholds are based on AB 32 GHG emission reduction goals, which take into consideration the emission reduction strategies outlined in ARB's Scoping Plan. The GHG significance thresholds include one qualitative threshold and two quantitative thresholds options for the evaluation of operational GHG emissions. The qualitative threshold option is based on a consistency analysis in comparison to a Qualified Greenhouse Gas Reduction Strategy, or equitably similar adopted policies, ordinances, and programs. If a project complies with a Qualified Greenhouse Gas Reduction Strategy that is specifically applicable to the project, then the project would be considered to have a less-than-significant impact.

The two quantitative threshold options identified by the SLOAPCD include: 1) a bright-line threshold of 1,150 $MTCO_2e$/year; and 2) an efficiency threshold of 4.9 $MTCO_2e$/service population (SP; residents+employees) /year ($MTCO_2e$/SP/yr). An additional GHG significance threshold of 10,000 $MTCO_2e$/year is proposed for industrial stationary sources. The applicable GHG significance threshold to be used would depend on the type of project being proposed. Project-level analyses typically rely on the bright-line threshold, whereas, programmatic-level analyses, such as those prepared for larger community or general plans, typically rely on the efficiency metric threshold. Projects with GHG emissions that do not exceed the selected threshold would be considered to have a less-than-significant impact and would not conflict with applicable GHG-reduction plans, policies, or regulations. SLOAPCD's GHG emission thresholds are summarized in Table 16.

Table 16. SLOAPCD Greenhouse Gas Thresholds of Significance

Project	Threshold
Projects other than Stationary Sources	1. Compliance with Qualified GHG Reduction Strategy (i.e., Climate Action Plan); or 2. Bright Line Threshold: 1,150 MT CO_2e/year; or 3. Efficiency Threshold: 4.9 MT CO_2e/SP/year (residents+employees)
Stationary Sources (Industrial)	10,000 MT CO_2e/year
Construction	Amortized over the project life and added to operation GHG emissions
Source: SLOAPCD 2012	

Threshold of Significance

As noted above, the SLOAPCD recommends three approaches that can be applied for the evaluation of project-level GHG impacts. For large development projects, use of the SLOAPCD-recommended efficiency threshold or compliance with a qualified GHG-reduction strategy/CAP, such as the *City of Paso Robles Climate Action Plan*, is typically recommended. The City of Paso Robles CAP includes a "Consistency Worksheet", which identifies various mandatory and voluntary measures designed to reduce project-related

GHG emissions. The CAP Consistency Worksheet can be used to demonstrate project-level compliance with the CAP. However, it is important to note that the City's CAP, as well as, the SLOAPCD's recommended GHG significance thresholds were developed prior to adoption of SB 32. As a result, although the SLOAPCD's recommended GHG significance thresholds and the City's CAP are aligned with the emissions targets identified in AB 32, they are not reflective of the more stringent year 2030 emissions reduction target mandated by SB 32.

As noted earlier in this analysis, the buildout year for this project would be post year 2020, with an estimated buildout year of 2024. Because the SLOAPCD's-recommended GHG-efficiency threshold was based on AB 32 year 2020 GHG-reduction target, the GHG-efficiency threshold was adjusted to account for the more stringent year 2030 GHG-reduction target mandated by SB 32. The GHG-efficiency threshold was calculated by dividing the GHG emissions inventory goal (allowable emissions), by the estimated service population (SP). The efficiency threshold was calculated based on ARB's GHG emissions inventory identified in the *2017 Scoping Plan Update*. Emissions sectors that do not apply to the proposed project (i.e., industrial, agriculture) were excluded from the calculation. The GHG emissions inventory for the land use sectors applicable to the proposed project were then divided by the projected SP for both build-out year 2024 and future year 2030 operational conditions. The service population was calculated based on the most current population and employment projections derived from the California Department of Finance Demographic Research Unit and California Employment Development Department, respectively. The methodology used for quantification of the target efficiency threshold applied to the proposed project is summarized in Table 17. Project-generated GHG emissions that would exceed the efficiency threshold of 4.0 $MTCO_2e$/SP/year in year 2024 or 3.3 $MTCO_2e$/SP/year in 2030 would be considered to have a potentially significant impact on the environment that could conflict with GHG-reduction planning efforts. To be conservative, amortized construction-generated GHG emissions were included in annual operational GHG emissions estimates, consistent with SLOAPCD-recommended methodologies.

Table 17. Project-Level GHG Efficiency Threshold Calculation

	2024	2030
Land Use Sectors GHG Emissions Target[1]	249	213
Population[2]	41,994,283	43,939,250
Employment[3]	19,636,080	20,795,940
Service Population (SP)	61,630,363	64,735,190
GHG Efficiency Threshold ($MTCO_2e$/SP/yr)	4.0	3.3

Note: Employment data for interim years are estimated based on proportionality with population trends based on historical data.
Based on AB 32 Scoping Plan's land use inventory sectors for years 2024 and 2030; Includes transportation sources.
1. Based on ARB 2017 Climate Scoping Plan Update/SB 32 Scoping Plan Emissions Sector targets.
2. California Department of Finance Demographic Research Unit. 2019. Report P-1 "State Population Projections (2010 - 2060)".
3. California Employment Development Department. Employment Projections Labor Market Information Resources and Data, "CA Long-Term. 2016-2026 Statewide Employment Projections". Projected year 2030 employment data was projected based on the average-annual increase for years 2016 through 2026.

Methodology

Short-term Construction Impacts

Short-term emissions were quantified using the CalEEMod, version 2016.3.2, based on estimated acreage and building square footage provided for the proposed project. Other modeling assumptions, including construction equipment requirements, hours of use, worker, and vendor vehicle trips, trip distances and fleet mix were based on model defaults for San Luis Obispo County. To be conservative, construction-generated emissions were amortized assuming a minimum project life of 30 years. In accordance with SLOAPCD-recommended methodologies for the analysis of GHG emissions, amortized construction emissions were included with operational emissions for comparison to applicable GHG significance thresholds. Refer to Appendix C for emissions modeling assumptions and results.

Long-term Operational Air Quality Impacts

Long-term operational GHG emissions were calculated using the CalEEMod, version 2016.3.2. Emissions modeling included quantification of emissions associated with area sources, energy use, and mobile sources. Reductions in electricity use associated with the installation of solar PV systems for residential uses was calculated based on the estimated total electricity use for proposed single-family and multi-family residential land uses and assuming an average energy reduction of 50 percent (CEC 2019). Mitigated emissions associated with energy use assumes natural-gas fired appliances and building mechanical equipment (e.g., fireplaces, water heaters, space heaters) for residential land uses would not be installed.

Trip-generation rates for the proposed residential land uses and elementary school were derived from the City's *Travel Demand Forecasting Model* (2009), which are specific to the Paso Robles area, rather than relying on trip-generation rates based on nation-wide survey data developed by the Institute of Transportation Engineers (ITE). Although use of the ITE trip-generation rates are often used for traffic analysis purposes, the ITE rates may not be reflective of local conditions. As a result, for emissions calculation purposes, use of locally-specific trip-generation rates is preferred, when available, and approved for use by the SLOAPCD. Mobile-source emissions for land uses not identified in the City's *Travel Demand Forecasting Model*, including the proposed commercial uses and health club, were quantified based on the trip-generation rates derived from the traffic analysis prepared for this project. Other proposed land uses (i.e., Community Supported Agriculture (CSA) maintenance shed, pool house, pool service building, event barn, community parks, neighborhood open space, and other asphalt surfaces) would not generate vehicle trips. With the exception of proposed residential land uses, the vehicle fleet mix used in the analysis was based on default assumptions contained in CalEEMod for San Luis Obispo County. It is important to note that the default fleet mix contained in CalEEMod is based largely on County-wide data and, therefore, may not be reflective of vehicle fleet mixes for some land uses, such as residential uses. The fleet mix for proposed residential land uses was adjusted based on the recommended fleet mix for residential land uses derived from the San Joaquin Valley Air Pollution Control District (SJVAPCD) and approved for use by the SLOAPCD. The fleet mix for proposed residential land uses was derived by applying the SJVAPCD-recommended vehicle fleet adjustments to the default fleet mix identified in CalEEMod. Fleet mix data for other land uses was not available and, therefore, were based on the default fleet mix identified in CalEEMod. Proposed land uses are summarized in Table 6. Exposure to localized pollutant concentrations was qualitatively assessed. Emission modeling files are provided in Appendix C.

The service population for the proposed project was calculated taking into account predicted employment and population for the project. For most development projects, service population is traditionally defined as the sum of the number of jobs and the number of residents provided by a project. However, this traditional definition of service population may not be applicable to all projects, depending on the end-use. For instance, with regard to schools, the student and employee population is the primary generator of GHG emissions with a majority of the school's emissions being associated with student vehicle trips. Therefore, the calculated GHG efficiency of the proposed project was expanded to include the student and employee population for the proposed school. GHG efficiency for the proposed project was calculated for build-out year 2024; as well as, future year 2030 to be in line with SB 32 GHG-reduction target year and reduction goal.

Project Impacts and Mitigation Measures

Impact GHG-A. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and,

Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 from mobile sources. To a lesser extent, other GHG pollutants, such as CH_4 and N_2O, would also be generated. Short-term and long-term GHG emissions associated with the development of the proposed project are discussed in greater detail, as follows:

Short-term Construction GHG Emissions

Estimated increases in GHG emissions associated with the construction of the proposed project are summarized in Table 18. Based on the modeling conducted, construction-related GHG emissions would total approximately 22,974 $MTCO_2e$. Amortized GHG emissions, when averaged over the assumed 50-year life of the project, would total approximately 459 $MTCO_2e$/year. There would also be a small amount of GHG emissions from waste generated during construction; however, this amount is speculative. Actual emissions may vary, depending on the final construction schedules, equipment required, and activities conducted. Amortized construction-generated GHG emissions are included in the operational GHG emissions impact discussion provided below.

Table 18. Construction-Generated GHG Emissions Without Mitigation

Construction Year	GHG Emissions ($MTCO_2e$/Year)
2020	4,848.9
2021	8,518.2
2022	8,295.9
2023	3,617.5
Construction Total:	22,974
Amortized Construction Emissions:	842.7
Amortized emissions are quantified based on a minimum 30-year project life. Refer to Appendix C for modeling assumptions and results.	

Long-term Operational GHG Emissions

Estimated long-term increases in GHG emissions associated with the proposed project for buildout year 2024 and future year 2030 are summarized in Table 19. As depicted, operational GHG emissions for the proposed project, with the inclusion of amortized construction GHGs, would total approximately 16,107 $MTCO_2e$/year during the initial year of full operation (year 2024) and 13,733 $MTCO_2e$/year for operational year 2030. A majority of the operational GHG emissions would be associated with energy use and the operation of motor vehicles. To a lesser extent, GHG emissions would also be associated with solid waste generation and water use. Project-generated GHG emissions are projected to decrease in future years due largely to improvements in energy-efficiency and vehicle fleet emissions.

Based on the modeling conducted and assuming a total service population of 4,090 individuals (i.e., 3,517 residents, 495 students, and 78 employees), the calculated GHG efficiency for the proposed project, without mitigation, would be 3.0 $MTCO_2e$/SP/yr in 2024 and 2.6 $MTCO_2e$/SP/yr in 2030. The GHG efficiency for the proposed project would not exceed the thresholds of 3.9 $MTCO_2e$/SP/yr in 2024 and 3.2 $MTCO_2e$/SP/yr in 2030. It is important to note, however, that estimated GHG emissions conservatively calculated assuming that residential solar PV systems would provide a minimum estimated 50% of residential energy demand. According to the California Energy Commission, solar PV systems are estimated to provide an average of 50-53% of the residential energy demand, depending on various factors, including the buildings exposure/orientation to the sun and the number of sun exposure days, or climate zone, for the area within which the dwelling is located (CEC 2019). On average, Paso Robles has approximately 332 sunny days per year, and is one of the cities having the highest number of sunny days in the state (MeteoBlue 2019). As a result, actual emissions reductions associated with on-site solar PV systems would likely be higher than the 50% reduction assumed for this analysis. As noted in Impact GHG-B, project-generated increases in GHG

emissions could conflict with GHG-reduction efforts, as a result this impact is considered ***potentially significant***. Refer to Impact GHG-B for additional discussion of GHG impacts and recommended mitigation measures.

Table 19. Operational GHG Emissions Without Mitigation

Operational Year/Source	GHG Emissions ($MTCO_2e$/Year)	
	Year 2024	Year 2030
Area Source[1]	29.5	29.5
Energy Use[2]	2,956.1	2,592.5
Motor Vehicles[3]	7,917.1	6,741.7
Waste Generation[4]	339.0	339.0
Water Use and Conveyance[5]	236.4	176.7
Total Operational Emissions:	11,478	9,879
Amortized Construction Emissions:	842.7	842.7
Total with Amortized Construction Emissions:	12,321	10,722
Service Population (SP)[6]:	4,090	4,090
MTCO2e/SP:	3.0	2.6
GHG Efficiency Significance Threshold:	4.0	3.3
Exceeds Threshold?	No	No

1. Area source includes emissions associated primarily with the use of landscape maintenance equipment.
2. Includes adjustment for California Renewable Portfolio Standards requirements and a 50% reduction in residential energy use with installation of on-site residential solar PV systems (CEC 2019).
3. Based on default fleet mix for non-residential land uses contained in CalEEMod for San Luis Obispo County. Fleet mix for residential land uses based on the vehicle distribution for residential land uses obtained from the SJVAPCD and applied to San Luis Obispo County default fleet mix, per SLOAPCD recommendations (SJVAPCD 2019; SLOAPCD 2019). Includes CH_4, N_20, and CO_2 mobile source emissions expressed in CO_2e.
4. Based on an average annual waste diversion/recycling rate of 50% based on statewide averages.
5. Incudes use of low-flow water fixtures and water-efficient irrigation systems, per current building code requirements.
6. Based on the estimated number of residents, employees, and students served by the proposed project (Rincon 2019).
Refer to Appendix C for modeling assumptions and results.

Impact GHG-B Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

As noted in Table 19, operational GHG emissions attributable to the proposed project would be primarily associated with energy use and mobile sources, which account for roughly 26% and 69% of the project's total operational GHG emissions, respectively. Applicable GHG-reduction plans related to reducing operational GHG emissions, include the City of Paso Robles CAP and SLOCOG's Sustainable Communities Strategies (SCS). The project's consistency with these plans is discussed in greater detail, as follows:

City of Paso Robles Climate Action Plan

The City's CAP is a long-range plan to reduce GHG emissions from City government operations and community activities within Paso Robles. The City's CAP includes a worksheet that identifies various "mandatory", as well as, "voluntary" GHG-reduction measures. All "mandatory" actions must be incorporated as binding and enforceable components of the project to be considered consistent with the CAP. If a project cannot meet one or more of the "mandatory" actions, substitutions may be allowed provided equivalent reductions can be achieved. In addition, to demonstrate consistency with the CAP, all required measures must be incorporated as binding and enforceable components of the project (City of Paso Robles, 2013).

The proposed project does not include all mandatory measures identified in the City's CAP and, therefore, would be considered inconsistent with the City's CAP. In addition, as noted earlier in this report, the City's CAP was developed prior to adoption of SB 32. As a result, although the City's GHG-reductions identified in the CAP are aligned with the emissions targets identified in AB 32, they are not reflective of the more stringent year 2030 emissions-reduction target mandated by SB 32.

SLOCOG's Sustainable Communities Strategies

As previously noted, ARB's updated *2017 Scoping Plan* reflects the new statewide GHG emissions reductions of 40 percent below 1990 emissions levels by 2030, as mandated by SB 32. A significant part of achieving the SB 32 goals are strategies to promote sustainable communities, such as the promotion of ZNE buildings, and improved transportation choices that result in reducing VMT. Other measures include the increased use of low-carbon fuels and cleaner vehicles.

To support achievement of the State's GHG emissions reduction goals, including the goals recently mandated by SB 32, California established the *Sustainable Communities and Climate Protection Act* (SB 375). SB 375 requires regional metropolitan planning organizations, such as SLOCOG, to develop Sustainable Communities Strategies (SCS) which align transportation, housing, and land use decisions toward achieving the State's GHG emissions-reduction targets. Under SB 375, the development and implementation of SCSs, which link transportation, land use, housing, and climate policy at the regional level, are designed to reduce per capita mobile-source GHG emissions, which is accomplished through implementation of measures that would result in reductions in per capita VMT.

In 2018, ARB adopted more aggressive SB 375 targets as one measure to support progress toward the *2017 Scoping Plan* goals. SB 375 aims to achieve, in aggregate, a 19% reduction in statewide per capita GHG emissions from passenger vehicles by year 2035 (relative to year 2005). To achieve this reduction, ARB sets target reductions for various regions throughout the state to be included in the Regional Transportation Plans/Sustainable Communities Strategies (RTP/SCS) prepared for these regions. For the San Luis Obispo Council of Governments (SLOCOG) region, the ARB set passenger vehicle GHG reduction targets at an 8%/capita decrease in 2020 and an 8%/capita decrease in 2035. This equates to a reduction from 22.7 daily VMT/capita in 2005 to 20.7 daily VMT/capita for 2035 (SLOCOG 2019). Assuming a linear reductions in VMT/capita, the target reduction for the project's buildout year 2024 would equate to a daily rate of approximately 21.4 VMT/capita.

Based on the emissions modeling conducted for this project, the project would generate an average of approximately 75,712 VMT on a daily basis. Based on this estimated average-daily VMT and a project population of 3,517 individuals, the daily VMT/capita for the project would be 21.5 without implementation of recommended air quality mitigation measures to reduce mobile-source emissions (refer to Mitigation Measure AQ-7). Although this rate would be below the 2035 daily rate of 20.7 VMT/capita for 2035, this rate would be slightly above the projected year 2024 daily rate of 2.4 VMT/capita. As a result, without mitigation, projected increases in VMT associated with the proposed project, and associated GHG emissions, would be inconsistent with SLOCOG's SCS.

Increased GHG emissions associated with the proposed project could result in significant increases in GHG emissions that could conflict with GHG-reduction planning efforts. As a result, this impact would be considered ***potentially significant***.

<u>Mitigation Measures</u>

Implement Mitigation Measures AQ-2, AQ-3, AQ-7 and the following:

GHG-1 the proposed project shall implement the following GHG-reduction measures:

a. The following measures shall be implemented consistent with the "mandatory" measures identified in the City's CAP. To the extent possible, "voluntary" measures identified in the City's CAP should also be incorporated
    1. The project shall install high-efficiency lights (i.e., sodium, light-emitting diode [LED]) in parking lots, streets, and other public areas. (CAP Measure E-5).

2. The project shall provide on-site bicycle parking and/or amenities beyond those required by California Green Building Standards Code and related facilities to support long-term use (lockers or a locked room with standard racks and access limited to bicyclists only). (CAP Measure TL-1)
3. The project shall incorporate a pedestrian access network that internally links all uses and connects all existing or planned external streets and pedestrian facilities contiguous with the project site. (CAP Measure TL-2)
4. The project shall be designed to minimize barriers to pedestrian access and interconnectivity. (CAP Measure TL-2)
5. The project shall incorporate traffic calming improvements as appropriate (e.g., marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, median islands, mini-circles, tight corner radii, etc.). (CAP Measure TL-2)
6. The project shall be designed to provide safe and convenient access to public transit within and/or contiguous to the project site. (CAP Measure TL-3)
7. The project shall comply with CALGreen Tier 1 or Tier 2 standards for water efficiency and conservation. (CAP Measure W-1)
8. The project shall divert a minimum of 65 percent of non-hazardous construction or demolition debris. (CAP Measure S-1)
9. Trees to be planted shall be native and drought tolerant, beyond those required as mitigation for tree removal. (CAP Measure T-1).

b. In addition to the above measures, the following additional measures shall be implemented:
    1. To the extent locally available and permissible to meet applicable building-code requirements at the time of development, all appliances and building mechanical equipment (e.g., water heaters, space heaters, pool heating systems) to be installed in residential structures shall be electric powered. Non-residential structures shall be designed to support the future conversion of building mechanical equipment to electric power. The installation of natural-gas fueled appliances and building mechanical equipment in non-residential structures shall be discouraged.
    2. Any water heaters installed for proposed swimming pool(s) shall be electric/solar powered. The use of natural-gas fueled pool heaters shall be prohibited.

Significance After Mitigation

Mitigated operational GHG emissions are summarized in Table 20. As noted in Table 20, implementation of the proposed mitigation measures would further reduce operational emissions for buildout year 2024 conditions to below the GHG efficiency threshold of 3.6 $MTCO_2e$/SP/year. Under predicted future year 2030 conditions, operational emissions would total approximately 2.1 $MTCO_2e$/SP/year, which would be below the corresponding efficiency threshold of 3.2 $MTCO_2e$/SP/year for ensuring consistency with SB 32 GHG-reduction requirements.

Mitigation Measure GHG-1 includes all "mandatory" GHG-reduction measures, as identified in the City's CAP, as well as, additional measures to promote ZNE use for on-site structures, such as the prohibited installation of natural-gas fires appliances for proposed residential development. Proposed non-residential land uses would also be designed and built to promote the use of electrically-powered building mechanical equipment, in support of future ZNE goals for non-residential structures. Mitigation Measures AQ-7 would require the implementation of additional mitigation measures that would help to further reduce operational emissions associated with energy and motor vehicle use. With implementation of these measures, the project's daily VMT/capita rate would be reduced to 19.0, or less, which would be below the projected SCS target daily rate of 20.7 VMT/capita for year 2035. It is also important to note that implementation of Mitigation Measures AQ-2 and AQ-3 would also help to reduce short-term GHG emissions associated with the operation of construction equipment and vehicles, including emissions of black carbon. With mitigation, the proposed project would be considered to have a less-than-significant impact on the environment and would not conflict with GHG-reduction planning efforts. With mitigation, this impact is considered ***less than significant***.

Table 20. Operational GHG Emissions With Mitigation

Operational Year/Source	GHG Emissions ($MTCO_2e$/Year)	
	Year 2024	Year 2030
Area Source[1]	29.5	29.5
Energy Use[2]	2,018.8	1,370.1
Motor Vehicles	7,020.3	5,979.3
Waste Generation[4]	339.0	339.0
Water Use and Conveyance[5]	236.4	176.7
Total Operational Emissions:	9644	7895
Amortized Construction Emissions:	842.7	842.7
Total with Amortized Construction Emissions:	1,0487	8,737
Service Population[6] (SP):	4,090	4,090
MTCO2e/SP:	2.6	2.1
GHG Efficiency Significance Threshold:	4.0	3.3
Exceeds Threshold?	No	No

1. Area source includes emissions associated primarily with the use of landscape maintenance equipment.
2. Includes adjustment for California Renewable Portfolio Standards requirements and a 50% reduction in residential energy use with installation of on-site residential solar PV systems (CEC 2019). Mitigated emissions includes additional reductions in residential natural gas use.
3. Based on default fleet mix for non-residential land uses contained in CalEEMod for San Luis Obispo County. Fleet mix for residential land uses based on the vehicle distribution for residential land uses recommended by the SJVAPCD applied to San Luis Obispo County default fleet mix, per SLOAPCD recommendations (SJVAPCD 2019, SLOAPCD 2019).
4. Based on an average annual waste diversion/recycling rate of 50% based on statewide averages.
5. Incudes use of low-flow water fixtures and water-efficient irrigation systems, per current building code requirements.
6. Based on the estimated number of residents, employees, and students served by the proposed project (Rincon 2019).
Refer to Appendix C for modeling assumptions and results.

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APPENDIX A

SLOAPCD ASBESTOS NOTIFICATION FORMS

SLO COUNTY apcd | Air Pollution Control District
San Luis Obispo County

3433 Roberto Court, San Luis Obispo, CA 93401
805-781-5912 – FAX: 805-781-1002

Naturally Occurring Asbestos
Construction and Grading Project Form

Applicant Information/Property Owner		**Project Name**	
Address		**Project Address**	
City, State, Zip		**City, State, Zip**	
Email for Contact Person		**Project Site Latitude, Longitude**	**Assessors Parcel Number**
Phone Number	**Date Submitted**	**Agent**	**Phone Number**

Check Applicable	DESCRIPTION (attach applicable required information)	APCD REQUIREMENT 1	APCD REQUIREMENT 2
	Project is subject to ATCM regulation but exempt (See Website Map) http://www.slocleanair.org/business/pdf/serpentine-	Geological Evaluation	Exemption Request Form
	Project is subject to ATCM regulation and project is disturbing more than one acre	Geological Evaluation	Dust Control Measure Plan
	Project is subject to ATCM regulation and project is disturbing less than one acre	Geological Evaluation	Mini Dust Control Measure Plan

Please note that the applicant will be invoiced for any associated fees.

REQUIRED APPLICANT SIGNATURE:

Legal Declaration/Authorized Signature _____ Date _____

APCD OFFICE USE ONLY				
Geological Evaluation	**Exemption Request Form**	**Dust Control Measure Plan**		**Monitoring, Health and Safety Plan**
Approved Yes ☐ No ☐	Approved: Yes ☐ No ☐	Approved: Yes ☐ No ☐		Approved: Yes ☐ No ☐
Comments:	Comments:	Comments:		
APCD Staff:	Date Received:	Date Reviewed	OIS Site #	OIS Project #
Invoice No.	Basic Fee	Additional Fees	Billable Hrs	Total Fees

SLO COUNTY apcd | Air Pollution Control District
San Luis Obispo County

3433 Roberto Court, San Luis Obispo, CA 93401
805-781-5912 – FAX: 805-781-1002

Naturally Occurring Asbestos
Construction & Grading Project Exemption Request Form

Applicant Information/ Property Owner		**Project Name**	
Address		**Project Address**	
City, State, Zip		**City, State, Zip**	
Email Address		**Project Site Latitude, Longitude**	**Assessors Parcel Number**
Phone Number	**Date Submitted**	**Agent**	**Phone Number**

The District may provide an exemption from Section 93105 of the California Code of Regulations - Asbestos Airborne Toxic Control Measu For Construction, Grading, Quarrying, And Surface Mining Operations for any property that has any portion of the area to be disturbed located in a geographic ultramafic rock unit; if a registered geologist has conducted a geologic evaluation of the property and determined that no serpentine or ultramafic rock is likely to be found in the area to be disturbed. Before an exemption can be granted, the owner/operator must provide a copy of a report detailing the geologic evaluation to the District for consideration. The District will approve or deny the exemption within 90 days. An outline of the required geological evaluation is provided in the District handout **"ASBESTOS AIRBORNE TOXIC CONTROL MEASURES FOR CONSTRUCTION, GRADING, QUARRYING, AND SURFACE MINING OPERATIONS – Geological Evaluation Requirements." See the APCD Website map: http://www.slocleanair.org/business/asbestos.php**

NOTE: A basic exemption evaluation fee of $172.00 will be charged.

APPLICANT MUST SIGN BELOW:

I request the San Luis Obispo County Air Pollution Control District grant this project exemption from the requirements of the ATCM based on the attached geological evaluation.

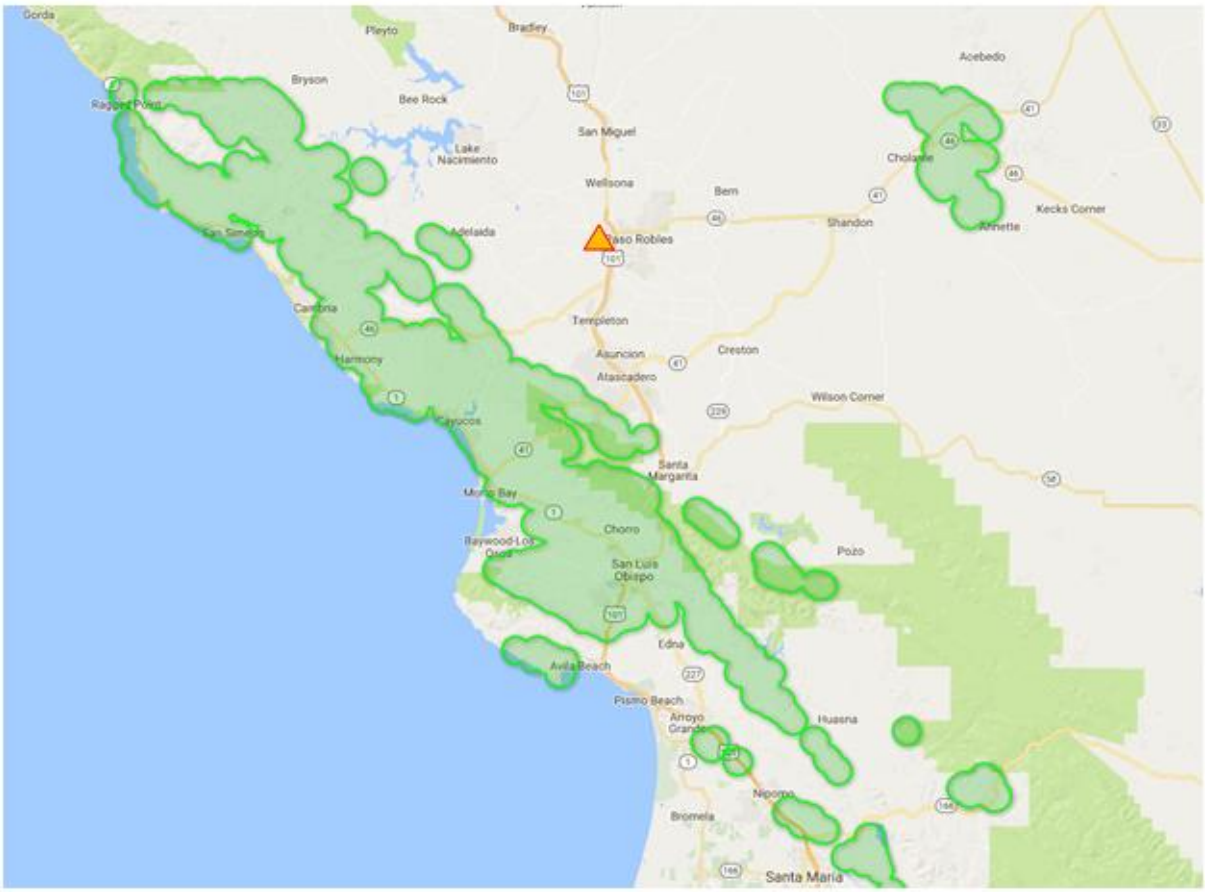
Legal Declaration/Authorized Signature

Date:

OFFICE USE ONLY - APCD Required Element – Geological Evaluation			
Date Received:	Date Reviewed:	OIS Site #:	OIS Project #:
	APCD Staff:	Approved	Not Approved
Comments:			

APPENDIX B

NATURALLY OCCURRING ASBESTOS ZONES



▲ **PROJECT SITE**

SLOAPCD. Naturally Occurring Asbestos Map. Available at: http://www.slocleanair.org/rules-regulations/land-use-ceqa.php

APPENDIX C

EMISSIONS MODELING & SUPPORT DOCUMENTATION

AMBIENT AIR QUALITY MONITORING DATA

Maximum 8-Hour Ozone Averages

Top 4 Summary: Highest 4 Daily Maximum 8-Hour Ozone Averages

at Paso Robles-Santa Fe Avenue

iADAM

	2015		2016		2017	
	Date	8-Hr Average	Date	8-Hr Average	Date	8-Hr Average
National 2015 Std (0.070 ppm):						
First High:	Jun 8	0.068	Sep 17	0.066	Sep 1	0.074
Second High:	Sep 19	0.066	Sep 27	0.064	Sep 2	0.070
Third High:	Apr 17	0.065	Jun 21	0.063	May 21	0.066
Fourth High:	Apr 18	0.065	Jun 24	0.063	Oct 16	0.065
California Std (0.070 ppm):						
First High:	Jun 8	0.068	Sep 17	0.067	Sep 1	0.075
Second High:	Sep 19	0.067	Sep 27	0.065	Sep 2	0.071
Third High:	Apr 17	0.066	Jun 21	0.064	May 21	0.066
Fourth High:	Apr 18	0.066	Jul 27	0.064	Mar 14	0.065
National 2015 Std (0.070 ppm):						
# Days Above the Standard:		0		0		1
Nat'l Standard Design Value:		0.061		0.062		0.064
National Year Coverage:		100		100		95
California Std (0.070 ppm):						
# Days Above the Standard:		0		0		2
California Designation Value:		0.068		0.068		0.071
Expected Peak Day Concentration:		0.068		0.071		0.072
California Year Coverage:		100		100		94

◄ Shift Backward 1 year ▼ Shift Forward ►

Notes:

Eight-hour ozone averages and related statistics are available at Paso Robles-Santa Fe Avenue between 1991 and 2017. Some years in this range may not be represented.

All averages expressed in parts per million.

orange exceeds a national ambient air quality standard.

yellow exceeds a California ambient air quality standard.

An exceedance of a standard is not necessarily related to a violation of the standard.

State and national statistics may differ for the following reasons:

National 8-hour averages are truncated to three decimal places; State 8-hour averages are rounded to three decimal places.

State criteria for ensuring that data are sufficiently complete for calculating 8-hour averages are more stringent than the national criteria.

Daily maximum 8-hour averages associated with the National 0.070 ppm standard exclude those 8-hour averages that have first hours between midnight and 6:00 am, Pacific Standard Time.

Daily maximum 8-hour averages associated with the National 0.070 ppm standard include only those 8-hour averages from days that have sufficient data for the day to be considered valid.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

* means there was insufficient data available to determine the value.

Maximum Hourly Ozone Measurements

Top 4 Summary: Highest 4 Daily Maximum Hourly Ozone Measurements

at Paso Robles-Santa Fe Avenue

iADAM

	2015		2016		2017	
	Date	Measurement	Date	Measurement	Date	Measurement
First High:	Apr 18	0.073	Jul 28	0.091	Sep 1	0.083
Second High:	Sep 25	0.073	Aug 16	0.089	Mar 14	0.082
Third High:	Jun 8	0.072	Jul 27	0.081	Sep 2	0.078
Fourth High:	Sep 20	0.072	Jul 29	0.078	Oct 27	0.078
California:						
# Days Above the Standard:		0		0		0
California Designation Value:		0.07		0.08		0.08
Expected Peak Day Concentration:		0.073		0.078		0.079
National:						
# Days Above the Standard:		*0*		*0*		*0*
3-Year Estimated Expected Number of Exceedance Days:		*0.0*		*0.0*		*0.0*
1-Year Estimated Expected Number of Exceedance Days:		*0.0*		*0.0*		*0.0*
Nat'l Standard Design Value:		*0.072*		*0.078*		*0.082*
Year Coverage:		100		100		95

◄ Shift Backward 1 year ▼ Shift Forward ►

Notes:

Hourly ozone measurements and related statistics are available at Paso Robles-Santa Fe Avenue between 1991 and 2017. Some years in this range may not be represented.

All concentrations expressed in parts per million.

The national 1-hour ozone standard was revoked in June 2005. Statistics related to the national 1-hour ozone standard are shown in *italics* or *italics*.

yellow exceeds a California ambient air quality standard. *orange* exceeds the revoked 1-hour national ambient air quality standard.

An exceedance of a standard is not necessarily related to a violation of the standard.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

* means there was insufficient data available to determine the value.

24-Hour PM2.5 Averages

Top 4 Summary: Highest 4 Daily 24-Hour PM2.5 Averages

at Atascadero-Lewis Avenue

	2015		2016		2017	
	Date	24-Hr Average	Date	24-Hr Average	Date	24-Hr Average
National:						
First High:	Jan 13	29.1		*		*
Second High:	Jan 12	23.7		*		*
Third High:	Jan 1	23.5		*		*
Fourth High:	Jan 4	20.5		*		*
California:						
First High:	Jan 13	29.1		*		*
Second High:	Jan 12	23.7		*		*
Third High:	Jan 1	23.5		*		*
Fourth High:	Jan 4	20.5		*		*
National:						
Estimated # Days > 24-Hour Std:		*		*		*
Measured # Days > 24-Hour Std:		0		0		0
24-Hour Standard Design Value:		*		*		*
24-Hour Standard 98th Percentile:		*		*		*
2006 Annual Std Design Value:		*		*		*
2013 Annual Std Design Value:		*		*		*
Annual Average:		*		*		*
California:						
Annual Std Designation Value:		8		*		*
Annual Average:		*		*		*
Year Coverage:		36		*		*

◄ Shift Backward 1 year ▼ Shift Forward ►

Notes:

Daily PM2.5 averages and related statistics are available at Atascadero-Lewis Avenue between 1999 and 2015. Some years in this range may not be represented.

All averages expressed in micrograms per cubic meter.

yellow exceeds a California ambient air quality standard. orange exceeds a national ambient air quality standard.

An exceedance of a standard is not necessarily related to a violation of the standard.

State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

* means there was insufficient data available to determine the value.

Daily 24-Hour PM10 Averages

Top 4 Summary: Highest 4 Daily 24-Hour PM10 Averages

at Paso Robles-Santa Fe Avenue

	2015		2016		2017	
	Date	24-Hr Average	Date	24-Hr Average	Date	24-Hr Average
National:						
First High:	Aug 17	37.2	Jul 28	44.8	Dec 16	56.2
Second High:	Sep 25	35.7	Jul 26	44.5	Oct 17	54.9
Third High:	Aug 16	35.7	Jul 27	44.4	Oct 18	53.8
Fourth High:	Oct 27	35.3	Sep 21	42.7	Dec 13	51.8
California:						
First High:	Oct 27	35.2	Jul 26	43.0	Dec 16	57.0
Second High:	Sep 25	34.6	Jul 28	42.8	Oct 17	54.3
Third High:	Sep 24	34.4	Jul 27	42.5	Dec 13	54.1
Fourth High:	Aug 16	34.2	Sep 21	42.1	Oct 18	53.1
National:						
Estimated # Days > 24-Hour Std:		0.0		0.0		*
Measured # Days > 24-Hour Std:		0		0		0
3-Yr Avg Est # Days > 24-Hr Std:		*		0.0		*
Annual Average:		*17.7*		*19.2*		*18.6*
3-Year Average:		*22*		*19*		*19*
California:						
Estimated # Days > 24-Hour Std:		0.0		*		*
Measured # Days > 24-Hour Std:		0		0		6
Annual Average:		17.2		*		*
3-Year Maximum Annual Average:		24		20		17
Year Coverage:		0		0		0

◄ Shift Backward 1 year ▼ Shift Forward ►

Notes:

Daily PM10 averages and related statistics are available at Paso Robles-Santa Fe Avenue between 1991 and 2017. Some years in this range may not be represented.

All averages expressed in micrograms per cubic meter.

The national annual average PM10 standard was revoked in December 2006 and is no longer in effect. Statistics related to the revoked standard are shown in *italics* or *italics*.

yellow exceeds a California ambient air quality standard. orange exceeds a national ambient air quality standard.

An exceedance of a standard is not necessarily related to a violation of the standard.

All values listed above represent midnight-to-midnight 24-hour averages and may be related to an exceptional event.

State and national statistics may differ for the following reasons:

State statistics are based on California approved samplers, whereas national statistics are based on samplers using federal reference or equivalent methods. State and national statistics may therefore be based on different samplers.

State statistics for 1998 and later are based on local conditions (except for sites in the South Coast Air Basin, where State statistics for 2002 and later are based on local conditions). National statistics are based on standard conditions.

State criteria for ensuring that data are sufficiently complete for calculating valid annual averages are more stringent than the national criteria.

Measurements are usually collected every six days. Measured days counts the days that a measurement was greater than the level of the standard; Estimated days mathematically estimates how many days concentrations would have been greater than the level of the standard had each day been monitored.

3-Year statistics represent the listed year and the 2 years before the listed year.

Year Coverage indicates the extent to which available monitoring data represent the time of the year when concentrations are expected to be highest. 0 means that data represent none of the high period; 100 means that data represent the entire high period. A high Year Coverage does not mean that there was sufficient data for annual statistics to be considered valid.

* means there was insufficient data available to determine the value.

Source: ARB. 2019. Air Quality & Emissions. Website url: https://www.arb.ca.gov/html/ds.htm.

Daily Construction Emissions Without Mitigation

Construction Activity	Construction Year	Daily Emissions (lbs/day)	
		ROG+NO_X	Exhaust PM_{10}
Demolition	2020	37.6	1.7
Site Preparation	2020	46.6	2.2
Grading/Excavation	2020	54.8	2.2
Building Construction	2020	204.1	2.1
Architectural Coatings	2020	31.1	0.2
Building Construction	2021	188.0	1.6
Architectural Coatings	2021	31.3	0.1
Building Construction	2022	175.9	1.4
Architectural Coatings	2022	30.6	0.1
Building Construction	2023	149.0	1.1
Architectural Coatings	2023	30.1	0.1
Paving	2023	17.0	0.5
SLOAPCD Significance Thresholds		*137*	*7*
Maximum Daily Emissions-Year 2020		235.2	2.3
Exceed SLOAPCD Thresholds?		Yes	No
Maximum Daily Emissions-Year 2021		219.3	1.7
Exceed SLOAPCD Thresholds?		Yes	No
Maximum Daily Emissions-Year 2022		206.5	1.5
Exceed SLOAPCD Thresholds?		Yes	No
Maximum Daily Emissions-Year 2023		196.1	1.7
Exceed SLOAPCD Thresholds?		No	No

CONSTRUCTION EMISSIONS SUMMARY

Construction Activity	Construction Year	Days	Site	Yearly Emissions (tons) ROG	Yearly Emissions (tons) NO_X	Yearly Emissions (tons) Exhaust PM_{10}	Yearly Emissions (tons) ROG+NO_X	Yearly Emissions (tons) Exhaust PM_{10}	Yearly Emissions (pounds) ROG+NO_X	Yearly Emissions (pounds) Exhaust PM_{10}	Daily Emissions (pounds) ROG+NO_X	Daily Emissions (pounds) Exhaust PM_{10}
Demolition	2020	5	On-Site	0.008280	0.083000	0.004150	0.09	0.00	188.14	8.32	37.63	1.66
			Off-Site	0.000230	0.002560	0.000010						
Site Preparation	2020	23	On-Site	0.046900	0.487800	0.025300	0.54	0.03	1072.86	50.62	46.65	2.20
			Off-Site	0.000910	0.000820	0.000010						
Grading/Excavation	2020	87	On-Site	0.193600	2.183600	0.094600	2.38	0.09	4768.92	189.32	54.82	2.18
			Off-Site	0.003800	0.003460	0.000060						
Building Construction	2020	148	On-Site	0.155800	1.410200	0.082100	15.10	0.16	30204.20	317.60	204.08	2.15
			Off-Site	1.611800	11.924300	0.076700						
Architectural Coatings	2020	39	On-Site	0.454000	0.032000	0.002110	0.61	0.00	1214.00	6.06	31.13	0.16
			Off-Site	0.063400	0.057600	0.000920						
Building Construction	2021	260	On-Site	0.248100	2.274900	0.125100	24.43	0.21	48867.20	411.40	187.95	1.58
			Off-Site	2.590200	19.320400	0.080600						
Architectural Coatings	2021	260	On-Site	3.115200	0.199300	0.012300	4.07	0.02	8148.20	36.80	31.34	0.14
			Off-Site	0.405800	0.353800	0.006100						
Building Construction	2022	260	On-Site	0.221800	2.030000	0.105200	22.86	0.18	45729.40	357.20	175.88	1.37
			Off-Site	2.414700	18.198200	0.073400						
Architectural Coatings	2022	260	On-Site	3.101400	0.183100	0.010600	3.98	0.02	7962.00	33.00	30.62	0.13
			Off-Site	0.379600	0.316900	0.005900						
Building Construction	2023	115	On-Site	0.090400	0.827100	0.040200	8.57	0.06	17139.00	123.80	149.03	1.08
			Off-Site	0.963200	6.688800	0.021700						
Architectural Coatings	2023	115	On-Site	1.371000	0.074900	0.004070	1.73	0.01	3459.20	13.22	30.08	0.11
			Off-Site	0.157700	0.126000	0.002540						
Paving	2023	45	On-Site	0.151100	0.229300	0.011500	0.38	0.01	765.16	23.04	17.00	0.51
			Off-Site	0.001210	0.000970	0.000020						

Operational Emissions Without Mitigation (Yr 2024)

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fug	Exh	Tot	
Daily Emissions (lbs/day)								
Area Source	71.9054	1.2292	73.1346	106.7015	0	0.5913	0.5913	
Energy Use - Total	1.0263	8.7937	9.82	3.9041	0	0.7091	0.7091	
Energy Use - Residential Solar PV Adjustment								
Energy Use with Residential Solar PV Adjustment								
Mobile - Total Uncorrected	19.994	78.3561	98.3501	226.559	72.6285	0.6467	73.2752	
Residential Fleet Mix Adjustment	-3.6089	-44.5021	-48.111	-24.1456	-0.5454	-0.1018	-0.6472	
Mobile - Total with Corrected Fleet Mix	16.3851	33.854	50.2391	202.4134	72.0831	0.5449	72.628	
Total Operational Emissions:	89.3168	43.8769	133.1937	313.019	72.0831	1.8453	73.9284	
SLOAPCD Significance Thresholds	--	--	25	550	25	1.25	--	
Exceeds SLOAPCD Thresholds?	--	--	Yes	No	Yes	Yes	--	
Annual Emissions (tons/year)								
Area Source	13.0665	0.2028	13.2693	17.6057	0	0.0976	0.0976	29.466
Energy Use - Total	0.1873	1.6049		0.7125	0	0.1294	0.1294	3934.807
Energy Use - Residential Solar PV Adjustment								-978.705
Energy Use with Residential Solar PV Adjustment								2956.102
Mobile - Total Uncorrected	2.8763	11.5051	14.3814	0.105	10.3694	0.0944	10.4638	9636.212
Residential Fleet Mix Adjustment	-0.5179	-6.6082	-7.1261	-3.3893	-0.0802	-0.0148	-0.095	-1770.895
Mobile - Total with Corrected Fleet Mix	2.3584	4.8969	7.2553	-3.2843	10.2892	0.0796	10.3688	7865.317
Waste								807.102
Water								276.617
Total Operational Emissions:	15.6122	6.7046	20.5246	15.0339	10.2892	0.3066	10.5958	12913.308
SLOAPCD Significance Thresholds	--	--	25	--	25	--	--	
Exceeds SLOAPCD Thresholds?	--	--	Yes	--	No	--	--	

Operational Emissions With Mitigation (Yr 2024)

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fug	Exh	Tot	
Daily Emissions (lbs/day)								
Area Source	71.9054	1.2292	73.1346	106.7015	0	0.5913	0.5913	
Energy Use - Total	0.9363	8.0229	8.9592	3.5622	0	0.6469	0.6469	
Energy Use - Residential Solar PV Adjustment								
Energy Use with Residential Solar PV Adjustment								
Energy Use - Res. Natural Gas Use Adjustment	-0.897	-7.6653	-8.5623	-3.2619	0	-0.6198	-0.6198	
Energy Use with Nat. Gas Adjustment	0.0393	0.3576	0.3969	0.3003	0	0.0271	0.0271	
Mobile - Total Uncorrected	19.2209	72.8092	92.0301	207.6006	64.0584	0.58	64.6384	
Residential Fleet Mix Adjustment	-3.2942	-41.8135	-45.1077	-22.0624	-0.481	-0.0904	-0.5714	
Mobile - Total with Corrected Fleet Mix	15.9267	30.9957	46.9224	185.5382	63.5774	0.4896	64.067	
Total Operational Emissions:	87.8714	32.5825	120.4539	292.54	63.5774	1.108	64.6854	
SLOAPCD Significance Thresholds	--	--	25	550	25	1.25	--	
Exceeds SLOAPCD Thresholds?	--	--	Yes	No	Yes	Yes	--	
Annual Emissions (tons/year)								
Area Source	13.0665	0.2028	13.2693	17.6057	0	0.0976	0.0976	29.466
Energy Use - Total	0.1709	1.4642	1.6351	0.6501	0	0.1181	0.1181	3648.575
Energy Use - Residential Solar PV Adjustment								-922.612
Energy Use with Residential Solar PV Adjustment								2725.963
Energy Use - Res. Natural Gas Use Adjustment	-0.1637	-1.3989	-1.5626	-0.5953	0	-0.1131		-1629.733
Energy Use with Nat. Gas Adjustment	0.0072	0.0653	0.0725	0.0548	0	0.005	0.1181	2018.842
Mobile - Total Uncorrected	2.7631	10.693	13.4561	29.8525	9.1458	0.0847	9.2305	8570.723
Residential Fleet Mix Adjustment	-0.4723	-6.21	-6.6823	-3.0942	-0.0708	-0.0131	-0.0839	-1596.155
Mobile - Total with Corrected Fleet Mix	2.2908	4.483	6.7738	26.7583	9.075	0.0716	9.1466	6974.568
Waste								338.983
Water								236.348
Total Operational Emissions:	15.3645	4.7511	20.1156	44.4188	9.075	0.1742	9.3623	9598.207
SLOAPCD Significance Thresholds	--	--	25	--	25	--	--	
Exceeds SLOAPCD Thresholds?	--	--	Yes	--	No	--	--	

RESIDENTIAL FLEET MIX ADJUSTMENT - YR 2024

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	ROG+NO_X	CO	PM_{10}			
					Fug	Exh	Tot	
Daily Emissions (lbs/day)								
Default Fleet Mix	17.6081	69.7003	87.3084	202.3284	65.5519	0.581	66.1329	
Corrected Fleet Mix	13.9992	25.1982	39.1974	178.1828	65.0065	0.4792	65.4857	
Adjustment	-3.6089	-44.5021	-48.111	-24.1456	-0.5454	-0.1018	-0.6472	
Annual Emissions (tons/year)								
Default Fleet Mix	2.5401	10.2642	12.8043	29.2673	9.3932	0.0852	9.4784	8708.357
Corrected Fleet Mix	2.0222	3.656	5.6782	25.878	9.313	0.0704	9.3834	6937.462
Adjustment	-0.5179	-6.6082	-7.1261	-3.3893	-0.0802	-0.0148	-0.095	-1770.895

RESIDENTIAL SOLAR PV ADJUSTMENT - YR 2024

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	ROG+NO_X	CO	PM_{10}			
					Fug	Exh	Tot	
Daily Emissions (lbs/day)								
Residential without Solar PV								
Residential with Solar PV								
Adjustment								
Annual Emissions (tons/year)								
Residential without Solar PV								1957.409
Residential with Solar PV								978.705
Adjustment								-978.705

RESIDENTIAL FLEET MIX ADJUSTMENT - YR 2024 WITH MITIGATION

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fug	Exh	Tot	
Daily Emissions (lbs/day)								
Default Fleet Mix	16.9103	64.6939	81.6042	185.2245	57.8168	0.5208	58.3376	
Corrected Fleet Mix	13.6161	22.8804	36.4965	163.1621	57.3358	0.4304	57.7662	
Adjustment	-3.2942	-41.8135	-45.1077	-22.0624	-0.481	-0.0904	-0.5714	
Annual Emissions (tons/year)								
Default Fleet Mix	2.4375	9.5285	11.966	26.736	8.2848	0.0763	8.3611	7743.172
Corrected Fleet Mix	1.9652	3.3185	5.2837	23.6418	8.214	0.0632	8.2772	6147.017
Adjustment	-0.4723	-6.21	-6.6823	-3.0942	-0.0708	-0.0131	-0.0839	-1596.155

RESIDENTIAL SOLAR PV ADJUSTMENT - YR 2024 WITH MTIGATION

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fug	Exh	Tot	
Daily Emissions (lbs/day)								
Residential without Solar PV								
Residential with Solar PV								
Adjustment								
Annual Emissions (tons/year)								
Residential without Solar PV								1845.224
Residential with Solar PV								922.612
Adjustment								-922.612

Operational Emissions Without Mitigation (Yr 2030)

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fugitive	Exhaust	Total	
Daily Emissions (lbs/day)								
Annual Emissions (tons/year)								
Area Source								29.461
Energy Use - Total								3245.175
Energy Use - Residential Solar PV Adjustment								-652.668
Energy Use with Residential Solar PV Adjustment								2592.507
Mobile - Total Uncorrected								8078.692
Residential Fleet Mix Adjustment								-1395.079
Mobile - Total with Corrected Fleet Mix								6683.612
Waste								807.102
Water								208.288
Total Operational Emissions:								10973.638

Operational Emissions With Mitigation (Yr 2030)

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fugitive	Exhaust	Total	
Daily Emissions (lbs/day)								
Annual Emissions (tons/year)								
Area Source								29.461
Energy Use - Total								2999.840
Energy Use - Residential Solar PV Adjustment								-615.262
Energy Use with Residential Solar PV Adjustment								2384.578
Energy Use - Res. Natural Gas Use Adjustment								-1629.733
Energy Use with Nat. Gas Adjustment								1370.107
Mobile - Total Uncorrected								7190.749
Residential Fleet Mix Adjustment								-1262.621
Mobile - Total with Corrected Fleet Mix								5928.128
Waste								338.983
Water								176.670
Total Operational Emissions:								7843.349

RESIDENTIAL FLEET MIX ADJUSTMENT - YR 2030

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fugitive	Exhaust	Total	
Daily Emissions (lbs/day)								
Annual Emissions (tons/year)								
Default Fleet Mix								7299.266
Corrected Fleet Mix								5904.186
Adjustment								-1395.079

RESIDENTIAL SOLAR PV ADJUSTMENT - YR 2030

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fugitive	Exhaust	Total	
Daily Emissions (lbs/day)								
Annual Emissions (tons/year)								
Residential without Solar PV								1305.336
Residential with Solar PV								652.668
Adjustment								-652.668

RESIDENTIAL FLEET MIX ADJUSTMENT - YR 2030 WITH MITIGATION

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fugitive	Exhaust	Total	
Daily Emissions (lbs/day)								
Annual Emissions (tons/year)								
Default Fleet Mix								6494.913
Corrected Fleet Mix								5232.292
Adjustment								-1262.621

RESIDENTIAL SOLAR PV ADJUSTMENT - YR 2030 WITH MTIGATION

Operational Period/Source	Emissions							MTCO2e
	ROG	NO_X	$ROG+NO_X$	CO	PM_{10}			
					Fugitive	Exhaust	Total	
Daily Emissions (lbs/day)								
Annual Emissions (tons/year)								
Residential without Solar PV								1230.524
Residential with Solar PV								615.262
Adjustment								-615.262

OPERATIONAL GHG SUMMARY (2024)

	Without Mitigation	With Mitigation
AREA SOURCE	29.5	29.5
ENERGY USE	2,956.1	2,018.8
MOTOR VEHICLES (CH4 & CO2 in CO2e)	7,865.3	6,974.6
MOTOR VEHICLES (N2O in CO2e)	51.8	45.7
MOTOR VEHICLES - TOTAL	7,917.1	7,020.3
WASTE GENERATION	339.0	339.0
WATER USE & CONVEYANCE	236.4	236.4
TOTAL	11,478.1	9,644.0
AMORTIZED CONSTRUCTION	842.7	842.7
TOTAL WITH CONST.	12,320.8	10,486.7
SERVICE POPULATION	4,090.0	4,090.0
MTCO2e/SP/Yr	3.0	2.6

OPERATIONAL GHG SUMMARY (2030)

	Without Mitigation	With Mitigation
AREA SOURCE	29.5	29.5
ENERGY USE	2,592.5	1,370.1
MOTOR VEHICLES (CH4 & CO2 in CO2e)	6,683.6	5,928.1
MOTOR VEHICLES (N2O in CO2e)	58.1	51.2
MOTOR VEHICLES - TOTAL	6,741.7	5,979.3
WASTE GENERATION	339.0	339.0
WATER USE & CONVEYANCE	176.7	176.7
TOTAL	9,879.4	7,894.6
AMORTIZED CONSTRUCTION	842.7	842.7
TOTAL WITH CONST.	10,722.0	8,737.3
SERVICE POPULATION	4,090.0	4,090.0
MTCO2e/SP/Yr	2.6	2.1

MOBILE SOURCE N20 - YEAR 2024 WITHOUT MITIGATION

SCENARIO: ALL LAND USES WITHOUT ADJUSTMENT

ANNUAL VMT: 27634856

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.588806	16271569.02	0.002493845	0.04473048
LDT1	0.027737	766508.0009	0.002516246	0.00212605
LDT2	0.198305	5480130.119	0.002536081	0.01531999
MT	0.114471	3163389.601	0.044203714	0.15414025
LHD1	0.022249	614847.9111	0.059951623	0.04063247
LHD2	0.005748	158845.1523	0.068038748	0.01191338
MHD	0.012759	352593.1277	0.125358377	0.04872275
HHD	0.019721	544986.9952	0.183319618	0.11012849
BUS - OTHER	0.002316	64002.3265	0.132734565	0.0093645
BUS - URBAN	0.001163	32139.33753	0.151646082	0.00537245
MC	0.004776	131984.0723	0.06668364	0.00970165
BUS - SCHOOL	0.000758	20947.22085	0.130245666	0.00300742
MH	0.001192	32940.74835	0.134206333	0.00487316
			TOTAL:	0.46003306
			GWP:	298
			MT/TON:	0.9072
			CO2e:	124.367913

MOBILE SOURCE N20 - YEAR 2024 WITHOUT MITIGATION

SCENARIO: RESIDENTIAL LAND USES WITHOUT ADJUSTMENT

ANNUAL VMT: 25033354

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.588806	14739789.04	0.002493845	0.04051962
LDT1	0.027737	694350.1399	0.002516246	0.00192591
LDT2	0.198305	4964239.265	0.002536081	0.01387779
MT	0.114471	2865593.066	0.044203714	0.13962973
LHD1	0.022249	556967.0931	0.059951623	0.0368074
LHD2	0.005748	143891.7188	0.068038748	0.01079187
MHD	0.012759	319400.5637	0.125358377	0.04413607
HHD	0.019721	493682.7742	0.183319618	0.09976117
BUS - OTHER	0.002316	57977.24786	0.132734565	0.00848294
BUS - URBAN	0.001163	29113.7907	0.151646082	0.0048667
MC	0.004776	119559.2987	0.06668364	0.00878835
BUS - SCHOOL	0.000758	18975.28233	0.130245666	0.00272431
MH	0.001192	29839.75797	0.134206333	0.00441441
			TOTAL:	0.41672627
			GWP:	298
			MT/TON:	0.9072
			CO2e:	112.660112

MOBILE SOURCE N20 - YEAR 2024 WITHOUT MITIGATION

SCENARIO: RESIDENTIAL LAND USES WITH ADJUSTMENT

ANNUAL VMT: 25033354

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.611	15295379.29	0.002493845	0.04204693
LDT1	0.150	3755003.1	0.002516246	0.01041521
LDT2	0.190	4756337.26	0.002536081	0.01329659
MT	0.040	1001334.16	0.044203714	0.0487913
LHD1	0.000	2503.3354	0.059951623	0.00016543
LHD2	0.000	2503.3354	0.068038748	0.00018775
MHD	0.000	2503.3354	0.125358377	0.00034592
HHD	0.001	25033.354	0.183319618	0.00505863
BUS - OTHER	0.000	2503.3354	0.132734565	0.00036628
BUS - URBAN	0.003	72596.7266	0.151646082	0.01213537
MC	0.001	25033.354	0.06668364	0.00184011
BUS - SCHOOL	0.000	2503.3354	0.130245666	0.00035941
MH	0.004	90120.0744	0.134206333	0.01333212
			TOTAL:	0.14834104
			GWP:	298
			MT/TON:	0.9072
			CO2e:	40.1033486
			REDUCTION COMPARED TO NO ADJUSTMENT SCENARIO:	-72.556764

**Fleet mix adjusted based on SJVAPCD-recommended fleet mix for residential land uses, approved for use by SLOAPCD.*

YEAR 2024 WITHOUT MITGATION

TOTAL N20 IN CO2e ALL LAND USES - WITH RESIDENTIAL ADJUSTMENT: 51.8111489

MOBILE SOURCE N20 - YEAR 2030 WITHOUT MITIGATION

SCENARIO: ALL LAND USES WITHOUT ADJUSTMENT

ANNUAL VMT: 27634856

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.610645	16875086.64	0.002413093	0.044887422
LDT1	0.025081	693109.8233	0.00244284	0.001866387
LDT2	0.199254	5506355.597	0.002523654	0.015317881
MT	0.104456	2886626.518	0.042281923	0.134539542
LHD1	0.014638	404519.0221	0.055574624	0.024781072
LHD2	0.00444	122698.7606	0.063071317	0.008530543
MHD	0.01255	346817.4428	0.120439538	0.046044168
HHD	0.019914	550320.5224	0.172523446	0.104657041
BUS - OTHER	0.002247	62095.52143	0.130307049	0.008919342
BUS - URBAN	0.001059	29265.3125	0.190240106	0.006137053
MC	0.00428	118277.1837	0.066650908	0.008689838
BUS - SCHOOL	0.000708	19565.47805	0.125554818	0.002707874
MH	0.000759	20974.8557	0.12937284	0.002991209
			TOTAL:	0.410069372
			GWP:	298
			MT/TON:	0.9072
			CO2e:	110.8604504

MOBILE SOURCE N20 - YEAR 2030 WITHOUT MITIGATION

SCENARIO: RESIDENTIAL LAND USES WITHOUT ADJUSTMENT

ANNUAL VMT: 25033354

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.610645	15286492.45	0.002413093	0.04066179
LDT1	0.025081	627861.5517	0.00244284	0.001690689
LDT2	0.199254	4987995.918	0.002523654	0.01387588
MT	0.104456	2614884.025	0.042281923	0.121874201
LHD1	0.014638	366438.2359	0.055574624	0.022448221
LHD2	0.00444	111148.0918	0.063071317	0.007727491
MHD	0.01255	314168.5927	0.120439538	0.041709642
HHD	0.019914	498514.2116	0.172523446	0.094804791
BUS - OTHER	0.002247	56249.94644	0.130307049	0.008079689
BUS - URBAN	0.001059	26510.32189	0.190240106	0.00555932
MC	0.00428	107142.7551	0.066650908	0.00787179
BUS - SCHOOL	0.000708	17723.61463	0.125554818	0.002452959
MH	0.000759	19000.31569	0.12937284	0.002709621
			TOTAL:	0.371466085
			GWP:	298
			MT/TON:	0.9072
			CO2e:	100.4242215

MOBILE SOURCE N20 - YEAR 2030 WITHOUT MITIGATION

SCENARIO: RESIDENTIAL LAND USES WITH ADJUSTMENT

ANNUAL VMT: 25033354

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.600	15020012.4	0.002413093	0.039952958
LDT1	0.150	3755003.1	0.00244284	0.01011137
LDT2	0.185	4631170.49	0.002523654	0.012883243
MT	0.050	1254171.035	0.042281923	0.058454253
LHD1	0.001	25033.354	0.055574624	0.001533558
LHD2	0.001	12516.677	0.063071317	0.000870213
MHD	0.002	50066.708	0.120439538	0.006646955
HHD	0.002	37550.031	0.172523446	0.007141066
BUS - OTHER	0.001	25033.354	0.130307049	0.003595767
BUS - URBAN	0.003	75100.062	0.190240106	0.015748783
MC	0.001	25033.354	0.066650908	0.001839203
BUS - SCHOOL	0.001	22530.0186	0.125554818	0.003118168
MH	0.004	100133.416	0.12937284	0.014279952
			TOTAL:	0.176175491
			GWP:	298
			MT/TON:	0.9072
			CO2e:	47.62826879
			REDUCTION COMPARED TO NO ADJUSTMENT SCENARIO:	-52.79595272

**Fleet mix adjusted based on SJVAPCD-recommended fleet mix for residential land uses, approved for use by SLOAPCD.*

YEAR 2030 WITHOUT MITIGATION

TOTAL N20 IN CO2e ALL LAND USES - WITH RESIDENTIAL ADJUSTMENT: 58.06449771

MOBILE SOURCE N20 - YEAR 2024 WITH MITIGATION

SCENARIO: ALL LAND USES WITHOUT ADJUSTMENT

ANNUAL VMT: 24373943

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.588806	14351523.88	0.002493845	0.03945228
LDT1	0.027737	676060.057	0.002516246	0.00187518
LDT2	0.198305	4833474.767	0.002536081	0.01351223
MT	0.114471	2790109.629	0.044203714	0.1359517
LHD1	0.022249	542295.8578	0.059951623	0.03583784
LHD2	0.005748	140101.4244	0.068038748	0.0105076
MHD	0.012759	310987.1387	0.125358377	0.04297347
HHD	0.019721	480678.5299	0.183319618	0.09713333
BUS - OTHER	0.002316	56450.05199	0.132734565	0.00825949
BUS - URBAN	0.001163	28346.89571	0.151646082	0.0047385
MC	0.004776	116409.9518	0.06668364	0.00855685
BUS - SCHOOL	0.000758	18475.44879	0.130245666	0.00265255
MH	0.001192	29053.74006	0.134206333	0.00429813
			TOTAL:	0.40574916
			GWP:	298
			MT/TON:	0.9072
			CO2e:	109.692499

MOBILE SOURCE N20 - YEAR 2024 WITH MITIGATION

SCENARIO: RESIDENTIAL LAND USES WITHOUT ADJUSTMENT

ANNUAL VMT: 22079419

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.588806	13000494.38	0.002493845	0.03573831
LDT1	0.027737	612416.8448	0.002516246	0.00169865
LDT2	0.198305	4378459.185	0.002536081	0.01224021
MT	0.114471	2527453.172	0.044203714	0.12315343
LHD1	0.022249	491244.9933	0.059951623	0.03246412
LHD2	0.005748	126912.5004	0.068038748	0.00951843
MHD	0.012759	281711.307	0.125358377	0.03892801
HHD	0.019721	435428.2221	0.183319618	0.08798936
BUS - OTHER	0.002316	51135.9344	0.132734565	0.00748195
BUS - URBAN	0.001163	25678.3643	0.151646082	0.00429243
MC	0.004776	105451.3051	0.06668364	0.00775132
BUS - SCHOOL	0.000758	16736.1996	0.130245666	0.00240284
MH	0.001192	26318.66745	0.134206333	0.00389351
			TOTAL:	0.36755258
			GWP:	298
			MT/TON:	0.9072
			CO2e:	99.3662226

MOBILE SOURCE N20 - YEAR 2024 WITH MITIGATION

SCENARIO: RESIDENTIAL LAND USES WITH ADJUSTMENT

ANNUAL VMT: 22079419

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.611	13490525.01	0.002493845	0.0370854
LDT1	0.150	3311912.85	0.002516246	0.00918622
LDT2	0.190	4195089.61	0.002536081	0.0117276
MT	0.040	883176.76	0.044203714	0.04303393
LHD1	0.000	2207.9419	0.059951623	0.00014591
LHD2	0.000	2207.9419	0.068038748	0.0001656
MHD	0.000	2207.9419	0.125358377	0.0003051
HHD	0.001	22079.419	0.183319618	0.00446171
BUS - OTHER	0.000	2207.9419	0.132734565	0.00032305
BUS - URBAN	0.003	64030.3151	0.151646082	0.01070339
MC	0.001	22079.419	0.06668364	0.00162297
BUS - SCHOOL	0.000	2207.9419	0.130245666	0.000317
MH	0.004	79485.9084	0.134206333	0.01175893
			TOTAL:	0.13083681
			GWP:	298
			MT/TON:	0.9072
			CO2e:	35.3711547
			REDUCTION COMPARED TO NO ADJUSTMENT SCENARIO:	-63.995068

**Fleet mix adjusted based on SJVAPCD-recommended fleet mix for residential land uses, approved for use by SLOAPCD.*

YEAR 2024 WITH MITGATION

TOTAL N20 IN CO2e ALL LAND USES - WITH RESIDENTIAL ADJUSTMENT: 45.6974311

MOBILE SOURCE N20 - YEAR 2030 WITH MITIGATION

SCENARIO: ALL LAND USES WITHOUT ADJUSTMENT

ANNUAL VMT: 24373943

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.610645	14883826.42	0.002413093	0.039590706
LDT1	0.025081	611322.8644	0.00244284	0.001646154
LDT2	0.199254	4856605.639	0.002523654	0.013510371
MT	0.104456	2546004.59	0.042281923	0.118663876
LHD1	0.014638	356785.7776	0.055574624	0.021856906
LHD2	0.00444	108220.3069	0.063071317	0.007523939
MHD	0.01255	305892.9847	0.120439538	0.040610956
HHD	0.019914	485382.7009	0.172523446	0.09230751
BUS - OTHER	0.002247	54768.24992	0.130307049	0.007866859
BUS - URBAN	0.001059	25812.00564	0.190240106	0.005412881
MC	0.00428	104320.476	0.066650908	0.007664437
BUS - SCHOOL	0.000708	17256.75164	0.125554818	0.002388345
MH	0.000759	18499.82274	0.12937284	0.002638246
			TOTAL:	0.361681186
			GWP:	298
			MT/TON:	0.9072
			CO2e:	97.77891731

MOBILE SOURCE N20 - YEAR 2030 WITH MITIGATION

SCENARIO: RESIDENTIAL LAND USES WITHOUT ADJUSTMENT

ANNUAL VMT: 22079419

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.610645	13482686.82	0.002413093	0.0358637
LDT1	0.025081	553773.9079	0.00244284	0.001491187
LDT2	0.199254	4399412.553	0.002523654	0.012238526
MT	0.104456	2306327.791	0.042281923	0.107493049
LHD1	0.014638	323198.5353	0.055574624	0.019799332
LHD2	0.00444	98032.62036	0.063071317	0.006815648
MHD	0.01255	277096.7085	0.120439538	0.036787906
HHD	0.019914	439689.55	0.172523446	0.083617829
BUS - OTHER	0.002247	49612.45449	0.130307049	0.007126286
BUS - URBAN	0.001059	23382.10472	0.190240106	0.004903321
MC	0.00428	94499.91332	0.066650908	0.006942919
BUS - SCHOOL	0.000708	15632.22865	0.125554818	0.00216351
MH	0.000759	16758.27902	0.12937284	0.002389886
			TOTAL:	0.327633098
			GWP:	298
			MT/TON:	0.9072
			CO2e:	88.57416647

MOBILE SOURCE N20 - YEAR 2030 WITH MITIGATION

SCENARIO: RESIDENTIAL LAND USES WITH ADJUSTMENT

ANNUAL VMT: 22079419

VEHICLE FLEET MIX			N20 EMISSIONS	
VEHICLE TYPE	PERCENT	VMT	EMFAC (G/MI)	EMISSIONS
LDA	0.600	13247651.4	0.002413093	0.035238511
LDT1	0.150	3311912.85	0.00244284	0.008918229
LDT2	0.185	4084692.515	0.002523654	0.011363021
MT	0.050	1106178.892	0.042281923	0.051556653
LHD1	0.001	22079.419	0.055574624	0.001352598
LHD2	0.001	11039.7095	0.063071317	0.000767528
MHD	0.002	44158.838	0.120439538	0.005862614
HHD	0.002	33119.1285	0.172523446	0.00629842
BUS - OTHER	0.001	22079.419	0.130307049	0.003171467
BUS - URBAN	0.003	66238.257	0.190240106	0.013890427
MC	0.001	22079.419	0.066650908	0.001622177
BUS - SCHOOL	0.001	19871.4771	0.125554818	0.002750225
MH	0.004	88317.676	0.12937284	0.012594919
			TOTAL:	0.155386788
			GWP:	298
			MT/TON:	0.9072
			CO2e:	42.00813454
			REDUCTION COMPARED TO NO ADJUSTMENT SCENARIO:	-46.56603193

**Fleet mix adjusted based on SJVAPCD-recommended fleet mix for residential land uses, approved for use by SLOAPCD.*

YEAR 2030 WITH MITIGATION

TOTAL N20 IN CO2e ALL LAND USES - WITH RESIDENTIAL ADJUSTMENT: 51.21288538

VMT/Capita

	Without Mitigation	With Mitigation
Annual VMT:	27,634,856	24,373,043
Daily VMT:	75,712	66,775
Population:	3517	3517
VMT/Capita:	21.5	19.0

Annual VMT derived from CalEEMod modeling results.

Daily VMT assumes 365 days/year.

Population provided by the project applicant.

CONSTRUCTION EMISSIONS SUMMARY (TONS/QTR)

		EMISSIONS (TONS/QTR)						
			PM10			PM2.5		
CONSTRUCTION QUARTER		ROG+NOX	FUG	EXH	TOTAL	FUG	EXH	TOTAL
2020	Q1	1.64	0.68	0.07	0.75	0.22	0.06	0.28
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		No	No	No				
2020	Q2	2.89	0.96	0.07	1.03	0.22	0.07	0.29
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / No	No	No				
2020	Q3	6.57	1.44	0.07	1.51	0.39	0.07	0.45
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / Yes	No	No				
2020	Q4	7.31	1.58	0.07	1.66	0.42	0.07	0.49
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / Yes	No	No				
2021	Q1	7.13	1.68	0.06	1.74	0.45	0.05	0.50
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / Yes	No	No				
2021	Q2	7.00	1.68	0.06	1.74	0.45	0.05	0.50
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / Yes	No	No				
2021	Q3	7.00	1.68	0.06	1.74	0.45	0.05	0.50
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / Yes	No	No				
2021	Q4	7.13	1.68	0.06	1.74	0.45	0.05	0.50
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / Yes	No	No				
2022	Q1	6.74	1.68	0.05	1.73	0.45	0.05	0.50
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / Yes	No	No				
2022	Q2	6.62	1.68	0.05	1.73	0.45	0.05	0.50
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				
EXCEEDS?		Yes / Yes	No	No				
2022	Q3	6.62	1.68	0.05	1.73	0.45	0.05	0.50
TIER 1&2 THRESHOLDS		2.5 / 6.3	2.5 / None	0.13 / 0.32				

	EXCEEDS?	Yes / Yes	No	No				
2022	Q4	6.74	1.68	0.05	1.73	0.45	0.05	0.50
	TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
	EXCEEDS?	Yes / Yes	No	No				
2023	Q1	5.86	1.68	0.04	1.72	0.45	0.04	0.49
	TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
	EXCEEDS?	Yes / No	No	No				
2023	Q2	4.85	1.37	0.04	1.40	0.37	0.03	0.40
	TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
	EXCEEDS?	Yes / No	No	No				
2023	Q3	0.25	0.00	0.01	0.01	0.00	0.01	0.01
	TIER 1&2 THRESHOLDS	2.5 / 6.3	2.5 / None	0.13 / 0.32				
	EXCEEDS?	No	No	No				

CALEEMOD – YEAR 2024

Includes Construction and Operational Conditions.
Mobile-source adjustment for Residential Fleet Mix Calculated Separately.

NOTE: Does not include residential adjustment for fleet mix or solar PV, calculated separately.

Olsen-Chandler

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.58	1000sqft	0.01	576.00	0
Elementary School	495.00	Student	0.95	41,383.67	0
Other Asphalt Surfaces	97.60	Acre	97.60	4,251,456.00	0
City Park	45.30	Acre	45.30	1,973,268.00	0
City Park	33.80	Acre	33.80	1,472,328.00	0
Health Club	18.75	1000sqft	11.50	18,752.00	0
Racquet Club	6.21	1000sqft	3.80	6,205.00	0
Recreational Swimming Pool	0.00	1000sqft	1.10	1,789.00	0
Recreational Swimming Pool	0.00	1000sqft	0.70	1,154.00	0
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046
Regional Shopping Center	10.66	1000sqft	0.24	10,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes RPS adjustment.

Land Use - Provided by the applicant team.

Construction Phase - Based on provided phase durations. Architectural Coating, starts five months after building construction and stops at the end of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment use based on model defaults.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Const trips based on model defaults.

On-road Fugitive Dust -

Demolition - Demolition of 3,400 building square footage.

Grading - Based on model defaults.

Architectural Coating - Residential low-VOC content: 50 g/L, per mitigation requirements. Non-Residential low-VOC content: 100 g/L.

Vehicle Trips - Trip-gen rates for residential and school based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. Other uses derived from the traffic analysis prepared for this project.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -
Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	400.00	5.00
tblConstructionPhase	NumDays	240.00	23.00
tblConstructionPhase	NumDays	620.00	87.00
tblConstructionPhase	NumDays	6,200.00	783.00
tblConstructionPhase	NumDays	440.00	45.00
tblConstructionPhase	NumDays	440.00	674.00
tblConstructionPhase	PhaseEndDate	7/13/2021	1/7/2020
tblConstructionPhase	PhaseEndDate	6/14/2022	2/7/2020
tblConstructionPhase	PhaseEndDate	10/29/2024	6/9/2020
tblConstructionPhase	PhaseEndDate	8/4/2048	6/9/2023
tblConstructionPhase	PhaseEndDate	4/12/2050	8/11/2023
tblConstructionPhase	PhaseStartDate	7/14/2021	1/8/2020
tblConstructionPhase	PhaseStartDate	6/15/2022	2/8/2020
tblConstructionPhase	PhaseStartDate	10/30/2024	6/10/2020
tblConstructionPhase	PhaseStartDate	8/5/2048	6/10/2023
tblGrading	AcresOfGrading	217.50	1,550.00
tblLandUse	LandUseSquareFeet	580.00	576.00

tblLandUse	LandUseSquareFeet	18,750.00	18,752.00
tblLandUse	LandUseSquareFeet	6,210.00	6,205.00
tblLandUse	LandUseSquareFeet	0.00	1,789.00
tblLandUse	LandUseSquareFeet	0.00	1,154.00
tblLandUse	LandUseSquareFeet	10,660.00	10,659.00
tblLandUse	LotAcreage	0.43	11.50
tblLandUse	LotAcreage	0.14	3.80
tblLandUse	LotAcreage	0.00	1.10
tblLandUse	LotAcreage	0.00	0.70
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	32.93	34.66
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00

tblVehicleTrips	WD_TR	42.70	37.72
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	2.5387	16.1853	16.4177	0.0524	4.6136	0.2859	4.8994	1.2405	0.2671	1.5076						4,848.9110
2021	6.3593	22.1483	26.1606	0.0918	6.5868	0.2240	6.8108	1.7699	0.2115	1.9814						8,518.2350
2022	6.1174	20.7282	24.0813	0.0893	6.5617	0.1951	6.7568	1.7632	0.1842	1.9474						8,295.9189
2023	2.7347	7.9471	10.0747	0.0389	2.9056	0.0801	2.9857	0.7808	0.0752	0.8559						3,617.4591
Maximum	**6.3593**	**22.1483**	**26.1606**	**0.0918**	**6.5868**	**0.2859**	**6.8108**	**1.7699**	**0.2671**	**1.9814**						**8,518.2350**

2.1 Overall Construction

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	2.2595	14.6292	16.7243	0.0524	3.8246	0.2155	4.0401	1.0287	0.2115	1.2402						4,848.9104
2021	6.1783	21.7077	26.3320	0.0918	6.5868	0.2170	6.8038	1.7699	0.2120	1.9819						8,518.2346
2022	5.9644	20.5409	24.2801	0.0893	6.5617	0.2091	6.7708	1.7632	0.2045	1.9676						8,295.9185
2023	2.6648	7.9659	10.2307	0.0389	2.9056	0.0954	3.0010	0.7808	0.0938	0.8746						3,617.4589
Maximum	**6.1783**	**21.7077**	**26.3320**	**0.0918**	**6.5868**	**0.2170**	**6.8038**	**1.7699**	**0.2120**	**1.9819**						**8,518.2346**

	ROG	NOx	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	**3.85**	**3.23**	**-1.09**	**0.00**	**3.82**	**6.13**	**3.90**	**3.81**	**2.21**	**3.63**	**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	**1-1-2020**	**3-31-2020**	1.6484	0.8737
2	**4-1-2020**	**6-30-2020**	2.8864	2.2597
3	**7-1-2020**	**9-30-2020**	6.6427	6.4322
4	**10-1-2020**	**12-31-2020**	7.3654	7.1455
5	**1-1-2021**	**3-31-2021**	7.0478	6.8947
6	**4-1-2021**	**6-30-2021**	6.9975	6.8427
7	**7-1-2021**	**9-30-2021**	7.0744	6.9179
8	**10-1-2021**	**12-31-2021**	7.2044	7.0479

9	**1-1-2022**	**3-31-2022**	6.6624	6.5782
10	**4-1-2022**	**6-30-2022**	6.6203	6.5352
11	**7-1-2022**	**9-30-2022**	6.6931	6.6070
12	**10-1-2022**	**12-31-2022**	6.8104	6.7244
13	**1-1-2023**	**3-31-2023**	5.7908	5.7543
14	**4-1-2023**	**6-30-2023**	4.5476	4.5240
15	**7-1-2023**	**9-30-2023**	0.2550	0.2644
		Highest	7.3654	7.1455

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	13.0665	0.2028	17.6057	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4657
Energy	0.1873	1.6049	0.7125	0.0102		0.1294	0.1294		0.1294	0.1294						3,934.8071
Mobile	2.8763	11.5051	32.6468	0.1050	10.3694	0.0944	10.4638	2.7747	0.0883	2.8630						9,636.2116
Waste						0.0000	0.0000		0.0000	0.0000						807.1016
Water						0.0000	0.0000		0.0000	0.0000						276.6166
Total	**16.1301**	**13.3128**	**50.9650**	**0.1162**	**10.3694**	**0.3214**	**10.6908**	**2.7747**	**0.3152**	**3.0899**						**14,684.2026**

2.2 Overall Operational

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	13.0665	0.2028	17.6057	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4657
Energy	0.1709	1.4642	0.6501	9.3200e-003		0.1181	0.1181		0.1181	0.1181						3,648.5750
Mobile	2.7631	10.6930	29.8525	0.0934	9.1458	0.0847	9.2304	2.4473	0.0791	2.5264						8,570.7232
Waste						0.0000	0.0000		0.0000	0.0000						338.9827
Water						0.0000	0.0000		0.0000	0.0000						236.3480
Total	**16.0005**	**12.3600**	**48.1084**	**0.1037**	**9.1458**	**0.3003**	**9.4461**	**2.4473**	**0.2948**	**2.7420**						**12,824.0946**

	ROG	NOx	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	**0.80**	**7.16**	**5.61**	**10.78**	**11.80**	**6.57**	**11.64**	**11.80**	**6.50**	**11.26**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**12.67**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	5	
2	Site Preparation	Site Preparation	1/8/2020	2/7/2020	5	23	
3	Grading	Grading	2/8/2020	6/9/2020	5	87	
4	Building Construction	Building Construction	6/10/2020	6/9/2023	5	783	
5	Paving	Paving	6/10/2023	8/11/2023	5	45	
6	Architectural Coating	Architectural Coating	11/10/2020	6/9/2023	5	674	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 97.6

Residential Indoor: 4,343,625; Residential Outdoor: 1,447,875; Non-Residential Indoor: 120,778; Non-Residential Outdoor: 40,259; Striped Parking Area: 255,087 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,813.00	1,413.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	763.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					1.7300e-003	0.0000	1.7300e-003	2.6000e-004	0.0000	2.6000e-004						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**1.7300e-003**	**4.1500e-003**	**5.8800e-003**	**2.6000e-004**	**3.8500e-003**	**4.1100e-003**						**8.5596**

3.2 Demolition - 2020

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	7.0000e-005	2.4100e-003	5.2000e-004	1.0000e-005	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005						0.5778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.6000e-004	1.5000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004						0.3023
Total	**2.3000e-004**	**2.5600e-003**	**1.8100e-003**	**1.0000e-005**	**4.9000e-004**	**1.0000e-005**	**5.0000e-004**	**1.4000e-004**	**1.0000e-005**	**1.5000e-004**						**0.8800**

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					6.7000e-004	0.0000	6.7000e-004	1.0000e-004	0.0000	1.0000e-004						0.0000
Off-Road	2.3100e-003	0.0458	0.0617	1.0000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003						8.5596
Total	**2.3100e-003**	**0.0458**	**0.0617**	**1.0000e-004**	**6.7000e-004**	**2.1600e-003**	**2.8300e-003**	**1.0000e-004**	**2.1600e-003**	**2.2600e-003**						**8.5596**

3.2 Demolition - 2020

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	7.0000e-005	2.4100e-003	5.2000e-004	1.0000e-005	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005						0.5778
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.6000e-004	1.5000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004						0.3023
Total	**2.3000e-004**	**2.5600e-003**	**1.8100e-003**	**1.0000e-005**	**4.9000e-004**	**1.0000e-005**	**5.0000e-004**	**1.4000e-004**	**1.0000e-005**	**1.5000e-004**						**0.8800**

3.3 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					0.2078	0.0000	0.2078	0.1142	0.0000	0.1142						0.0000
Off-Road	0.0469	0.4878	0.2474	4.4000e-004		0.0253	0.0253		0.0233	0.0233						38.7561
Total	**0.0469**	**0.4878**	**0.2474**	**4.4000e-004**	**0.2078**	**0.0253**	**0.2330**	**0.1142**	**0.0233**	**0.1375**						**38.7561**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.1000e-004	8.2000e-004	7.1200e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.4000e-004						1.6686
Total	**9.1000e-004**	**8.2000e-004**	**7.1200e-003**	**2.0000e-005**	**1.9900e-003**	**1.0000e-005**	**2.0100e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**						**1.6686**

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					0.0810	0.0000	0.0810	0.0445	0.0000	0.0445						0.0000
Off-Road	0.0107	0.2193	0.2640	4.4000e-004		0.0109	0.0109		0.0109	0.0109						38.7561
Total	**0.0107**	**0.2193**	**0.2640**	**4.4000e-004**	**0.0810**	**0.0109**	**0.0919**	**0.0445**	**0.0109**	**0.0554**						**38.7561**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.1000e-004	8.2000e-004	7.1200e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.4000e-004						1.6686
Total	**9.1000e-004**	**8.2000e-004**	**7.1200e-003**	**2.0000e-005**	**1.9900e-003**	**1.0000e-005**	**2.0100e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**						**1.6686**

3.4 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					1.0839	0.0000	1.0839	0.2327	0.0000	0.2327						0.0000
Off-Road	0.1936	2.1836	1.3902	2.7000e-003		0.0946	0.0946		0.0870	0.0870						238.9230
Total	**0.1936**	**2.1836**	**1.3902**	**2.7000e-003**	**1.0839**	**0.0946**	**1.1784**	**0.2327**	**0.0870**	**0.3197**						**238.9230**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.8000e-003	3.4600e-003	0.0299	8.0000e-005	8.3800e-003	6.0000e-005	8.4300e-003	2.2300e-003	5.0000e-005	2.2800e-003						7.0128
Total	**3.8000e-003**	**3.4600e-003**	**0.0299**	**8.0000e-005**	**8.3800e-003**	**6.0000e-005**	**8.4300e-003**	**2.2300e-003**	**5.0000e-005**	**2.2800e-003**						**7.0128**

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					0.4227	0.0000	0.4227	0.0908	0.0000	0.0908						0.0000
Off-Road	0.0663	1.3041	1.5974	2.7000e-003		0.0565	0.0565		0.0565	0.0565						238.9227
Total	**0.0663**	**1.3041**	**1.5974**	**2.7000e-003**	**0.4227**	**0.0565**	**0.4792**	**0.0908**	**0.0565**	**0.1473**						**238.9227**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.8000e-003	3.4600e-003	0.0299	8.0000e-005	8.3800e-003	6.0000e-005	8.4300e-003	2.2300e-003	5.0000e-005	2.2800e-003						7.0128
Total	**3.8000e-003**	**3.4600e-003**	**0.0299**	**8.0000e-005**	**8.3800e-003**	**6.0000e-005**	**8.4300e-003**	**2.2300e-003**	**5.0000e-005**	**2.2800e-003**						**7.0128**

3.5 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	0.1558	1.4102	1.2384	1.9800e-003		0.0821	0.0821		0.0772	0.0772						171.2716
Total	**0.1558**	**1.4102**	**1.2384**	**1.9800e-003**		**0.0821**	**0.0821**		**0.0772**	**0.0772**						**171.2716**

3.5 Building Construction - 2020

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
Vendor	0.3862	10.8108	3.2753	0.0207	0.4717	0.0590	0.5307	0.1363	0.0564	0.1927						2,001.0644
Worker	1.2256	1.1135	9.6397	0.0250	2.6981	0.0177	2.7158	0.7170	0.0164	0.7334						2,259.0582
Total	**1.6118**	**11.9243**	**12.9151**	**0.0457**	**3.1698**	**0.0767**	**3.2465**	**0.8533**	**0.0728**	**0.9261**						**4,260.1225**

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	0.0495	1.0456	1.3137	1.9800e-003		0.0664	0.0664		0.0664	0.0664						171.2714
Total	**0.0495**	**1.0456**	**1.3137**	**1.9800e-003**		**0.0664**	**0.0664**		**0.0664**	**0.0664**						**171.2714**

3.5 Building Construction - 2020

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
Vendor	0.3862	10.8108	3.2753	0.0207	0.4717	0.0590	0.5307	0.1363	0.0564	0.1927						2,001.0644
Worker	1.2256	1.1135	9.6397	0.0250	2.6981	0.0177	2.7158	0.7170	0.0164	0.7334						2,259.0582
Total	**1.6118**	**11.9243**	**12.9151**	**0.0457**	**3.1698**	**0.0767**	**3.2465**	**0.8533**	**0.0728**	**0.9261**						**4,260.1225**

3.5 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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176						304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**						**304.1099**

3.5 Building Construction - 2021

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
Vendor	0.5621	17.5526	5.1434	0.0365	0.8378	0.0501	0.8879	0.2421	0.0479	0.2900						3,531.5098
Worker	2.0280	1.7678	15.5128	0.0428	4.7904	0.0305	4.8209	1.2731	0.0281	1.3012						3,874.0265
Total	**2.5902**	**19.3204**	**20.6562**	**0.0793**	**5.6282**	**0.0806**	**5.7088**	**1.5151**	**0.0760**	**1.5912**						**7,405.5363**

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	0.0879	1.8565	2.3325	3.5100e-003		0.1179	0.1179		0.1179	0.1179						304.1095
Total	**0.0879**	**1.8565**	**2.3325**	**3.5100e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**						**304.1095**

3.5 Building Construction - 2021

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
Vendor	0.5621	17.5526	5.1434	0.0365	0.8378	0.0501	0.8879	0.2421	0.0479	0.2900						3,531.5098
Worker	2.0280	1.7678	15.5128	0.0428	4.7904	0.0305	4.8209	1.2731	0.0281	1.3012						3,874.0265
Total	**2.5902**	**19.3204**	**20.6562**	**0.0793**	**5.6282**	**0.0806**	**5.7088**	**1.5151**	**0.0760**	**1.5912**						**7,405.5363**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990						303.0471
Total	**0.2218**	**2.0300**	**2.1272**	**3.5000e-003**		**0.1052**	**0.1052**		**0.0990**	**0.0990**						**303.0471**

3.5 Building Construction - 2022

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
Vendor	0.5179	16.6147	4.7296	0.0361	0.8347	0.0439	0.8786	0.2412	0.0420	0.2832						3,493.9859
Worker	1.8968	1.5835	14.1560	0.0411	4.7721	0.0295	4.8016	1.2682	0.0272	1.2954						3,721.0411
Total	**2.4147**	**18.1982**	**18.8856**	**0.0772**	**5.6068**	**0.0734**	**5.6802**	**1.5094**	**0.0692**	**1.5786**						**7,215.0269**

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	0.0876	1.8494	2.3236	3.5000e-003		0.1175	0.1175		0.1175	0.1175						303.0467
Total	**0.0876**	**1.8494**	**2.3236**	**3.5000e-003**		**0.1175**	**0.1175**		**0.1175**	**0.1175**						**303.0467**

3.5 Building Construction - 2022

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
Vendor	0.5179	16.6147	4.7296	0.0361	0.8347	0.0439	0.8786	0.2412	0.0420	0.2832						3,493.9859
Worker	1.8968	1.5835	14.1560	0.0411	4.7721	0.0295	4.8016	1.2682	0.0272	1.2954						3,721.0411
Total	**2.4147**	**18.1982**	**18.8856**	**0.0772**	**5.6068**	**0.0734**	**5.6802**	**1.5094**	**0.0692**	**1.5786**						**7,215.0269**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0904	0.8271	0.9340	1.5500e-003		0.0402	0.0402		0.0379	0.0379						134.0804
Total	**0.0904**	**0.8271**	**0.9340**	**1.5500e-003**		**0.0402**	**0.0402**		**0.0379**	**0.0379**						**134.0804**

3.5 Building Construction - 2023

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
Vendor	0.1749	6.0593	1.8378	0.0157	0.3693	8.9900e-003	0.3783	0.1067	8.6000e-003	0.1153						1,519.8021
Worker	0.7882	0.6296	5.7177	0.0175	2.1107	0.0127	2.1234	0.5609	0.0117	0.5726						1,584.0367
Total	**0.9632**	**6.6888**	**7.5555**	**0.0332**	**2.4800**	**0.0217**	**2.5017**	**0.6676**	**0.0203**	**0.6880**						**3,103.8388**

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	0.0388	0.8180	1.0277	1.5500e-003		0.0520	0.0520		0.0520	0.0520						134.0803
Total	**0.0388**	**0.8180**	**1.0277**	**1.5500e-003**		**0.0520**	**0.0520**		**0.0520**	**0.0520**						**134.0803**

3.5 Building Construction - 2023

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
Vendor	0.1749	6.0593	1.8378	0.0157	0.3693	8.9900e-003	0.3783	0.1067	8.6000e-003	0.1153						1,519.8021
Worker	0.7882	0.6296	5.7177	0.0175	2.1107	0.0127	2.1234	0.5609	0.0117	0.5726						1,584.0367
Total	**0.9632**	**6.6888**	**7.5555**	**0.0332**	**2.4800**	**0.0217**	**2.5017**	**0.6676**	**0.0203**	**0.6880**						**3,103.8388**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0232	0.2293	0.3281	5.1000e-004		0.0115	0.0115		0.0106	0.0106						45.4248
Paving	0.1279					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.1511**	**0.2293**	**0.3281**	**5.1000e-004**		**0.0115**	**0.0115**		**0.0106**	**0.0106**						**45.4248**

3.6 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.2100e-003	9.7000e-004	8.8000e-003	3.0000e-005	3.2500e-003	2.0000e-005	3.2700e-003	8.6000e-004	2.0000e-005	8.8000e-004						2.4384
Total	**1.2100e-003**	**9.7000e-004**	**8.8000e-003**	**3.0000e-005**	**3.2500e-003**	**2.0000e-005**	**3.2700e-003**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**						**2.4384**

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	0.0126	0.2541	0.3892	5.1000e-004		0.0137	0.0137		0.0137	0.0137						45.4247
Paving	0.1279					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.1405**	**0.2541**	**0.3892**	**5.1000e-004**		**0.0137**	**0.0137**		**0.0137**	**0.0137**						**45.4247**

3.6 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.2100e-003	9.7000e-004	8.8000e-003	3.0000e-005	3.2500e-003	2.0000e-005	3.2700e-003	8.6000e-004	2.0000e-005	8.8000e-004						2.4384
Total	**1.2100e-003**	**9.7000e-004**	**8.8000e-003**	**3.0000e-005**	**3.2500e-003**	**2.0000e-005**	**3.2700e-003**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**						**2.4384**

3.7 Architectural Coating - 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					
Archit. Coating	0.4494					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	4.6000e-003	0.0320	0.0348	6.0000e-005		2.1100e-003	2.1100e-003		2.1100e-003	2.1100e-003						4.8606
Total	**0.4540**	**0.0320**	**0.0348**	**6.0000e-005**		**2.1100e-003**	**2.1100e-003**		**2.1100e-003**	**2.1100e-003**						**4.8606**

3.7 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0634	0.0576	0.4986	1.2900e-003	0.1396	9.2000e-004	0.1405	0.0371	8.5000e-004	0.0379						116.8561
Total	**0.0634**	**0.0576**	**0.4986**	**1.2900e-003**	**0.1396**	**9.2000e-004**	**0.1405**	**0.0371**	**8.5000e-004**	**0.0379**						**116.8561**

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	0.4494					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	1.1300e-003	0.0258	0.0348	6.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003						4.8606
Total	**0.4505**	**0.0258**	**0.0348**	**6.0000e-005**		**1.8100e-003**	**1.8100e-003**		**1.8100e-003**	**1.8100e-003**						**4.8606**

3.7 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0634	0.0576	0.4986	1.2900e-003	0.1396	9.2000e-004	0.1405	0.0371	8.5000e-004	0.0379						116.8561
Total	**0.0634**	**0.0576**	**0.4986**	**1.2900e-003**	**0.1396**	**9.2000e-004**	**0.1405**	**0.0371**	**8.5000e-004**	**0.0379**						**116.8561**

3.7 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	3.0866					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123						33.3771
Total	**3.1152**	**0.1993**	**0.2372**	**3.9000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**						**33.3771**

3.7 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.4058	0.3538	3.1042	8.5700e-003	0.9586	6.1000e-003	0.9647	0.2548	5.6200e-003	0.2604						775.2117
Total	**0.4058**	**0.3538**	**3.1042**	**8.5700e-003**	**0.9586**	**6.1000e-003**	**0.9647**	**0.2548**	**5.6200e-003**	**0.2604**						**775.2117**

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	3.0866					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124						33.3771
Total	**3.0944**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**						**33.3771**

3.7 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.4058	0.3538	3.1042	8.5700e-003	0.9586	6.1000e-003	0.9647	0.2548	5.6200e-003	0.2604						775.2117
Total	**0.4058**	**0.3538**	**3.1042**	**8.5700e-003**	**0.9586**	**6.1000e-003**	**0.9647**	**0.2548**	**5.6200e-003**	**0.2604**						**775.2117**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.0748					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106						33.2463
Total	**3.1014**	**0.1831**	**0.2358**	**3.9000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**						**33.2463**

3.7 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.3796	0.3169	2.8327	8.2300e-003	0.9549	5.9000e-003	0.9608	0.2538	5.4400e-003	0.2592						744.5986
Total	**0.3796**	**0.3169**	**2.8327**	**8.2300e-003**	**0.9549**	**5.9000e-003**	**0.9608**	**0.2538**	**5.4400e-003**	**0.2592**						**744.5986**

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	3.0748					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124						33.2463
Total	**3.0825**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**						**33.2463**

3.7 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.3796	0.3169	2.8327	8.2300e-003	0.9549	5.9000e-003	0.9608	0.2538	5.4400e-003	0.2592						744.5986
Total	**0.3796**	**0.3169**	**2.8327**	**8.2300e-003**	**0.9549**	**5.9000e-003**	**0.9608**	**0.2538**	**5.4400e-003**	**0.2592**						**744.5986**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3600					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0110	0.0749	0.1041	1.7000e-004		4.0700e-003	4.0700e-003		4.0700e-003	4.0700e-003						14.7032
Total	**1.3710**	**0.0749**	**0.1041**	**1.7000e-004**		**4.0700e-003**	**4.0700e-003**		**4.0700e-003**	**4.0700e-003**						**14.7032**

3.7 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1577	0.1260	1.1441	3.5000e-003	0.4224	2.5400e-003	0.4249	0.1122	2.3400e-003	0.1146						316.9735
Total	**0.1577**	**0.1260**	**1.1441**	**3.5000e-003**	**0.4224**	**2.5400e-003**	**0.4249**	**0.1122**	**2.3400e-003**	**0.1146**						**316.9735**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.3600					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	3.4200e-003	0.0780	0.1054	1.7000e-004		5.4700e-003	5.4700e-003		5.4700e-003	5.4700e-003						14.7032
Total	**1.3634**	**0.0780**	**0.1054**	**1.7000e-004**		**5.4700e-003**	**5.4700e-003**		**5.4700e-003**	**5.4700e-003**						**14.7032**

3.7 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1577	0.1260	1.1441	3.5000e-003	0.4224	2.5400e-003	0.4249	0.1122	2.3400e-003	0.1146						316.9735
Total	**0.1577**	**0.1260**	**1.1441**	**3.5000e-003**	**0.4224**	**2.5400e-003**	**0.4249**	**0.1122**	**2.3400e-003**	**0.1146**						**316.9735**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	2.7631	10.6930	29.8525	0.0934	9.1458	0.0847	9.2304	2.4473	0.0791	2.5264						8,570.7232
Unmitigated	2.8763	11.5051	32.6468	0.1050	10.3694	0.0944	10.4638	2.7747	0.0883	2.8630						9,636.2116

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
City Park	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Elementary School	638.55	0.00	0.00	1,174,696	1,036,082
General Office Building	0.00	0.00	0.00		
Health Club	649.88	391.31	501.19	846,726	746,813
Other Asphalt Surfaces	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Regional Shopping Center	402.10	532.68	269.06	580,080	511,630
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	10,929.80	13,110.62	11,334.51	27,634,856	24,373,943

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Elementary School	13.00	5.00	5.00	65.00	30.00	5.00	63	25	12
General Office Building	13.00	5.00	5.00	33.00	48.00	19.00	77	19	4
Health Club	13.00	5.00	5.00	16.90	64.10	19.00	52	39	9
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Racquet Club	13.00	5.00	5.00	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
City Park	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Elementary School	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
General Office Building	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Health Club	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Other Asphalt Surfaces	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Racquet Club	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Recreational Swimming Pool	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Regional Shopping Center	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Single Family Housing	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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						1,947.3897
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						2,070.1557
NaturalGas Mitigated	0.1709	1.4642	0.6501	9.3200e-003		0.1181	0.1181		0.1181	0.1181						1,701.1853
NaturalGas Unmitigated	0.1873	1.6049	0.7125	0.0102		0.1294	0.1294		0.1294	0.1294						1,864.6514

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					
Apartments Low Rise	2.32534e+006	0.0125	0.1072	0.0456	6.8000e-004		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003						124.8263
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	763115	4.1100e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003						40.9647
General Office Building	9429.12	5.0000e-005	4.6000e-004	3.9000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005						0.5062
Health Club	494678	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003						26.5548
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	163688	8.8000e-004	8.0200e-003	6.7400e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004						8.7869
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	25261.8	1.4000e-004	1.2400e-003	1.0400e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005						1.3561
Single Family Housing	3.09543e+007	0.1669	1.4263	0.6070	9.1000e-003		0.1153	0.1153		0.1153	0.1153						1,661.6565
Total		**0.1873**	**1.6049**	**0.7125**	**0.0102**		**0.1294**	**0.1294**		**0.1294**	**0.1294**						**1,864.6514**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Low Rise	2.16474e+006	0.0117	0.0998	0.0425	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003						116.2051
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	690652	3.7200e-003	0.0339	0.0284	2.0000e-004		2.5700e-003	2.5700e-003		2.5700e-003	2.5700e-003						37.0748
General Office Building	8489.66	5.0000e-005	4.2000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.4557
Health Club	457718	2.4700e-003	0.0224	0.0189	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003						24.5707
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	151458	8.2000e-004	7.4200e-003	6.2400e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004						8.1304
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	22735.6	1.2000e-004	1.1100e-003	9.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005						1.2205
Single Family Housing	2.81949e+007	0.1520	1.2992	0.5528	8.2900e-003		0.1050	0.1050		0.1050	0.1050						1,513.5281
Total		**0.1709**	**1.4642**	**0.6501**	**9.3100e-003**		**0.1181**	**0.1181**		**0.1181**	**0.1181**						**1,701.1853**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	991526				202.0011
City Park	0				0.0000
Elementary School	223058				45.4430
General Office Building	10270.1				2.0923
Health Club	154892				31.5556
Other Asphalt Surfaces	0				0.0000
Racquet Club	51253.3				10.4417
Recreational Swimming Pool	0				0.0000
Regional Shopping Center	113945				23.2137
Single Family Housing	8.61646e+006				1,755.4083
Total					**2,070.1557**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	928743				189.2104
City Park	0				0.0000
Elementary School	199718				40.6879
General Office Building	9560.56				1.9478
Health Club	142875				29.1076
Other Asphalt Surfaces	0				0.0000
Racquet Club	47277.1				9.6317
Recreational Swimming Pool	0				0.0000
Regional Shopping Center	102049				20.7902
Single Family Housing	8.12858e+006				1,656.0142
Total					**1,947.3897**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	13.0665	0.2028	17.6057	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4657
Unmitigated	13.0665	0.2028	17.6057	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4657

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	3.5374					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.9990					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5301	0.2028	17.6057	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4657
Total	**13.0665**	**0.2028**	**17.6057**	**9.3000e-004**		**0.0976**	**0.0976**		**0.0976**	**0.0976**						**29.4657**

6.2 Area by SubCategory

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	3.5374					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.9990					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5301	0.2028	17.6057	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4657
Total	**13.0665**	**0.2028**	**17.6057**	**9.3000e-004**		**0.0976**	**0.0976**		**0.0976**	**0.0976**						**29.4657**

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				236.3480
Unmitigated				276.6166

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	14.8551 / 9.36518				35.1502
City Park	0 / 94.2462				67.2018
Elementary School	1.2 / 3.08571				4.5003
General Office Building	0.103086 / 0.0631815				0.2426
Health Club	1.10893 / 0.679669				2.6101
Other Asphalt Surfaces	0 / 0				0.0000
Racquet Club	0.367279 / 0.225106				0.8645
Recreational Swimming Pool	0 / 0				0.0000
Regional Shopping Center	0.789613 / 0.483956				1.8585
Single Family Housing	69.389 / 43.7453				164.1886
Total					**276.6166**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.8841 / 8.79391				29.0484
City Park	0 / 88.4972				63.1025
Elementary School	0.959999 / 2.89748				3.9060
General Office Building	0.0824685 / 0.0593274				0.2004
Health Club	0.887147 / 0.638209				2.1554
Other Asphalt Surfaces	0 / 0				0.0000
Racquet Club	0.293823 / 0.211375				0.7139
Recreational Swimming Pool	0 / 0				0.0000
Regional Shopping Center	0.63169 / 0.454435				1.5348
Single Family Housing	55.5112 / 41.0768				135.6866
Total					**236.3480**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				338.9827
Unmitigated				807.1016

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	104.88				52.7443
City Park	6.8				3.4197
Elementary School	90.34				45.4321
General Office Building	0.54				0.2716
Health Club	106.88				53.7501
Other Asphalt Surfaces	0				0.0000
Racquet Club	35.4				17.8027
Recreational Swimming Pool	0				0.0000
Regional Shopping Center	11.19				5.6275
Single Family Housing	1248.86				628.0536
Total					**807.1016**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	44.0496				22.1526
City Park	2.856				1.4363
Elementary School	37.9428				19.0815
General Office Building	0.2268				0.1141
Health Club	44.8896				22.5751
Other Asphalt Surfaces	0				0.0000
Racquet Club	14.868				7.4771
Recreational Swimming Pool	0				0.0000
Regional Shopping Center	4.6998				2.3635
Single Family Housing	524.521				263.7825
Total					**338.9827**

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

NOTE: Does not include residential adjustment for fleet mix or solar PV, calculated separately.

Olsen-Chandler

San Luis Obispo County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.58	1000sqft	0.01	576.00	0
Elementary School	495.00	Student	0.95	41,383.67	0
Other Asphalt Surfaces	97.60	Acre	97.60	4,251,456.00	0
City Park	45.30	Acre	45.30	1,973,268.00	0
City Park	33.80	Acre	33.80	1,472,328.00	0
Health Club	18.75	1000sqft	11.50	18,752.00	0
Racquet Club	6.21	1000sqft	3.80	6,205.00	0
Recreational Swimming Pool	0.00	1000sqft	1.10	1,789.00	0
Recreational Swimming Pool	0.00	1000sqft	0.70	1,154.00	0
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046
Regional Shopping Center	10.66	1000sqft	0.24	10,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes RPS adjustment.

Land Use - Provided by the applicant team.

Construction Phase - Based on provided phase durations. Architectural Coating, starts five months after building construction and stops at the end of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment use based on model defaults.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Const trips based on model defaults.

On-road Fugitive Dust -

Demolition - Demolition of 3,400 building square footage.

Grading - Based on model defaults.

Architectural Coating - Residential low-VOC content: 50 g/L, per mitigation requirements. Non-Residential low-VOC content: 100 g/L.

Vehicle Trips - Trip-gen rates for residential and school based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. Other uses derived from the traffic analysis prepared for this project.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -
Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstructionPhase	NumDays	400.00	5.00
tblConstructionPhase	NumDays	240.00	23.00
tblConstructionPhase	NumDays	620.00	87.00
tblConstructionPhase	NumDays	6,200.00	783.00
tblConstructionPhase	NumDays	440.00	45.00
tblConstructionPhase	NumDays	440.00	674.00
tblConstructionPhase	PhaseEndDate	7/13/2021	1/7/2020
tblConstructionPhase	PhaseEndDate	6/14/2022	2/7/2020
tblConstructionPhase	PhaseEndDate	10/29/2024	6/9/2020
tblConstructionPhase	PhaseEndDate	8/4/2048	6/9/2023
tblConstructionPhase	PhaseEndDate	4/12/2050	8/11/2023
tblConstructionPhase	PhaseStartDate	7/14/2021	1/8/2020
tblConstructionPhase	PhaseStartDate	6/15/2022	2/8/2020
tblConstructionPhase	PhaseStartDate	10/30/2024	6/10/2020
tblConstructionPhase	PhaseStartDate	8/5/2048	6/10/2023
tblGrading	AcresOfGrading	217.50	1,550.00
tblLandUse	LandUseSquareFeet	580.00	576.00

tblLandUse	LandUseSquareFeet	18,750.00	18,752.00
tblLandUse	LandUseSquareFeet	6,210.00	6,205.00
tblLandUse	LandUseSquareFeet	0.00	1,789.00
tblLandUse	LandUseSquareFeet	0.00	1,154.00
tblLandUse	LandUseSquareFeet	10,660.00	10,659.00
tblLandUse	LotAcreage	0.43	11.50
tblLandUse	LotAcreage	0.14	3.80
tblLandUse	LotAcreage	0.00	1.10
tblLandUse	LotAcreage	0.00	0.70
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	32.93	34.66
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00

tblVehicleTrips	WD_TR	42.70	37.72
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
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tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	50.7106	183.0230	222.9023	0.7397	51.7979	2.3090	54.1069	13.8873	2.1856	16.0729						75,557.2673
2021	48.1886	167.1197	202.7517	0.7231	51.7992	1.7076	53.5068	13.8878	1.6122	15.4999						73,935.7083
2022	46.5352	157.1664	187.5205	0.7061	51.8004	1.4920	53.2925	13.8882	1.4086	15.2968						72,273.2099
2023	44.4205	132.3845	171.9118	0.6862	51.8017	1.1889	52.9905	13.8887	1.1201	15.0087						70,303.8708
Maximum	**50.7106**	**183.0230**	**222.9023**	**0.7397**	**51.8017**	**2.3090**	**54.1069**	**13.8887**	**2.1856**	**16.0729**						**75,557.2673**

2.1 Overall Construction (Maximum Daily Emission)

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	49.0819	177.7361	223.9286	0.7397	51.7979	2.0797	53.8775	13.8873	2.0229	15.9102						75,557.2673
2021	46.8022	163.7438	204.0651	0.7231	51.7992	1.6535	53.4527	13.8878	1.6154	15.5032						73,935.7083
2022	45.3578	155.7253	189.0497	0.7061	51.8004	1.5999	53.4004	13.8882	1.5644	15.4526						72,273.2099
2023	43.3894	132.2797	173.5628	0.6862	51.8017	1.4169	53.2186	13.8887	1.3895	15.2781						70,303.8707
Maximum	**49.0819**	**177.7361**	**223.9286**	**0.7397**	**51.8017**	**2.0797**	**53.8775**	**13.8887**	**2.0229**	**15.9102**						**75,557.2673**

	ROG	NOx	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	**2.75**	**1.60**	**-0.70**	**0.00**	**0.00**	**-0.78**	**-0.02**	**0.00**	**-4.20**	**-0.43**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	71.9054	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Energy	1.0263	8.7937	3.9041	0.0560		0.7091	0.7091		0.7091	0.7091						11,262.6101
Mobile	20.8065	75.6457	222.9760	0.7405	72.6285	0.6439	73.2724	19.3928	0.6017	19.9945						74,871.7841
Total	**93.7382**	**85.6686**	**333.5816**	**0.8021**	**72.6285**	**1.9442**	**74.5727**	**19.3928**	**1.9020**	**21.2948**						**86,331.2448**

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	71.9054	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Energy	0.9363	8.0229	3.5622	0.0511		0.6469	0.6469		0.6469	0.6469						10,275.2648
Mobile	20.0262	70.4213	202.7596	0.6585	64.0584	0.5771	64.6355	17.1045	0.5393	17.6437						66,592.9443
Total	**92.8679**	**79.6734**	**313.0232**	**0.7152**	**64.0584**	**1.8153**	**65.8737**	**17.1045**	**1.7774**	**18.8819**						**77,065.0596**

	ROG	NOx	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	**0.93**	**7.00**	**6.16**	**10.83**	**11.80**	**6.63**	**11.67**	**11.80**	**6.55**	**11.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.73**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	5	
2	Site Preparation	Site Preparation	1/8/2020	2/7/2020	5	23	
3	Grading	Grading	2/8/2020	6/9/2020	5	87	
4	Building Construction	Building Construction	6/10/2020	6/9/2023	5	783	
5	Paving	Paving	6/10/2023	8/11/2023	5	45	
6	Architectural Coating	Architectural Coating	11/10/2020	6/9/2023	5	674	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 97.6

Residential Indoor: 4,343,625; Residential Outdoor: 1,447,875; Non-Residential Indoor: 120,778; Non-Residential Outdoor: 40,259; Striped Parking Area: 255,087 (Architectural Coating – sqft)

OffRoad Equipment

Olsen-Chandler - San Luis Obispo County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,813.00	1,413.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	763.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.6909	0.0000	0.6909	0.1046	0.0000	0.1046						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.6909**	**1.6587**	**2.3496**	**0.1046**	**1.5419**	**1.6465**						**3,774.1536**

3.2 Demolition - 2020

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	0.0257	0.9464	0.2039	2.3700e-003	0.0524	4.1700e-003	0.0565	0.0143	3.9900e-003	0.0183						256.3163
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0899**	**1.0000**	**0.7364**	**3.7600e-003**	**0.2006**	**5.1200e-003**	**0.2058**	**0.0537**	**4.8700e-003**	**0.0585**						**395.0124**

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					0.2695	0.0000	0.2695	0.0408	0.0000	0.0408						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,774.1536
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**0.2695**	**0.8627**	**1.1322**	**0.0408**	**0.8627**	**0.9035**						**3,774.1536**

3.2 Demolition - 2020

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	0.0257	0.9464	0.2039	2.3700e-003	0.0524	4.1700e-003	0.0565	0.0143	3.9900e-003	0.0183						256.3163
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0899**	**1.0000**	**0.7364**	**3.7600e-003**	**0.2006**	**5.1200e-003**	**0.2058**	**0.0537**	**4.8700e-003**	**0.0585**						**395.0124**

3.3 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
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**						**3,714.8975**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0770	0.0642	0.6389	1.6700e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						166.4352
Total	**0.0770**	**0.0642**	**0.6389**	**1.6700e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**166.4352**

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462						3,714.8975
Total	**0.9312**	**19.0656**	**22.9600**	**0.0380**	**7.0458**	**0.9462**	**7.9920**	**3.8730**	**0.9462**	**4.8191**						**3,714.8975**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0770	0.0642	0.6389	1.6700e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						166.4352
Total	**0.0770**	**0.0642**	**0.6389**	**1.6700e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**166.4352**

3.4 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					24.9161	0.0000	24.9161	5.3503	0.0000	5.3503						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**24.9161**	**2.1739**	**27.0900**	**5.3503**	**2.0000**	**7.3503**						**6,054.4257**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0855	0.0714	0.7099	1.8600e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						184.9280
Total	**0.0855**	**0.0714**	**0.7099**	**1.8600e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**184.9280**

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					9.7173	0.0000	9.7173	2.0866	0.0000	2.0866						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0620		1.2994	1.2994		1.2994	1.2994						6,054.4257
Total	**1.5231**	**29.9782**	**36.7226**	**0.0620**	**9.7173**	**1.2994**	**11.0167**	**2.0866**	**1.2994**	**3.3861**						**6,054.4257**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0855	0.0714	0.7099	1.8600e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						184.9280
Total	**0.0855**	**0.0714**	**0.7099**	**1.8600e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**184.9280**

3.5 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						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

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
Vendor	5.1241	145.8264	41.7896	0.2852	6.5589	0.7918	7.3507	1.8890	0.7574	2.6464						30,395.1059
Worker	16.3087	13.6044	135.3488	0.3538	37.6958	0.2411	37.9369	9.9977	0.2224	10.2201						35,256.5297
Total	**21.4328**	**159.4308**	**177.1385**	**0.6390**	**44.2548**	**1.0328**	**45.2876**	**11.8867**	**0.9798**	**12.8665**						**65,651.6355**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.6345
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.6345**

3.5 Building Construction - 2020

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
Vendor	5.1241	145.8264	41.7896	0.2852	6.5589	0.7918	7.3507	1.8890	0.7574	2.6464						30,395.1059
Worker	16.3087	13.6044	135.3488	0.3538	37.6958	0.2411	37.9369	9.9977	0.2224	10.2201						35,256.5297
Total	**21.4328**	**159.4308**	**177.1385**	**0.6390**	**44.2548**	**1.0328**	**45.2876**	**11.8867**	**0.9798**	**12.8665**						**65,651.6355**

3.5 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						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

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
Vendor	4.1877	133.5589	36.8532	0.2832	6.5603	0.3747	6.9349	1.8895	0.3584	2.2479						30,218.0284
Worker	15.1893	12.1671	122.9107	0.3416	37.6958	0.2334	37.9293	9.9977	0.2153	10.2130						34,052.8437
Total	**19.3770**	**145.7260**	**159.7639**	**0.6248**	**44.2561**	**0.6081**	**44.8642**	**11.8872**	**0.5737**	**12.4609**						**64,270.8721**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.7643**

3.5 Building Construction - 2021

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
Vendor	4.1877	133.5589	36.8532	0.2832	6.5603	0.3747	6.9349	1.8895	0.3584	2.2479						30,218.0284
Worker	15.1893	12.1671	122.9107	0.3416	37.6958	0.2334	37.9293	9.9977	0.2153	10.2130						34,052.8437
Total	**19.3770**	**145.7260**	**159.7639**	**0.6248**	**44.2561**	**0.6081**	**44.8642**	**11.8872**	**0.5737**	**12.4609**						**64,270.8721**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612						2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**						**2,569.6322**

3.5 Building Construction - 2022

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
Vendor	3.8721	127.0109	33.9877	0.2810	6.5615	0.3291	6.8906	1.8900	0.3147	2.2047						30,017.9840
Worker	14.2488	10.9418	112.7867	0.3293	37.6958	0.2268	37.9227	9.9977	0.2092	10.2069						32,833.5360
Total	**18.1208**	**137.9527**	**146.7743**	**0.6103**	**44.2573**	**0.5559**	**44.8132**	**11.8876**	**0.5239**	**12.4115**						**62,851.5200**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,569.6322
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,569.6322**

3.5 Building Construction - 2022

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
Vendor	3.8721	127.0109	33.9877	0.2810	6.5615	0.3291	6.8906	1.8900	0.3147	2.2047						30,017.9840
Worker	14.2488	10.9418	112.7867	0.3293	37.6958	0.2268	37.9227	9.9977	0.2092	10.2069						32,833.5360
Total	**18.1208**	**137.9527**	**146.7743**	**0.6103**	**44.2573**	**0.5559**	**44.8132**	**11.8876**	**0.5239**	**12.4115**						**62,851.5200**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**						**2,570.4061**

3.5 Building Construction - 2023

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
Vendor	2.9543	104.8910	30.0007	0.2761	6.5627	0.1531	6.7158	1.8904	0.1464	2.0368						29,528.0951
Worker	13.3733	9.8372	103.2043	0.3169	37.6958	0.2210	37.9168	9.9977	0.2037	10.2014						31,600.1547
Total	**16.3276**	**114.7282**	**133.2050**	**0.5929**	**44.2585**	**0.3741**	**44.6326**	**11.8881**	**0.3501**	**12.2381**						**61,128.2498**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,570.4061
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,570.4061**

3.5 Building Construction - 2023

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
Vendor	2.9543	104.8910	30.0007	0.2761	6.5627	0.1531	6.7158	1.8904	0.1464	2.0368						29,528.0951
Worker	13.3733	9.8372	103.2043	0.3169	37.6958	0.2210	37.9168	9.9977	0.2037	10.2014						31,600.1547
Total	**16.3276**	**114.7282**	**133.2050**	**0.5929**	**44.2585**	**0.3741**	**44.6326**	**11.8881**	**0.3501**	**12.2381**						**61,128.2498**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694						2,225.4336
Paving	5.6825					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**6.7152**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**						**2,225.4336**

3.6 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0526	0.0387	0.4060	1.2500e-003	0.1483	8.7000e-004	0.1492	0.0393	8.0000e-004	0.0401						124.3122
Total	**0.0526**	**0.0387**	**0.4060**	**1.2500e-003**	**0.1483**	**8.7000e-004**	**0.1492**	**0.0393**	**8.0000e-004**	**0.0401**						**124.3122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093						2,225.4336
Paving	5.6825					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**6.2434**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**						**2,225.4336**

3.6 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0526	0.0387	0.4060	1.2500e-003	0.1483	8.7000e-004	0.1492	0.0393	8.0000e-004	0.0401						124.3122
Total	**0.0526**	**0.0387**	**0.4060**	**1.2500e-003**	**0.1483**	**8.7000e-004**	**0.1492**	**0.0393**	**8.0000e-004**	**0.0401**						**124.3122**

3.7 Architectural Coating - 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					
Archit. Coating	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109						281.9928
Total	**23.8946**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**						**281.9928**

3.7 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.2635	2.7223	27.0840	0.0708	7.5431	0.0482	7.5914	2.0006	0.0445	2.0451						7,055.0045
Total	**3.2635**	**2.7223**	**27.0840**	**0.0708**	**7.5431**	**0.0482**	**7.5914**	**2.0006**	**0.0445**	**2.0451**						**7,055.0045**

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	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9928
Total	**23.7118**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9928**

3.7 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.2635	2.7223	27.0840	0.0708	7.5431	0.0482	7.5914	2.0006	0.0445	2.0451						7,055.0045
Total	**3.2635**	**2.7223**	**27.0840**	**0.0708**	**7.5431**	**0.0482**	**7.5914**	**2.0006**	**0.0445**	**2.0451**						**7,055.0045**

3.7 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	23.6524					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						281.9309
Total	**23.8713**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**						**281.9309**

3.7 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.0395	2.4347	24.5950	0.0684	7.5431	0.0467	7.5898	2.0006	0.0431	2.0437						6,814.1410
Total	**3.0395**	**2.4347**	**24.5950**	**0.0684**	**7.5431**	**0.0467**	**7.5898**	**2.0006**	**0.0431**	**2.0437**						**6,814.1410**

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	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9309
Total	**23.7118**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9309**

3.7 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.0395	2.4347	24.5950	0.0684	7.5431	0.0467	7.5898	2.0006	0.0431	2.0437						6,814.1410
Total	**3.0395**	**2.4347**	**24.5950**	**0.0684**	**7.5431**	**0.0467**	**7.5898**	**2.0006**	**0.0431**	**2.0437**						**6,814.1410**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817						281.9062
Total	**23.8569**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**						**281.9062**

3.7 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.8513	2.1895	22.5692	0.0659	7.5431	0.0454	7.5885	2.0006	0.0419	2.0424						6,570.1516
Total	**2.8513**	**2.1895**	**22.5692**	**0.0659**	**7.5431**	**0.0454**	**7.5885**	**2.0006**	**0.0419**	**2.0424**						**6,570.1516**

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	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9062
Total	**23.7118**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9062**

3.7 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.8513	2.1895	22.5692	0.0659	7.5431	0.0454	7.5885	2.0006	0.0419	2.0424						6,570.1516
Total	**2.8513**	**2.1895**	**22.5692**	**0.0659**	**7.5431**	**0.0454**	**7.5885**	**2.0006**	**0.0419**	**2.0424**						**6,570.1516**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						281.8690
Total	**23.8440**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						**281.8690**

3.7 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.6761	1.9685	20.6517	0.0634	7.5431	0.0442	7.5873	2.0006	0.0408	2.0414						6,323.3459
Total	**2.6761**	**1.9685**	**20.6517**	**0.0634**	**7.5431**	**0.0442**	**7.5873**	**2.0006**	**0.0408**	**2.0414**						**6,323.3459**

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	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.8690
Total	**23.7118**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.8690**

3.7 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.6761	1.9685	20.6517	0.0634	7.5431	0.0442	7.5873	2.0006	0.0408	2.0414						6,323.3459
Total	**2.6761**	**1.9685**	**20.6517**	**0.0634**	**7.5431**	**0.0442**	**7.5873**	**2.0006**	**0.0408**	**2.0414**						**6,323.3459**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	20.0262	70.4213	202.7596	0.6585	64.0584	0.5771	64.6355	17.1045	0.5393	17.6437						66,592.9443
Unmitigated	20.8065	75.6457	222.9760	0.7405	72.6285	0.6439	73.2724	19.3928	0.6017	19.9945						74,871.7841

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
City Park	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Elementary School	638.55	0.00	0.00	1,174,696	1,036,082
General Office Building	0.00	0.00	0.00		
Health Club	649.88	391.31	501.19	846,726	746,813
Other Asphalt Surfaces	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Regional Shopping Center	402.10	532.68	269.06	580,080	511,630
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	10,929.80	13,110.62	11,334.51	27,634,856	24,373,943

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Elementary School	13.00	5.00	5.00	65.00	30.00	5.00	63	25	12
General Office Building	13.00	5.00	5.00	33.00	48.00	19.00	77	19	4
Health Club	13.00	5.00	5.00	16.90	64.10	19.00	52	39	9
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Racquet Club	13.00	5.00	5.00	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
City Park	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Elementary School	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
General Office Building	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Health Club	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Other Asphalt Surfaces	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Racquet Club	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Recreational Swimming Pool	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Regional Shopping Center	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Single Family Housing	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.9363	8.0229	3.5622	0.0511		0.6469	0.6469		0.6469	0.6469						10,275.2648
NaturalGas Unmitigated	1.0263	8.7937	3.9041	0.0560		0.7091	0.7091		0.7091	0.7091						11,262.6101

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	2090.73	0.0226	0.2050	0.1722	1.2300e-003		0.0156	0.0156		0.0156	0.0156						247.4294
General Office Building	25.8332	2.8000e-004	2.5300e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004						3.0573
Health Club	1355.28	0.0146	0.1329	0.1116	8.0000e-004		0.0101	0.0101		0.0101	0.0101						160.3924
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	448.46	4.8400e-003	0.0440	0.0369	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003						53.0735
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	69.2105	7.5000e-004	6.7900e-003	5.7000e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004						8.1908
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**1.0263**	**8.7937**	**3.9041**	**0.0560**		**0.7091**	**0.7091**		**0.7091**	**0.7091**						**11,262.6101**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	1.8922	0.0204	0.1855	0.1558	1.1100e-003		0.0141	0.0141		0.0141	0.0141						223.9343
General Office Building	0.0232594	2.5000e-004	2.2800e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						2.7527
Health Club	1.25402	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003						148.4086
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	0.414953	4.4700e-003	0.0407	0.0342	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003						49.1081
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	0.0622894	6.7000e-004	6.1100e-003	5.1300e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004						7.3717
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.9363**	**8.0229**	**3.5622**	**0.0511**		**0.6469**	**0.6469**		**0.6469**	**0.6469**						**10,275.2648**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	71.9054	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Unmitigated	71.9054	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506

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	19.3832					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	49.3095					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2128	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Total	**71.9054**	**1.2292**	**106.7015**	**5.6400e-003**		**0.5913**	**0.5913**		**0.5913**	**0.5913**						**196.8506**

6.2 Area by SubCategory

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	19.3832					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	49.3095					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2128	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Total	**71.9054**	**1.2292**	**106.7015**	**5.6400e-003**		**0.5913**	**0.5913**		**0.5913**	**0.5913**						**196.8506**

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

Institute Recycling and Composting Services

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

NOTE: Does not include residential adjustment for fleet mix or solar PV, calculated separately.

Olsen-Chandler

San Luis Obispo County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.58	1000sqft	0.01	576.00	0
Elementary School	495.00	Student	0.95	41,383.67	0
Other Asphalt Surfaces	97.60	Acre	97.60	4,251,456.00	0
City Park	45.30	Acre	45.30	1,973,268.00	0
City Park	33.80	Acre	33.80	1,472,328.00	0
Health Club	18.75	1000sqft	11.50	18,752.00	0
Racquet Club	6.21	1000sqft	3.80	6,205.00	0
Recreational Swimming Pool	0.00	1000sqft	1.10	1,789.00	0
Recreational Swimming Pool	0.00	1000sqft	0.70	1,154.00	0
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046
Regional Shopping Center	10.66	1000sqft	0.24	10,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes RPS adjustment.

Land Use - Provided by the applicant team.

Construction Phase - Based on provided phase durations. Architectural Coating, starts five months after building construction and stops at the end of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment use based on model defaults.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Const trips based on model defaults.

On-road Fugitive Dust -

Demolition - Demolition of 3,400 building square footage.

Grading - Based on model defaults.

Architectural Coating - Residential low-VOC content: 50 g/L, per mitigation requirements. Non-Residential low-VOC content: 100 g/L.

Vehicle Trips - Trip-gen rates for residential and school based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. Other uses derived from the traffic analysis prepared for this project.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -
Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
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tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	400.00	5.00
tblConstructionPhase	NumDays	240.00	23.00
tblConstructionPhase	NumDays	620.00	87.00
tblConstructionPhase	NumDays	6,200.00	783.00
tblConstructionPhase	NumDays	440.00	45.00
tblConstructionPhase	NumDays	440.00	674.00
tblConstructionPhase	PhaseEndDate	7/13/2021	1/7/2020
tblConstructionPhase	PhaseEndDate	6/14/2022	2/7/2020
tblConstructionPhase	PhaseEndDate	10/29/2024	6/9/2020
tblConstructionPhase	PhaseEndDate	8/4/2048	6/9/2023
tblConstructionPhase	PhaseEndDate	4/12/2050	8/11/2023
tblConstructionPhase	PhaseStartDate	7/14/2021	1/8/2020
tblConstructionPhase	PhaseStartDate	6/15/2022	2/8/2020
tblConstructionPhase	PhaseStartDate	10/30/2024	6/10/2020
tblConstructionPhase	PhaseStartDate	8/5/2048	6/10/2023
tblGrading	AcresOfGrading	217.50	1,550.00
tblLandUse	LandUseSquareFeet	580.00	576.00

tblLandUse	LandUseSquareFeet	18,750.00	18,752.00
tblLandUse	LandUseSquareFeet	6,210.00	6,205.00
tblLandUse	LandUseSquareFeet	0.00	1,789.00
tblLandUse	LandUseSquareFeet	0.00	1,154.00
tblLandUse	LandUseSquareFeet	10,660.00	10,659.00
tblLandUse	LotAcreage	0.43	11.50
tblLandUse	LotAcreage	0.14	3.80
tblLandUse	LotAcreage	0.00	1.10
tblLandUse	LotAcreage	0.00	0.70
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	32.93	34.66
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00

tblVehicleTrips	WD_TR	42.70	37.72
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	53.7437	184.5031	223.7649	0.7114	51.7979	2.3338	54.1317	13.8873	2.2093	16.0966						72,662.3857
2021	51.0514	168.2127	203.2421	0.6954	51.7992	1.7296	53.5288	13.8878	1.6332	15.5210						71,099.4826
2022	49.2665	158.0078	187.7679	0.6790	51.8004	1.5127	53.3131	13.8882	1.4284	15.3166						69,497.8760
2023	46.9974	133.1616	171.2454	0.6598	51.8017	1.1968	52.9984	13.8887	1.1276	15.0163						67,595.5298
Maximum	**53.7437**	**184.5031**	**223.7649**	**0.7114**	**51.8017**	**2.3338**	**54.1317**	**13.8887**	**2.2093**	**16.0966**						**72,662.3857**

2.1 Overall Construction (Maximum Daily Emission)

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	52.1150	179.2163	224.7911	0.7114	51.7979	2.1045	53.9023	13.8873	2.0467	15.9340						72,662.3857
2021	49.6649	164.8368	204.5556	0.6954	51.7992	1.6755	53.4747	13.8878	1.6365	15.5243						71,099.4826
2022	48.0890	156.5668	189.2971	0.6790	51.8004	1.6206	53.4210	13.8882	1.5841	15.4724						69,497.8760
2023	45.9663	133.0567	172.8965	0.6598	51.8017	1.4248	53.2265	13.8887	1.3970	15.2857						67,595.5298
Maximum	**52.1150**	**179.2163**	**224.7911**	**0.7114**	**51.8017**	**2.1045**	**53.9023**	**13.8887**	**2.0467**	**15.9340**						**72,662.3857**

	ROG	NOx	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	**2.60**	**1.59**	**-0.70**	**0.00**	**0.00**	**-0.78**	**-0.02**	**0.00**	**-4.15**	**-0.43**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	71.9054	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Energy	1.0263	8.7937	3.9041	0.0560		0.7091	0.7091		0.7091	0.7091						11,262.6101
Mobile	19.9940	78.3561	226.5509	0.7112	72.6285	0.6467	73.2752	19.3928	0.6044	19.9972						71,912.0651
Total	**92.9257**	**88.3790**	**337.1565**	**0.7728**	**72.6285**	**1.9470**	**74.5755**	**19.3928**	**1.9047**	**21.2975**						**83,371.5258**

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	71.9054	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Energy	0.9363	8.0229	3.5622	0.0511		0.6469	0.6469		0.6469	0.6469						10,275.2648
Mobile	19.2209	72.8092	207.6006	0.6323	64.0584	0.5800	64.6383	17.1045	0.5420	17.6464						63,939.7792
Total	**92.0626**	**82.0613**	**317.8642**	**0.6890**	**64.0584**	**1.8181**	**65.8765**	**17.1045**	**1.7801**	**18.8846**						**74,411.8946**

	ROG	NOx	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	**0.93**	**7.15**	**5.72**	**10.84**	**11.80**	**6.62**	**11.66**	**11.80**	**6.54**	**11.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	5	
2	Site Preparation	Site Preparation	1/8/2020	2/7/2020	5	23	
3	Grading	Grading	2/8/2020	6/9/2020	5	87	
4	Building Construction	Building Construction	6/10/2020	6/9/2023	5	783	
5	Paving	Paving	6/10/2023	8/11/2023	5	45	
6	Architectural Coating	Architectural Coating	11/10/2020	6/9/2023	5	674	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 97.6

Residential Indoor: 4,343,625; Residential Outdoor: 1,447,875; Non-Residential Indoor: 120,778; Non-Residential Outdoor: 40,259; Striped Parking Area: 255,087 (Architectural Coating – sqft)

OffRoad Equipment

Olsen-Chandler - San Luis Obispo County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,813.00	1,413.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	763.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.6909	0.0000	0.6909	0.1046	0.0000	0.1046						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.6909**	**1.6587**	**2.3496**	**0.1046**	**1.5419**	**1.6465**						**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0265	0.9530	0.2166	2.3400e-003	0.0524	4.2600e-003	0.0566	0.0143	4.0700e-003	0.0184						252.5681
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0996**	**1.0138**	**0.7347**	**3.6700e-003**	**0.2006**	**5.2100e-003**	**0.2059**	**0.0537**	**4.9500e-003**	**0.0586**						**384.7714**

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					0.2695	0.0000	0.2695	0.0408	0.0000	0.0408						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,774.1536
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**0.2695**	**0.8627**	**1.1322**	**0.0408**	**0.8627**	**0.9035**						**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0265	0.9530	0.2166	2.3400e-003	0.0524	4.2600e-003	0.0566	0.0143	4.0700e-003	0.0184						252.5681
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0996**	**1.0138**	**0.7347**	**3.6700e-003**	**0.2006**	**5.2100e-003**	**0.2059**	**0.0537**	**4.9500e-003**	**0.0586**						**384.7714**

3.3 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
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**						**3,714.8975**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0878	0.0729	0.6216	1.5900e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						158.6439
Total	**0.0878**	**0.0729**	**0.6216**	**1.5900e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**158.6439**

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462						3,714.8975
Total	**0.9312**	**19.0656**	**22.9600**	**0.0380**	**7.0458**	**0.9462**	**7.9920**	**3.8730**	**0.9462**	**4.8191**						**3,714.8975**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0878	0.0729	0.6216	1.5900e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						158.6439
Total	**0.0878**	**0.0729**	**0.6216**	**1.5900e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**158.6439**

3.4 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					24.9161	0.0000	24.9161	5.3503	0.0000	5.3503						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**24.9161**	**2.1739**	**27.0900**	**5.3503**	**2.0000**	**7.3503**						**6,054.4257**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0975	0.0810	0.6907	1.7700e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						176.2710
Total	**0.0975**	**0.0810**	**0.6907**	**1.7700e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**176.2710**

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					9.7173	0.0000	9.7173	2.0866	0.0000	2.0866						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0620		1.2994	1.2994		1.2994	1.2994						6,054.4257
Total	**1.5231**	**29.9782**	**36.7226**	**0.0620**	**9.7173**	**1.2994**	**11.0167**	**2.0866**	**1.2994**	**3.3861**						**6,054.4257**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0975	0.0810	0.6907	1.7700e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						176.2710
Total	**0.0975**	**0.0810**	**0.6907**	**1.7700e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**176.2710**

3.5 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						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

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
Vendor	5.4189	145.1021	47.0554	0.2767	6.5589	0.8165	7.3755	1.8890	0.7811	2.6701						29,480.9464
Worker	18.5904	15.4413	131.6798	0.3373	37.6958	0.2411	37.9369	9.9977	0.2224	10.2201						33,606.0722
Total	**24.0092**	**160.5434**	**178.7352**	**0.6140**	**44.2548**	**1.0576**	**45.3123**	**11.8867**	**1.0035**	**12.8902**						**63,087.0186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.6345
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.6345**

3.5 Building Construction - 2020

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
Vendor	5.4189	145.1021	47.0554	0.2767	6.5589	0.8165	7.3755	1.8890	0.7811	2.6701						29,480.9464
Worker	18.5904	15.4413	131.6798	0.3373	37.6958	0.2411	37.9369	9.9977	0.2224	10.2201						33,606.0722
Total	**24.0092**	**160.5434**	**178.7352**	**0.6140**	**44.2548**	**1.0576**	**45.3123**	**11.8867**	**1.0035**	**12.8902**						**63,087.0186**

3.5 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						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

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
Vendor	4.4592	132.6853	41.7274	0.2747	6.5603	0.3967	6.9570	1.8895	0.3795	2.2690						29,295.1205
Worker	17.3485	13.8059	119.2579	0.3257	37.6958	0.2334	37.9293	9.9977	0.2153	10.2130						32,458.5516
Total	**21.8077**	**146.4912**	**160.9853**	**0.6003**	**44.2561**	**0.6302**	**44.8863**	**11.8872**	**0.5948**	**12.4820**						**61,753.6721**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.7643**

3.5 Building Construction - 2021

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
Vendor	4.4592	132.6853	41.7274	0.2747	6.5603	0.3967	6.9570	1.8895	0.3795	2.2690						29,295.1205
Worker	17.3485	13.8059	119.2579	0.3257	37.6958	0.2334	37.9293	9.9977	0.2153	10.2130						32,458.5516
Total	**21.8077**	**146.4912**	**160.9853**	**0.6003**	**44.2561**	**0.6302**	**44.8863**	**11.8872**	**0.5948**	**12.4820**						**61,753.6721**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612						2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**						**2,569.6322**

3.5 Building Construction - 2022

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
Vendor	4.1255	126.0866	38.5744	0.2724	6.5615	0.3497	6.9112	1.8900	0.3345	2.2244						29,086.9758
Worker	16.3134	12.4132	109.1709	0.3139	37.6958	0.2268	37.9227	9.9977	0.2092	10.2069						31,296.7322
Total	**20.4389**	**138.4998**	**147.7453**	**0.5863**	**44.2573**	**0.5766**	**44.8339**	**11.8876**	**0.5437**	**12.4313**						**60,383.7080**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,569.6322
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,569.6322**

3.5 Building Construction - 2022

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
Vendor	4.1255	126.0866	38.5744	0.2724	6.5615	0.3497	6.9112	1.8900	0.3345	2.2244						29,086.9758
Worker	16.3134	12.4132	109.1709	0.3139	37.6958	0.2268	37.9227	9.9977	0.2092	10.2069						31,296.7322
Total	**20.4389**	**138.4998**	**147.7453**	**0.5863**	**44.2573**	**0.5766**	**44.8339**	**11.8876**	**0.5437**	**12.4313**						**60,383.7080**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**						**2,570.4061**

3.5 Building Construction - 2023

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
Vendor	3.1524	104.0849	33.6497	0.2674	6.5627	0.1610	6.7237	1.8904	0.1539	2.0443						28,594.3384
Worker	15.3555	11.1564	99.6084	0.3021	37.6958	0.2210	37.9168	9.9977	0.2037	10.2014						30,121.4637
Total	**18.5079**	**115.2413**	**133.2582**	**0.5695**	**44.2585**	**0.3820**	**44.6405**	**11.8881**	**0.3576**	**12.2457**						**58,715.8021**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,570.4061
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,570.4061**

3.5 Building Construction - 2023

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
Vendor	3.1524	104.0849	33.6497	0.2674	6.5627	0.1610	6.7237	1.8904	0.1539	2.0443						28,594.3384
Worker	15.3555	11.1564	99.6084	0.3021	37.6958	0.2210	37.9168	9.9977	0.2037	10.2014						30,121.4637
Total	**18.5079**	**115.2413**	**133.2582**	**0.5695**	**44.2585**	**0.3820**	**44.6405**	**11.8881**	**0.3576**	**12.2457**						**58,715.8021**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694						2,225.4336
Paving	5.6825					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**6.7152**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**						**2,225.4336**

3.6 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0604	0.0439	0.3919	1.1900e-003	0.1483	8.7000e-004	0.1492	0.0393	8.0000e-004	0.0401						118.4951
Total	**0.0604**	**0.0439**	**0.3919**	**1.1900e-003**	**0.1483**	**8.7000e-004**	**0.1492**	**0.0393**	**8.0000e-004**	**0.0401**						**118.4951**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093						2,225.4336
Paving	5.6825					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**6.2434**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**						**2,225.4336**

3.6 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0604	0.0439	0.3919	1.1900e-003	0.1483	8.7000e-004	0.1492	0.0393	8.0000e-004	0.0401						118.4951
Total	**0.0604**	**0.0439**	**0.3919**	**1.1900e-003**	**0.1483**	**8.7000e-004**	**0.1492**	**0.0393**	**8.0000e-004**	**0.0401**						**118.4951**

3.7 Architectural Coating - 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					
Archit. Coating	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109						281.9928
Total	**23.8946**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**						**281.9928**

3.7 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.7200	3.0899	26.3498	0.0675	7.5431	0.0482	7.5914	2.0006	0.0445	2.0451						6,724.7399
Total	**3.7200**	**3.0899**	**26.3498**	**0.0675**	**7.5431**	**0.0482**	**7.5914**	**2.0006**	**0.0445**	**2.0451**						**6,724.7399**

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	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9928
Total	**23.7118**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9928**

3.7 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.7200	3.0899	26.3498	0.0675	7.5431	0.0482	7.5914	2.0006	0.0445	2.0451						6,724.7399
Total	**3.7200**	**3.0899**	**26.3498**	**0.0675**	**7.5431**	**0.0482**	**7.5914**	**2.0006**	**0.0445**	**2.0451**						**6,724.7399**

3.7 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	23.6524					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						281.9309
Total	**23.8713**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**						**281.9309**

3.7 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.4715	2.7626	23.8641	0.0652	7.5431	0.0467	7.5898	2.0006	0.0431	2.0437						6,495.1154
Total	**3.4715**	**2.7626**	**23.8641**	**0.0652**	**7.5431**	**0.0467**	**7.5898**	**2.0006**	**0.0431**	**2.0437**						**6,495.1154**

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	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9309
Total	**23.7118**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9309**

3.7 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.4715	2.7626	23.8641	0.0652	7.5431	0.0467	7.5898	2.0006	0.0431	2.0437						6,495.1154
Total	**3.4715**	**2.7626**	**23.8641**	**0.0652**	**7.5431**	**0.0467**	**7.5898**	**2.0006**	**0.0431**	**2.0437**						**6,495.1154**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817						281.9062
Total	**23.8569**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**						**281.9062**

3.7 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.2644	2.4839	21.8456	0.0628	7.5431	0.0454	7.5885	2.0006	0.0419	2.0424						6,262.6296
Total	**3.2644**	**2.4839**	**21.8456**	**0.0628**	**7.5431**	**0.0454**	**7.5885**	**2.0006**	**0.0419**	**2.0424**						**6,262.6296**

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	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9062
Total	**23.7118**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9062**

3.7 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.2644	2.4839	21.8456	0.0628	7.5431	0.0454	7.5885	2.0006	0.0419	2.0424						6,262.6296
Total	**3.2644**	**2.4839**	**21.8456**	**0.0628**	**7.5431**	**0.0454**	**7.5885**	**2.0006**	**0.0419**	**2.0424**						**6,262.6296**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						281.8690
Total	**23.8440**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						**281.8690**

3.7 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.0727	2.2324	19.9321	0.0604	7.5431	0.0442	7.5873	2.0006	0.0408	2.0414						6,027.4526
Total	**3.0727**	**2.2324**	**19.9321**	**0.0604**	**7.5431**	**0.0442**	**7.5873**	**2.0006**	**0.0408**	**2.0414**						**6,027.4526**

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	23.6524					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.8690
Total	**23.7118**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.8690**

3.7 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.0727	2.2324	19.9321	0.0604	7.5431	0.0442	7.5873	2.0006	0.0408	2.0414						6,027.4526
Total	**3.0727**	**2.2324**	**19.9321**	**0.0604**	**7.5431**	**0.0442**	**7.5873**	**2.0006**	**0.0408**	**2.0414**						**6,027.4526**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	19.2209	72.8092	207.6006	0.6323	64.0584	0.5800	64.6383	17.1045	0.5420	17.6464						63,939.7792
Unmitigated	19.9940	78.3561	226.5509	0.7112	72.6285	0.6467	73.2752	19.3928	0.6044	19.9972						71,912.0651

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
City Park	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Elementary School	638.55	0.00	0.00	1,174,696	1,036,082
General Office Building	0.00	0.00	0.00		
Health Club	649.88	391.31	501.19	846,726	746,813
Other Asphalt Surfaces	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Regional Shopping Center	402.10	532.68	269.06	580,080	511,630
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	10,929.80	13,110.62	11,334.51	27,634,856	24,373,943

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Elementary School	13.00	5.00	5.00	65.00	30.00	5.00	63	25	12
General Office Building	13.00	5.00	5.00	33.00	48.00	19.00	77	19	4
Health Club	13.00	5.00	5.00	16.90	64.10	19.00	52	39	9
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Racquet Club	13.00	5.00	5.00	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
City Park	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Elementary School	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
General Office Building	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Health Club	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Other Asphalt Surfaces	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Racquet Club	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Recreational Swimming Pool	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Regional Shopping Center	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Single Family Housing	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.9363	8.0229	3.5622	0.0511		0.6469	0.6469		0.6469	0.6469						10,275.2648
NaturalGas Unmitigated	1.0263	8.7937	3.9041	0.0560		0.7091	0.7091		0.7091	0.7091						11,262.6101

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	2090.73	0.0226	0.2050	0.1722	1.2300e-003		0.0156	0.0156		0.0156	0.0156						247.4294
General Office Building	25.8332	2.8000e-004	2.5300e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004						3.0573
Health Club	1355.28	0.0146	0.1329	0.1116	8.0000e-004		0.0101	0.0101		0.0101	0.0101						160.3924
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	448.46	4.8400e-003	0.0440	0.0369	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003						53.0735
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	69.2105	7.5000e-004	6.7900e-003	5.7000e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004						8.1908
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**1.0263**	**8.7937**	**3.9041**	**0.0560**		**0.7091**	**0.7091**		**0.7091**	**0.7091**						**11,262.6101**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	1.8922	0.0204	0.1855	0.1558	1.1100e-003		0.0141	0.0141		0.0141	0.0141						223.9343
General Office Building	0.0232594	2.5000e-004	2.2800e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						2.7527
Health Club	1.25402	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003						148.4086
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	0.414953	4.4700e-003	0.0407	0.0342	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003						49.1081
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	0.0622894	6.7000e-004	6.1100e-003	5.1300e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004						7.3717
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.9363**	**8.0229**	**3.5622**	**0.0511**		**0.6469**	**0.6469**		**0.6469**	**0.6469**						**10,275.2648**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	71.9054	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Unmitigated	71.9054	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506

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	19.3832					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	49.3095					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2128	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Total	**71.9054**	**1.2292**	**106.7015**	**5.6400e-003**		**0.5913**	**0.5913**		**0.5913**	**0.5913**						**196.8506**

6.2 Area by SubCategory

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	19.3832					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	49.3095					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2128	1.2292	106.7015	5.6400e-003		0.5913	0.5913		0.5913	0.5913						196.8506
Total	**71.9054**	**1.2292**	**106.7015**	**5.6400e-003**		**0.5913**	**0.5913**		**0.5913**	**0.5913**						**196.8506**

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

Institute Recycling and Composting Services

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 – YEAR 2030

Includes Operational GHG.
Mobile-source adjustment for Residential Fleet Mix Calculated Separately.

NOTE: Does not include residential adjustment for fleet mix or solar PV, calculated separately.

Olsen-Chandler

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.58	1000sqft	0.01	576.00	0
Elementary School	495.00	Student	0.95	41,383.67	0
Other Asphalt Surfaces	97.60	Acre	97.60	4,251,456.00	0
City Park	45.30	Acre	45.30	1,973,268.00	0
City Park	33.80	Acre	33.80	1,472,328.00	0
Health Club	18.75	1000sqft	11.50	18,752.00	0
Racquet Club	6.21	1000sqft	3.80	6,205.00	0
Recreational Swimming Pool	0.00	1000sqft	1.10	1,789.00	0
Recreational Swimming Pool	0.00	1000sqft	0.70	1,154.00	0
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046
Regional Shopping Center	10.66	1000sqft	0.24	10,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes RPS adjustment.

Land Use - Provided by the applicant team.

Construction Phase - Based on provided phase durations. Architectural Coating, starts five months after building construction and stops at the end of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment use based on model defaults.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Const trips based on model defaults.

On-road Fugitive Dust -

Demolition - Demolition of 3,400 building square footage.

Grading - Based on model defaults.

Architectural Coating - Residential low-VOC content: 50 g/L, per mitigation requirements. Non-Residential low-VOC content: 100 g/L.

Vehicle Trips - Trip-gen rates for residential and school based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. Other uses derived from the traffic analysis prepared for this project.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -
Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	PhaseEndDate	7/13/2021	1/7/2020
tblConstructionPhase	PhaseEndDate	6/14/2022	2/7/2020
tblConstructionPhase	PhaseEndDate	10/29/2024	6/9/2020
tblConstructionPhase	PhaseEndDate	8/4/2048	6/9/2023
tblConstructionPhase	PhaseEndDate	4/12/2050	8/11/2023
tblConstructionPhase	PhaseStartDate	7/14/2021	1/8/2020
tblConstructionPhase	PhaseStartDate	6/15/2022	2/8/2020
tblConstructionPhase	PhaseStartDate	10/30/2024	6/10/2020
tblConstructionPhase	PhaseStartDate	8/5/2048	6/10/2023
tblLandUse	LandUseSquareFeet	580.00	576.00
tblLandUse	LandUseSquareFeet	18,750.00	18,752.00
tblLandUse	LandUseSquareFeet	6,210.00	6,205.00
tblLandUse	LandUseSquareFeet	0.00	1,789.00
tblLandUse	LandUseSquareFeet	0.00	1,154.00
tblLandUse	LandUseSquareFeet	10,660.00	10,659.00
tblLandUse	LotAcreage	0.43	11.50
tblLandUse	LotAcreage	0.14	3.80

tblLandUse	LotAcreage	0.00	1.10
tblLandUse	LotAcreage	0.00	0.70
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	32.93	34.66
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblVehicleTrips	WD_TR	42.70	37.72
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79

tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	2.7776	16.1829	16.4172	0.0524	3.9053	0.2859	4.1911	1.1639	0.2671	1.4310						4,848.3405
2021	8.0008	22.1483	26.1606	0.0918	6.5868	0.2240	6.8108	1.7699	0.2115	1.9814						8,518.2350
2022	7.7527	20.7282	24.0813	0.0893	6.5617	0.1951	6.7568	1.7632	0.1842	1.9474						8,295.9189
2023	3.3432	7.9471	10.0747	0.0389	2.9056	0.0801	2.9857	0.7808	0.0752	0.8559						3,617.4591
Maximum	**8.0008**	**22.1483**	**26.1606**	**0.0918**	**6.5868**	**0.2859**	**6.8108**	**1.7699**	**0.2671**	**1.9814**						**8,518.2350**

2.1 Overall Construction

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	2.4984	14.6268	16.7237	0.0524	3.5484	0.2154	3.7638	0.9988	0.2114	1.2103						4,848.3399
2021	7.8199	21.7077	26.3320	0.0918	6.5868	0.2170	6.8038	1.7699	0.2120	1.9819						8,518.2346
2022	7.5996	20.5409	24.2801	0.0893	6.5617	0.2091	6.7708	1.7632	0.2045	1.9676						8,295.9185
2023	3.2733	7.9659	10.2307	0.0389	2.9056	0.0954	3.0010	0.7808	0.0938	0.8746						3,617.4589
Maximum	**7.8199**	**21.7077**	**26.3320**	**0.0918**	**6.5868**	**0.2170**	**6.8038**	**1.7699**	**0.2120**	**1.9819**						**8,518.2346**

	ROG	NOx	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	**3.12**	**3.23**	**-1.09**	**0.00**	**1.79**	**6.13**	**1.95**	**3.01**	**2.21**	**2.92**	**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	**1-1-2020**	**3-31-2020**	1.6460	0.8713
2	**4-1-2020**	**6-30-2020**	2.8864	2.2597
3	**7-1-2020**	**9-30-2020**	6.6427	6.4322
4	**10-1-2020**	**12-31-2020**	7.5990	7.3791
5	**1-1-2021**	**3-31-2021**	7.4521	7.2990
6	**4-1-2021**	**6-30-2021**	7.4063	7.2516
7	**7-1-2021**	**9-30-2021**	7.4877	7.3312
8	**10-1-2021**	**12-31-2021**	7.6177	7.4612

9	**1-1-2022**	**3-31-2022**	7.0667	6.9825
10	**4-1-2022**	**6-30-2022**	7.0291	6.9440
11	**7-1-2022**	**9-30-2022**	7.1064	7.0203
12	**10-1-2022**	**12-31-2022**	7.2237	7.1377
13	**1-1-2023**	**3-31-2023**	6.1951	6.1586
14	**4-1-2023**	**6-30-2023**	4.8238	4.8002
15	**7-1-2023**	**9-30-2023**	0.1785	0.1879
		Highest	7.6177	7.4612

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	13.0626	0.2025	17.5666	9.3000e-004		0.0977	0.0977		0.0977	0.0977						29.4608
Energy	0.1873	1.6049	0.7125	0.0102		0.1294	0.1294		0.1294	0.1294						3,245.1746
Mobile	1.9958	8.2759	22.2955	0.0877	10.3529	0.0637	10.4166	2.7677	0.0593	2.8270						8,078.6917
Waste						0.0000	0.0000		0.0000	0.0000						807.1016
Water						0.0000	0.0000		0.0000	0.0000						208.2882
Total	**15.2457**	**10.0833**	**40.5746**	**0.0989**	**10.3529**	**0.2907**	**10.6436**	**2.7677**	**0.2863**	**3.0541**						**12,368.7169**

2.2 Overall Operational

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	13.0626	0.2025	17.5666	9.3000e-004		0.0977	0.0977		0.0977	0.0977						29.4608
Energy	0.1709	1.4642	0.6501	9.3200e-003		0.1181	0.1181		0.1181	0.1181						2,999.8397
Mobile	1.9180	7.7884	20.3406	0.0781	9.1313	0.0572	9.1885	2.4411	0.0533	2.4944						7,190.7490
Waste						0.0000	0.0000		0.0000	0.0000						338.9827
Water						0.0000	0.0000		0.0000	0.0000						176.6701
Total	**15.1515**	**9.4550**	**38.5572**	**0.0883**	**9.1313**	**0.2730**	**9.4042**	**2.4411**	**0.2690**	**2.7101**						**10,735.7022**

	ROG	NOx	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	**0.62**	**6.23**	**4.97**	**10.68**	**11.80**	**6.11**	**11.64**	**11.80**	**6.05**	**11.26**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**13.20**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	400	
2	Site Preparation	Site Preparation	1/8/2020	2/7/2020	5	240	
3	Grading	Grading	2/8/2020	6/9/2020	5	620	
4	Building Construction	Building Construction	6/10/2020	6/9/2023	5	6200	
5	Architectural Coating	Architectural Coating	11/10/2020	6/9/2023	5	440	
6	Paving	Paving	6/10/2023	8/11/2023	5	440	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 97.6

Residential Indoor: 4,343,625; Residential Outdoor: 1,447,875; Non-Residential Indoor: 120,778; Non-Residential Outdoor: 40,259; Striped Parking Area: 255,087 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,813.00	1,413.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	763.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**2.0000e-005**	**4.1500e-003**	**4.1700e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

3.2 Demolition - 2020

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	3.0000e-005	1.0000e-005	0.0000	1.0000e-004	0.0000	1.0000e-004	2.0000e-005	0.0000	2.0000e-005						7.2200e-003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.6000e-004	1.5000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004						0.3023
Total	**1.6000e-004**	**1.8000e-004**	**1.3000e-003**	**0.0000**	**4.6000e-004**	**0.0000**	**4.6000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**						**0.3095**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000						0.0000
Off-Road	2.3100e-003	0.0458	0.0617	1.0000e-004		2.1600e-003	2.1600e-003		2.1600e-003	2.1600e-003						8.5596
Total	**2.3100e-003**	**0.0458**	**0.0617**	**1.0000e-004**	**1.0000e-005**	**2.1600e-003**	**2.1700e-003**	**0.0000**	**2.1600e-003**	**2.1600e-003**						**8.5596**

3.2 Demolition - 2020

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	3.0000e-005	1.0000e-005	0.0000	1.0000e-004	0.0000	1.0000e-004	2.0000e-005	0.0000	2.0000e-005						7.2200e-003
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.6000e-004	1.5000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004						0.3023
Total	**1.6000e-004**	**1.8000e-004**	**1.3000e-003**	**0.0000**	**4.6000e-004**	**0.0000**	**4.6000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**						**0.3095**

3.3 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					0.2078	0.0000	0.2078	0.1142	0.0000	0.1142						0.0000
Off-Road	0.0469	0.4878	0.2474	4.4000e-004		0.0253	0.0253		0.0233	0.0233						38.7561
Total	**0.0469**	**0.4878**	**0.2474**	**4.4000e-004**	**0.2078**	**0.0253**	**0.2330**	**0.1142**	**0.0233**	**0.1375**						**38.7561**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.1000e-004	8.2000e-004	7.1200e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.4000e-004						1.6686
Total	**9.1000e-004**	**8.2000e-004**	**7.1200e-003**	**2.0000e-005**	**1.9900e-003**	**1.0000e-005**	**2.0100e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**						**1.6686**

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					0.0810	0.0000	0.0810	0.0445	0.0000	0.0445						0.0000
Off-Road	0.0107	0.2193	0.2640	4.4000e-004		0.0109	0.0109		0.0109	0.0109						38.7561
Total	**0.0107**	**0.2193**	**0.2640**	**4.4000e-004**	**0.0810**	**0.0109**	**0.0919**	**0.0445**	**0.0109**	**0.0554**						**38.7561**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	9.1000e-004	8.2000e-004	7.1200e-003	2.0000e-005	1.9900e-003	1.0000e-005	2.0100e-003	5.3000e-004	1.0000e-005	5.4000e-004						1.6686
Total	**9.1000e-004**	**8.2000e-004**	**7.1200e-003**	**2.0000e-005**	**1.9900e-003**	**1.0000e-005**	**2.0100e-003**	**5.3000e-004**	**1.0000e-005**	**5.4000e-004**						**1.6686**

3.4 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					0.3773	0.0000	0.3773	0.1565	0.0000	0.1565						0.0000
Off-Road	0.1936	2.1836	1.3902	2.7000e-003		0.0946	0.0946		0.0870	0.0870						238.9230
Total	**0.1936**	**2.1836**	**1.3902**	**2.7000e-003**	**0.3773**	**0.0946**	**0.4719**	**0.1565**	**0.0870**	**0.2435**						**238.9230**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.8000e-003	3.4600e-003	0.0299	8.0000e-005	8.3800e-003	6.0000e-005	8.4300e-003	2.2300e-003	5.0000e-005	2.2800e-003						7.0128
Total	**3.8000e-003**	**3.4600e-003**	**0.0299**	**8.0000e-005**	**8.3800e-003**	**6.0000e-005**	**8.4300e-003**	**2.2300e-003**	**5.0000e-005**	**2.2800e-003**						**7.0128**

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					0.1471	0.0000	0.1471	0.0610	0.0000	0.0610						0.0000
Off-Road	0.0663	1.3041	1.5974	2.7000e-003		0.0565	0.0565		0.0565	0.0565						238.9227
Total	**0.0663**	**1.3041**	**1.5974**	**2.7000e-003**	**0.1471**	**0.0565**	**0.2037**	**0.0610**	**0.0565**	**0.1175**						**238.9227**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.8000e-003	3.4600e-003	0.0299	8.0000e-005	8.3800e-003	6.0000e-005	8.4300e-003	2.2300e-003	5.0000e-005	2.2800e-003						7.0128
Total	**3.8000e-003**	**3.4600e-003**	**0.0299**	**8.0000e-005**	**8.3800e-003**	**6.0000e-005**	**8.4300e-003**	**2.2300e-003**	**5.0000e-005**	**2.2800e-003**						**7.0128**

3.5 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	0.1558	1.4102	1.2384	1.9800e-003		0.0821	0.0821		0.0772	0.0772						171.2716
Total	**0.1558**	**1.4102**	**1.2384**	**1.9800e-003**		**0.0821**	**0.0821**		**0.0772**	**0.0772**						**171.2716**

3.5 Building Construction - 2020

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
Vendor	0.3862	10.8108	3.2753	0.0207	0.4717	0.0590	0.5307	0.1363	0.0564	0.1927						2,001.0644
Worker	1.2256	1.1135	9.6397	0.0250	2.6981	0.0177	2.7158	0.7170	0.0164	0.7334						2,259.0582
Total	**1.6118**	**11.9243**	**12.9151**	**0.0457**	**3.1698**	**0.0767**	**3.2465**	**0.8533**	**0.0728**	**0.9261**						**4,260.1225**

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	0.0495	1.0456	1.3137	1.9800e-003		0.0664	0.0664		0.0664	0.0664						171.2714
Total	**0.0495**	**1.0456**	**1.3137**	**1.9800e-003**		**0.0664**	**0.0664**		**0.0664**	**0.0664**						**171.2714**

3.5 Building Construction - 2020

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
Vendor	0.3862	10.8108	3.2753	0.0207	0.4717	0.0590	0.5307	0.1363	0.0564	0.1927						2,001.0644
Worker	1.2256	1.1135	9.6397	0.0250	2.6981	0.0177	2.7158	0.7170	0.0164	0.7334						2,259.0582
Total	**1.6118**	**11.9243**	**12.9151**	**0.0457**	**3.1698**	**0.0767**	**3.2465**	**0.8533**	**0.0728**	**0.9261**						**4,260.1225**

3.5 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	0.2481	2.2749	2.1631	3.5100e-003		0.1251	0.1251		0.1176	0.1176						304.1099
Total	**0.2481**	**2.2749**	**2.1631**	**3.5100e-003**		**0.1251**	**0.1251**		**0.1176**	**0.1176**						**304.1099**

3.5 Building Construction - 2021

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
Vendor	0.5621	17.5526	5.1434	0.0365	0.8378	0.0501	0.8879	0.2421	0.0479	0.2900						3,531.5098
Worker	2.0280	1.7678	15.5128	0.0428	4.7904	0.0305	4.8209	1.2731	0.0281	1.3012						3,874.0265
Total	**2.5902**	**19.3204**	**20.6562**	**0.0793**	**5.6282**	**0.0806**	**5.7088**	**1.5151**	**0.0760**	**1.5912**						**7,405.5363**

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	0.0879	1.8565	2.3325	3.5100e-003		0.1179	0.1179		0.1179	0.1179						304.1095
Total	**0.0879**	**1.8565**	**2.3325**	**3.5100e-003**		**0.1179**	**0.1179**		**0.1179**	**0.1179**						**304.1095**

3.5 Building Construction - 2021

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
Vendor	0.5621	17.5526	5.1434	0.0365	0.8378	0.0501	0.8879	0.2421	0.0479	0.2900						3,531.5098
Worker	2.0280	1.7678	15.5128	0.0428	4.7904	0.0305	4.8209	1.2731	0.0281	1.3012						3,874.0265
Total	**2.5902**	**19.3204**	**20.6562**	**0.0793**	**5.6282**	**0.0806**	**5.7088**	**1.5151**	**0.0760**	**1.5912**						**7,405.5363**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990						303.0471
Total	**0.2218**	**2.0300**	**2.1272**	**3.5000e-003**		**0.1052**	**0.1052**		**0.0990**	**0.0990**						**303.0471**

3.5 Building Construction - 2022

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
Vendor	0.5179	16.6147	4.7296	0.0361	0.8347	0.0439	0.8786	0.2412	0.0420	0.2832						3,493.9859
Worker	1.8968	1.5835	14.1560	0.0411	4.7721	0.0295	4.8016	1.2682	0.0272	1.2954						3,721.0411
Total	**2.4147**	**18.1982**	**18.8856**	**0.0772**	**5.6068**	**0.0734**	**5.6802**	**1.5094**	**0.0692**	**1.5786**						**7,215.0269**

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	0.0876	1.8494	2.3236	3.5000e-003		0.1175	0.1175		0.1175	0.1175						303.0467
Total	**0.0876**	**1.8494**	**2.3236**	**3.5000e-003**		**0.1175**	**0.1175**		**0.1175**	**0.1175**						**303.0467**

3.5 Building Construction - 2022

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
Vendor	0.5179	16.6147	4.7296	0.0361	0.8347	0.0439	0.8786	0.2412	0.0420	0.2832						3,493.9859
Worker	1.8968	1.5835	14.1560	0.0411	4.7721	0.0295	4.8016	1.2682	0.0272	1.2954						3,721.0411
Total	**2.4147**	**18.1982**	**18.8856**	**0.0772**	**5.6068**	**0.0734**	**5.6802**	**1.5094**	**0.0692**	**1.5786**						**7,215.0269**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0904	0.8271	0.9340	1.5500e-003		0.0402	0.0402		0.0379	0.0379						134.0804
Total	**0.0904**	**0.8271**	**0.9340**	**1.5500e-003**		**0.0402**	**0.0402**		**0.0379**	**0.0379**						**134.0804**

3.5 Building Construction - 2023

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
Vendor	0.1749	6.0593	1.8378	0.0157	0.3693	8.9900e-003	0.3783	0.1067	8.6000e-003	0.1153						1,519.8021
Worker	0.7882	0.6296	5.7177	0.0175	2.1107	0.0127	2.1234	0.5609	0.0117	0.5726						1,584.0367
Total	**0.9632**	**6.6888**	**7.5555**	**0.0332**	**2.4800**	**0.0217**	**2.5017**	**0.6676**	**0.0203**	**0.6880**						**3,103.8388**

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	0.0388	0.8180	1.0277	1.5500e-003		0.0520	0.0520		0.0520	0.0520						134.0803
Total	**0.0388**	**0.8180**	**1.0277**	**1.5500e-003**		**0.0520**	**0.0520**		**0.0520**	**0.0520**						**134.0803**

3.5 Building Construction - 2023

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
Vendor	0.1749	6.0593	1.8378	0.0157	0.3693	8.9900e-003	0.3783	0.1067	8.6000e-003	0.1153						1,519.8021
Worker	0.7882	0.6296	5.7177	0.0175	2.1107	0.0127	2.1234	0.5609	0.0117	0.5726						1,584.0367
Total	**0.9632**	**6.6888**	**7.5555**	**0.0332**	**2.4800**	**0.0217**	**2.5017**	**0.6676**	**0.0203**	**0.6880**						**3,103.8388**

3.6 Architectural Coating - 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					
Archit. Coating	0.6884					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	4.6000e-003	0.0320	0.0348	6.0000e-005		2.1100e-003	2.1100e-003		2.1100e-003	2.1100e-003						4.8606
Total	**0.6930**	**0.0320**	**0.0348**	**6.0000e-005**		**2.1100e-003**	**2.1100e-003**		**2.1100e-003**	**2.1100e-003**						**4.8606**

3.6 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0634	0.0576	0.4986	1.2900e-003	0.1396	9.2000e-004	0.1405	0.0371	8.5000e-004	0.0379						116.8561
Total	**0.0634**	**0.0576**	**0.4986**	**1.2900e-003**	**0.1396**	**9.2000e-004**	**0.1405**	**0.0371**	**8.5000e-004**	**0.0379**						**116.8561**

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	0.6884					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	1.1300e-003	0.0258	0.0348	6.0000e-005		1.8100e-003	1.8100e-003		1.8100e-003	1.8100e-003						4.8606
Total	**0.6895**	**0.0258**	**0.0348**	**6.0000e-005**		**1.8100e-003**	**1.8100e-003**		**1.8100e-003**	**1.8100e-003**						**4.8606**

3.6 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0634	0.0576	0.4986	1.2900e-003	0.1396	9.2000e-004	0.1405	0.0371	8.5000e-004	0.0379						116.8561
Total	**0.0634**	**0.0576**	**0.4986**	**1.2900e-003**	**0.1396**	**9.2000e-004**	**0.1405**	**0.0371**	**8.5000e-004**	**0.0379**						**116.8561**

3.6 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	4.7282					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0286	0.1993	0.2372	3.9000e-004		0.0123	0.0123		0.0123	0.0123						33.3771
Total	**4.7567**	**0.1993**	**0.2372**	**3.9000e-004**		**0.0123**	**0.0123**		**0.0123**	**0.0123**						**33.3771**

3.6 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.4058	0.3538	3.1042	8.5700e-003	0.9586	6.1000e-003	0.9647	0.2548	5.6200e-003	0.2604						775.2117
Total	**0.4058**	**0.3538**	**3.1042**	**8.5700e-003**	**0.9586**	**6.1000e-003**	**0.9647**	**0.2548**	**5.6200e-003**	**0.2604**						**775.2117**

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	4.7282					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	7.7600e-003	0.1771	0.2391	3.9000e-004		0.0124	0.0124		0.0124	0.0124						33.3771
Total	**4.7359**	**0.1771**	**0.2391**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**						**33.3771**

3.6 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.4058	0.3538	3.1042	8.5700e-003	0.9586	6.1000e-003	0.9647	0.2548	5.6200e-003	0.2604						775.2117
Total	**0.4058**	**0.3538**	**3.1042**	**8.5700e-003**	**0.9586**	**6.1000e-003**	**0.9647**	**0.2548**	**5.6200e-003**	**0.2604**						**775.2117**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.7101					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106						33.2463
Total	**4.7366**	**0.1831**	**0.2358**	**3.9000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**						**33.2463**

3.6 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.3796	0.3169	2.8327	8.2300e-003	0.9549	5.9000e-003	0.9608	0.2538	5.4400e-003	0.2592						744.5986
Total	**0.3796**	**0.3169**	**2.8327**	**8.2300e-003**	**0.9549**	**5.9000e-003**	**0.9608**	**0.2538**	**5.4400e-003**	**0.2592**						**744.5986**

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	4.7101					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	7.7300e-003	0.1764	0.2382	3.9000e-004		0.0124	0.0124		0.0124	0.0124						33.2463
Total	**4.7178**	**0.1764**	**0.2382**	**3.9000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**						**33.2463**

3.6 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.3796	0.3169	2.8327	8.2300e-003	0.9549	5.9000e-003	0.9608	0.2538	5.4400e-003	0.2592						744.5986
Total	**0.3796**	**0.3169**	**2.8327**	**8.2300e-003**	**0.9549**	**5.9000e-003**	**0.9608**	**0.2538**	**5.4400e-003**	**0.2592**						**744.5986**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.0833					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0110	0.0749	0.1041	1.7000e-004		4.0700e-003	4.0700e-003		4.0700e-003	4.0700e-003						14.7032
Total	**2.0943**	**0.0749**	**0.1041**	**1.7000e-004**		**4.0700e-003**	**4.0700e-003**		**4.0700e-003**	**4.0700e-003**						**14.7032**

3.6 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1577	0.1260	1.1441	3.5000e-003	0.4224	2.5400e-003	0.4249	0.1122	2.3400e-003	0.1146						316.9735
Total	**0.1577**	**0.1260**	**1.1441**	**3.5000e-003**	**0.4224**	**2.5400e-003**	**0.4249**	**0.1122**	**2.3400e-003**	**0.1146**						**316.9735**

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	2.0833					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	3.4200e-003	0.0780	0.1054	1.7000e-004		5.4700e-003	5.4700e-003		5.4700e-003	5.4700e-003						14.7032
Total	**2.0867**	**0.0780**	**0.1054**	**1.7000e-004**		**5.4700e-003**	**5.4700e-003**		**5.4700e-003**	**5.4700e-003**						**14.7032**

3.6 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.1577	0.1260	1.1441	3.5000e-003	0.4224	2.5400e-003	0.4249	0.1122	2.3400e-003	0.1146						316.9735
Total	**0.1577**	**0.1260**	**1.1441**	**3.5000e-003**	**0.4224**	**2.5400e-003**	**0.4249**	**0.1122**	**2.3400e-003**	**0.1146**						**316.9735**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0232	0.2293	0.3281	5.1000e-004		0.0115	0.0115		0.0106	0.0106						45.4248
Paving	0.0131					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.0363**	**0.2293**	**0.3281**	**5.1000e-004**		**0.0115**	**0.0115**		**0.0106**	**0.0106**						**45.4248**

3.7 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.2100e-003	9.7000e-004	8.8000e-003	3.0000e-005	3.2500e-003	2.0000e-005	3.2700e-003	8.6000e-004	2.0000e-005	8.8000e-004						2.4384
Total	**1.2100e-003**	**9.7000e-004**	**8.8000e-003**	**3.0000e-005**	**3.2500e-003**	**2.0000e-005**	**3.2700e-003**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**						**2.4384**

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	0.0126	0.2541	0.3892	5.1000e-004		0.0137	0.0137		0.0137	0.0137						45.4247
Paving	0.0131					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**0.0257**	**0.2541**	**0.3892**	**5.1000e-004**		**0.0137**	**0.0137**		**0.0137**	**0.0137**						**45.4247**

3.7 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.2100e-003	9.7000e-004	8.8000e-003	3.0000e-005	3.2500e-003	2.0000e-005	3.2700e-003	8.6000e-004	2.0000e-005	8.8000e-004						2.4384
Total	**1.2100e-003**	**9.7000e-004**	**8.8000e-003**	**3.0000e-005**	**3.2500e-003**	**2.0000e-005**	**3.2700e-003**	**8.6000e-004**	**2.0000e-005**	**8.8000e-004**						**2.4384**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9180	7.7884	20.3406	0.0781	9.1313	0.0572	9.1885	2.4411	0.0533	2.4944						7,190.7490
Unmitigated	1.9958	8.2759	22.2955	0.0877	10.3529	0.0637	10.4166	2.7677	0.0593	2.8270						8,078.6917

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
City Park	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Elementary School	638.55	0.00	0.00	1,174,696	1,036,082
General Office Building	0.00	0.00	0.00		
Health Club	649.88	391.31	501.19	846,726	746,813
Other Asphalt Surfaces	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Regional Shopping Center	402.10	532.68	269.06	580,080	511,630
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	10,929.80	13,110.62	11,334.51	27,634,856	24,373,943

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Elementary School	13.00	5.00	5.00	65.00	30.00	5.00	63	25	12
General Office Building	13.00	5.00	5.00	33.00	48.00	19.00	77	19	4
Health Club	13.00	5.00	5.00	16.90	64.10	19.00	52	39	9
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Racquet Club	13.00	5.00	5.00	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
City Park	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Elementary School	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
General Office Building	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Health Club	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Other Asphalt Surfaces	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Racquet Club	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Recreational Swimming Pool	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Regional Shopping Center	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Single Family Housing	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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						1,298.6544
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						1,380.5232
NaturalGas Mitigated	0.1709	1.4642	0.6501	9.3200e-003		0.1181	0.1181		0.1181	0.1181						1,701.1853
NaturalGas Unmitigated	0.1873	1.6049	0.7125	0.0102		0.1294	0.1294		0.1294	0.1294						1,864.6514

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					
Apartments Low Rise	2.32534e+006	0.0125	0.1072	0.0456	6.8000e-004		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003						124.8263
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	763115	4.1100e-003	0.0374	0.0314	2.2000e-004		2.8400e-003	2.8400e-003		2.8400e-003	2.8400e-003						40.9647
General Office Building	9429.12	5.0000e-005	4.6000e-004	3.9000e-004	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005						0.5062
Health Club	494678	2.6700e-003	0.0243	0.0204	1.5000e-004		1.8400e-003	1.8400e-003		1.8400e-003	1.8400e-003						26.5548
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	163688	8.8000e-004	8.0200e-003	6.7400e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004						8.7869
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	25261.8	1.4000e-004	1.2400e-003	1.0400e-003	1.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005						1.3561
Single Family Housing	3.09543e+007	0.1669	1.4263	0.6070	9.1000e-003		0.1153	0.1153		0.1153	0.1153						1,661.6565
Total		**0.1873**	**1.6049**	**0.7125**	**0.0102**		**0.1294**	**0.1294**		**0.1294**	**0.1294**						**1,864.6514**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Low Rise	2.16474e+006	0.0117	0.0998	0.0425	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003						116.2051
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	690652	3.7200e-003	0.0339	0.0284	2.0000e-004		2.5700e-003	2.5700e-003		2.5700e-003	2.5700e-003						37.0748
General Office Building	8489.66	5.0000e-005	4.2000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005						0.4557
Health Club	457718	2.4700e-003	0.0224	0.0189	1.3000e-004		1.7100e-003	1.7100e-003		1.7100e-003	1.7100e-003						24.5707
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	151458	8.2000e-004	7.4200e-003	6.2400e-003	4.0000e-005		5.6000e-004	5.6000e-004		5.6000e-004	5.6000e-004						8.1304
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	22735.6	1.2000e-004	1.1100e-003	9.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005						1.2205
Single Family Housing	2.81949e+007	0.1520	1.2992	0.5528	8.2900e-003		0.1050	0.1050		0.1050	0.1050						1,513.5281
Total		**0.1709**	**1.4642**	**0.6501**	**9.3100e-003**		**0.1181**	**0.1181**		**0.1181**	**0.1181**						**1,701.1853**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	991526				134.7083
City Park	0				0.0000
Elementary School	223058				30.3046
General Office Building	10270.1				1.3953
Health Club	154892				21.0435
Other Asphalt Surfaces	0				0.0000
Racquet Club	51253.3				6.9633
Recreational Swimming Pool	0				0.0000
Regional Shopping Center	113945				15.4805
Single Family Housing	8.61646e+006				1,170.6278
Total					**1,380.5232**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	928743				126.1786
City Park	0				0.0000
Elementary School	199718				27.1335
General Office Building	9560.56				1.2989
Health Club	142875				19.4110
Other Asphalt Surfaces	0				0.0000
Racquet Club	47277.1				6.4231
Recreational Swimming Pool	0				0.0000
Regional Shopping Center	102049				13.8644
Single Family Housing	8.12858e+006				1,104.3450
Total					**1,298.6544**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	13.0626	0.2025	17.5666	9.3000e-004		0.0977	0.0977		0.0977	0.0977						29.4608
Unmitigated	13.0626	0.2025	17.5666	9.3000e-004		0.0977	0.0977		0.0977	0.0977						29.4608

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	3.5374					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.9990					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5262	0.2025	17.5666	9.3000e-004		0.0977	0.0977		0.0977	0.0977						29.4608
Total	**13.0626**	**0.2025**	**17.5666**	**9.3000e-004**		**0.0977**	**0.0977**		**0.0977**	**0.0977**						**29.4608**

6.2 Area by SubCategory

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	3.5374					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.9990					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5262	0.2025	17.5666	9.3000e-004		0.0977	0.0977		0.0977	0.0977						29.4608
Total	**13.0626**	**0.2025**	**17.5666**	**9.3000e-004**		**0.0977**	**0.0977**		**0.0977**	**0.0977**						**29.4608**

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				176.6701
Unmitigated				208.2882

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	14.8551 / 9.36518				27.4704
City Park	0 / 94.2462				44.8148
Elementary School	1.2 / 3.08571				3.3266
General Office Building	0.103086 / 0.0631815				0.1898
Health Club	1.10893 / 0.679669				2.0414
Other Asphalt Surfaces	0 / 0				0.0000
Racquet Club	0.367279 / 0.225106				0.6761
Recreational Swimming Pool	0 / 0				0.0000
Regional Shopping Center	0.789613 / 0.483956				1.4536
Single Family Housing	69.389 / 43.7453				128.3155
Total					**208.2882**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.8841 / 8.79391				22.5953
City Park	0 / 88.4972				42.0811
Elementary School	0.959999 / 2.89748				2.8652
General Office Building	0.0824685 / 0.0593274				0.1560
Health Club	0.887147 / 0.638209				1.6781
Other Asphalt Surfaces	0 / 0				0.0000
Racquet Club	0.293823 / 0.211375				0.5558
Recreational Swimming Pool	0 / 0				0.0000
Regional Shopping Center	0.63169 / 0.454435				1.1949
Single Family Housing	55.5112 / 41.0768				105.5438
Total					**176.6701**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				338.9827
Unmitigated				807.1016

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	104.88				52.7443
City Park	6.8				3.4197
Elementary School	90.34				45.4321
General Office Building	0.54				0.2716
Health Club	106.88				53.7501
Other Asphalt Surfaces	0				0.0000
Racquet Club	35.4				17.8027
Recreational Swimming Pool	0				0.0000
Regional Shopping Center	11.19				5.6275
Single Family Housing	1248.86				628.0536
Total					**807.1016**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	44.0496				22.1526
City Park	2.856				1.4363
Elementary School	37.9428				19.0815
General Office Building	0.2268				0.1141
Health Club	44.8896				22.5751
Other Asphalt Surfaces	0				0.0000
Racquet Club	14.868				7.4771
Recreational Swimming Pool	0				0.0000
Regional Shopping Center	4.6998				2.3635
Single Family Housing	524.521				263.7825
Total					**338.9827**

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

NOTE: Does not include residential adjustment for fleet mix or solar PV, calculated separately.

Olsen-Chandler

San Luis Obispo County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.58	1000sqft	0.01	576.00	0
Elementary School	495.00	Student	0.95	41,383.67	0
Other Asphalt Surfaces	97.60	Acre	97.60	4,251,456.00	0
City Park	45.30	Acre	45.30	1,973,268.00	0
City Park	33.80	Acre	33.80	1,472,328.00	0
Health Club	18.75	1000sqft	11.50	18,752.00	0
Racquet Club	6.21	1000sqft	3.80	6,205.00	0
Recreational Swimming Pool	0.00	1000sqft	1.10	1,789.00	0
Recreational Swimming Pool	0.00	1000sqft	0.70	1,154.00	0
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046
Regional Shopping Center	10.66	1000sqft	0.24	10,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes RPS adjustment.

Land Use - Provided by the applicant team.

Construction Phase - Based on provided phase durations. Architectural Coating, starts five months after building construction and stops at the end of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment use based on model defaults.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Const trips based on model defaults.

On-road Fugitive Dust -

Demolition - Demolition of 3,400 building square footage.

Grading - Based on model defaults.

Architectural Coating - Residential low-VOC content: 50 g/L, per mitigation requirements. Non-Residential low-VOC content: 100 g/L.

Vehicle Trips - Trip-gen rates for residential and school based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. Other uses derived from the traffic analysis prepared for this project.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -
Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	PhaseEndDate	7/13/2021	1/7/2020
tblConstructionPhase	PhaseEndDate	6/14/2022	2/7/2020
tblConstructionPhase	PhaseEndDate	10/29/2024	6/9/2020
tblConstructionPhase	PhaseEndDate	8/4/2048	6/9/2023
tblConstructionPhase	PhaseEndDate	4/12/2050	8/11/2023
tblConstructionPhase	PhaseStartDate	7/14/2021	1/8/2020
tblConstructionPhase	PhaseStartDate	6/15/2022	2/8/2020
tblConstructionPhase	PhaseStartDate	10/30/2024	6/10/2020
tblConstructionPhase	PhaseStartDate	8/5/2048	6/10/2023
tblLandUse	LandUseSquareFeet	580.00	576.00
tblLandUse	LandUseSquareFeet	18,750.00	18,752.00
tblLandUse	LandUseSquareFeet	6,210.00	6,205.00
tblLandUse	LandUseSquareFeet	0.00	1,789.00
tblLandUse	LandUseSquareFeet	0.00	1,154.00
tblLandUse	LandUseSquareFeet	10,660.00	10,659.00
tblLandUse	LotAcreage	0.43	11.50
tblLandUse	LotAcreage	0.14	3.80

tblLandUse	LotAcreage	0.00	1.10
tblLandUse	LotAcreage	0.00	0.70
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	32.93	34.66
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblVehicleTrips	WD_TR	42.70	37.72
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79

tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	63.2894	183.0230	222.9023	0.7397	51.7979	2.3090	54.1069	13.8873	2.1856	16.0729						75,557.2673
2021	60.7674	167.1197	202.7517	0.7231	51.7992	1.7076	53.5068	13.8878	1.6122	15.4999						73,935.7083
2022	59.1140	157.1664	187.5205	0.7061	51.8004	1.4920	53.2925	13.8882	1.4086	15.2968						72,273.2099
2023	56.9992	132.3845	171.9118	0.6862	51.8017	1.1889	52.9905	13.8887	1.1201	15.0087						70,303.8708
Maximum	**63.2894**	**183.0230**	**222.9023**	**0.7397**	**51.8017**	**2.3090**	**54.1069**	**13.8887**	**2.1856**	**16.0729**						**75,557.2673**

2.1 Overall Construction (Maximum Daily Emission)

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	61.6607	177.7361	223.9286	0.7397	51.7979	2.0797	53.8775	13.8873	2.0229	15.9102						75,557.2673
2021	59.3809	163.7438	204.0651	0.7231	51.7992	1.6535	53.4527	13.8878	1.6154	15.5032						73,935.7083
2022	57.9365	155.7253	189.0497	0.7061	51.8004	1.5999	53.4004	13.8882	1.5644	15.4526						72,273.2099
2023	55.9681	132.2797	173.5628	0.6862	51.8017	1.4169	53.2186	13.8887	1.3895	15.2781						70,303.8707
Maximum	**61.6607**	**177.7361**	**223.9286**	**0.7397**	**51.8017**	**2.0797**	**53.8775**	**13.8887**	**2.0229**	**15.9102**						**75,557.2673**

	ROG	NOx	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	**2.18**	**1.60**	**-0.70**	**0.00**	**0.00**	**-0.78**	**-0.02**	**0.00**	**-4.20**	**-0.43**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	71.8815	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Energy	1.0263	8.7937	3.9041	0.0560		0.7091	0.7091		0.7091	0.7091						11,262.6101
Mobile	14.5805	54.8418	152.9935	0.6185	72.5165	0.4342	72.9507	19.3453	0.4043	19.7496						62,752.0966
Total	**87.4883**	**64.8627**	**263.3618**	**0.6801**	**72.5165**	**1.7351**	**74.2516**	**19.3453**	**1.7052**	**21.0505**						**74,211.5248**

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	71.8815	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Energy	0.9363	8.0229	3.5622	0.0511		0.6469	0.6469		0.6469	0.6469						10,275.2648
Mobile	14.0464	51.7066	138.8515	0.5504	63.9596	0.3904	64.3499	17.0626	0.3634	17.4260						55,856.2582
Total	**86.8643**	**60.9566**	**248.8778**	**0.6071**	**63.9596**	**1.6291**	**65.5887**	**17.0626**	**1.6022**	**18.6647**						**66,328.3410**

	ROG	NOx	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	**0.71**	**6.02**	**5.50**	**10.73**	**11.80**	**6.11**	**11.67**	**11.80**	**6.04**	**11.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.62**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	400	
2	Site Preparation	Site Preparation	1/8/2020	2/7/2020	5	240	
3	Grading	Grading	2/8/2020	6/9/2020	5	620	
4	Building Construction	Building Construction	6/10/2020	6/9/2023	5	6200	
5	Architectural Coating	Architectural Coating	11/10/2020	6/9/2023	5	440	
6	Paving	Paving	6/10/2023	8/11/2023	5	440	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 97.6

Residential Indoor: 4,343,625; Residential Outdoor: 1,447,875; Non-Residential Indoor: 120,778; Non-Residential Outdoor: 40,259; Striped Parking Area: 255,087 (Architectural Coating – sqft)

OffRoad Equipment

Olsen-Chandler - San Luis Obispo County APCD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,813.00	1,413.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	763.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					8.6400e-003	0.0000	8.6400e-003	1.3100e-003	0.0000	1.3100e-003						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**8.6400e-003**	**1.6587**	**1.6673**	**1.3100e-003**	**1.5419**	**1.5432**						**3,774.1536**

3.2 Demolition - 2020

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	3.2000e-004	0.0118	2.5500e-003	3.0000e-005	0.0398	5.0000e-005	0.0399	9.7900e-003	5.0000e-005	9.8400e-003						3.2040
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0645**	**0.0654**	**0.5350**	**1.4200e-003**	**0.1881**	**1.0000e-003**	**0.1891**	**0.0491**	**9.3000e-004**	**0.0501**						**141.9000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3700e-003	0.0000	3.3700e-003	5.1000e-004	0.0000	5.1000e-004						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,774.1536
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**3.3700e-003**	**0.8627**	**0.8661**	**5.1000e-004**	**0.8627**	**0.8632**						**3,774.1536**

3.2 Demolition - 2020

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	3.2000e-004	0.0118	2.5500e-003	3.0000e-005	0.0398	5.0000e-005	0.0399	9.7900e-003	5.0000e-005	9.8400e-003						3.2040
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0645**	**0.0654**	**0.5350**	**1.4200e-003**	**0.1881**	**1.0000e-003**	**0.1891**	**0.0491**	**9.3000e-004**	**0.0501**						**141.9000**

3.3 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
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**						**3,714.8975**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0770	0.0642	0.6389	1.6700e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						166.4352
Total	**0.0770**	**0.0642**	**0.6389**	**1.6700e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**166.4352**

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462						3,714.8975
Total	**0.9312**	**19.0656**	**22.9600**	**0.0380**	**7.0458**	**0.9462**	**7.9920**	**3.8730**	**0.9462**	**4.8191**						**3,714.8975**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0770	0.0642	0.6389	1.6700e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						166.4352
Total	**0.0770**	**0.0642**	**0.6389**	**1.6700e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**166.4352**

3.4 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**						**6,054.4257**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0855	0.0714	0.7099	1.8600e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						184.9280
Total	**0.0855**	**0.0714**	**0.7099**	**1.8600e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**184.9280**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0620		1.2994	1.2994		1.2994	1.2994						6,054.4257
Total	**1.5231**	**29.9782**	**36.7226**	**0.0620**	**3.3826**	**1.2994**	**4.6820**	**1.4026**	**1.2994**	**2.7021**						**6,054.4257**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0855	0.0714	0.7099	1.8600e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						184.9280
Total	**0.0855**	**0.0714**	**0.7099**	**1.8600e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**184.9280**

3.5 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						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

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
Vendor	5.1241	145.8264	41.7896	0.2852	6.5589	0.7918	7.3507	1.8890	0.7574	2.6464						30,395.1059
Worker	16.3087	13.6044	135.3488	0.3538	37.6958	0.2411	37.9369	9.9977	0.2224	10.2201						35,256.5297
Total	**21.4328**	**159.4308**	**177.1385**	**0.6390**	**44.2548**	**1.0328**	**45.2876**	**11.8867**	**0.9798**	**12.8665**						**65,651.6355**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.6345
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.6345**

3.5 Building Construction - 2020

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
Vendor	5.1241	145.8264	41.7896	0.2852	6.5589	0.7918	7.3507	1.8890	0.7574	2.6464						30,395.1059
Worker	16.3087	13.6044	135.3488	0.3538	37.6958	0.2411	37.9369	9.9977	0.2224	10.2201						35,256.5297
Total	**21.4328**	**159.4308**	**177.1385**	**0.6390**	**44.2548**	**1.0328**	**45.2876**	**11.8867**	**0.9798**	**12.8665**						**65,651.6355**

3.5 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						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

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
Vendor	4.1877	133.5589	36.8532	0.2832	6.5603	0.3747	6.9349	1.8895	0.3584	2.2479						30,218.0284
Worker	15.1893	12.1671	122.9107	0.3416	37.6958	0.2334	37.9293	9.9977	0.2153	10.2130						34,052.8437
Total	**19.3770**	**145.7260**	**159.7639**	**0.6248**	**44.2561**	**0.6081**	**44.8642**	**11.8872**	**0.5737**	**12.4609**						**64,270.8721**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.7643**

3.5 Building Construction - 2021

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
Vendor	4.1877	133.5589	36.8532	0.2832	6.5603	0.3747	6.9349	1.8895	0.3584	2.2479						30,218.0284
Worker	15.1893	12.1671	122.9107	0.3416	37.6958	0.2334	37.9293	9.9977	0.2153	10.2130						34,052.8437
Total	**19.3770**	**145.7260**	**159.7639**	**0.6248**	**44.2561**	**0.6081**	**44.8642**	**11.8872**	**0.5737**	**12.4609**						**64,270.8721**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612						2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**						**2,569.6322**

3.5 Building Construction - 2022

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
Vendor	3.8721	127.0109	33.9877	0.2810	6.5615	0.3291	6.8906	1.8900	0.3147	2.2047						30,017.9840
Worker	14.2488	10.9418	112.7867	0.3293	37.6958	0.2268	37.9227	9.9977	0.2092	10.2069						32,833.5360
Total	**18.1208**	**137.9527**	**146.7743**	**0.6103**	**44.2573**	**0.5559**	**44.8132**	**11.8876**	**0.5239**	**12.4115**						**62,851.5200**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,569.6322
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,569.6322**

3.5 Building Construction - 2022

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
Vendor	3.8721	127.0109	33.9877	0.2810	6.5615	0.3291	6.8906	1.8900	0.3147	2.2047						30,017.9840
Worker	14.2488	10.9418	112.7867	0.3293	37.6958	0.2268	37.9227	9.9977	0.2092	10.2069						32,833.5360
Total	**18.1208**	**137.9527**	**146.7743**	**0.6103**	**44.2573**	**0.5559**	**44.8132**	**11.8876**	**0.5239**	**12.4115**						**62,851.5200**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**						**2,570.4061**

3.5 Building Construction - 2023

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
Vendor	2.9543	104.8910	30.0007	0.2761	6.5627	0.1531	6.7158	1.8904	0.1464	2.0368						29,528.0951
Worker	13.3733	9.8372	103.2043	0.3169	37.6958	0.2210	37.9168	9.9977	0.2037	10.2014						31,600.1547
Total	**16.3276**	**114.7282**	**133.2050**	**0.5929**	**44.2585**	**0.3741**	**44.6326**	**11.8881**	**0.3501**	**12.2381**						**61,128.2498**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,570.4061
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,570.4061**

3.5 Building Construction - 2023

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
Vendor	2.9543	104.8910	30.0007	0.2761	6.5627	0.1531	6.7158	1.8904	0.1464	2.0368						29,528.0951
Worker	13.3733	9.8372	103.2043	0.3169	37.6958	0.2210	37.9168	9.9977	0.2037	10.2014						31,600.1547
Total	**16.3276**	**114.7282**	**133.2050**	**0.5929**	**44.2585**	**0.3741**	**44.6326**	**11.8881**	**0.3501**	**12.2381**						**61,128.2498**

3.6 Architectural Coating - 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					
Archit. Coating	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109						281.9928
Total	**36.4733**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**						**281.9928**

3.6 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.2635	2.7223	27.0840	0.0708	7.5431	0.0482	7.5914	2.0006	0.0445	2.0451						7,055.0045
Total	**3.2635**	**2.7223**	**27.0840**	**0.0708**	**7.5431**	**0.0482**	**7.5914**	**2.0006**	**0.0445**	**2.0451**						**7,055.0045**

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	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9928
Total	**36.2906**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9928**

3.6 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.2635	2.7223	27.0840	0.0708	7.5431	0.0482	7.5914	2.0006	0.0445	2.0451						7,055.0045
Total	**3.2635**	**2.7223**	**27.0840**	**0.0708**	**7.5431**	**0.0482**	**7.5914**	**2.0006**	**0.0445**	**2.0451**						**7,055.0045**

3.6 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	36.2311					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						281.9309
Total	**36.4500**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**						**281.9309**

3.6 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.0395	2.4347	24.5950	0.0684	7.5431	0.0467	7.5898	2.0006	0.0431	2.0437						6,814.1410
Total	**3.0395**	**2.4347**	**24.5950**	**0.0684**	**7.5431**	**0.0467**	**7.5898**	**2.0006**	**0.0431**	**2.0437**						**6,814.1410**

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	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9309
Total	**36.2906**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9309**

3.6 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.0395	2.4347	24.5950	0.0684	7.5431	0.0467	7.5898	2.0006	0.0431	2.0437						6,814.1410
Total	**3.0395**	**2.4347**	**24.5950**	**0.0684**	**7.5431**	**0.0467**	**7.5898**	**2.0006**	**0.0431**	**2.0437**						**6,814.1410**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817						281.9062
Total	**36.4357**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**						**281.9062**

3.6 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.8513	2.1895	22.5692	0.0659	7.5431	0.0454	7.5885	2.0006	0.0419	2.0424						6,570.1516
Total	**2.8513**	**2.1895**	**22.5692**	**0.0659**	**7.5431**	**0.0454**	**7.5885**	**2.0006**	**0.0419**	**2.0424**						**6,570.1516**

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	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9062
Total	**36.2906**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9062**

3.6 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.8513	2.1895	22.5692	0.0659	7.5431	0.0454	7.5885	2.0006	0.0419	2.0424						6,570.1516
Total	**2.8513**	**2.1895**	**22.5692**	**0.0659**	**7.5431**	**0.0454**	**7.5885**	**2.0006**	**0.0419**	**2.0424**						**6,570.1516**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						281.8690
Total	**36.4228**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						**281.8690**

3.6 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.6761	1.9685	20.6517	0.0634	7.5431	0.0442	7.5873	2.0006	0.0408	2.0414						6,323.3459
Total	**2.6761**	**1.9685**	**20.6517**	**0.0634**	**7.5431**	**0.0442**	**7.5873**	**2.0006**	**0.0408**	**2.0414**						**6,323.3459**

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	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.8690
Total	**36.2906**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.8690**

3.6 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	2.6761	1.9685	20.6517	0.0634	7.5431	0.0442	7.5873	2.0006	0.0408	2.0414						6,323.3459
Total	**2.6761**	**1.9685**	**20.6517**	**0.0634**	**7.5431**	**0.0442**	**7.5873**	**2.0006**	**0.0408**	**2.0414**						**6,323.3459**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694						2,225.4336
Paving	0.5812					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**1.6139**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**						**2,225.4336**

3.7 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0526	0.0387	0.4060	1.2500e-003	0.1483	8.7000e-004	0.1492	0.0393	8.0000e-004	0.0401						124.3122
Total	**0.0526**	**0.0387**	**0.4060**	**1.2500e-003**	**0.1483**	**8.7000e-004**	**0.1492**	**0.0393**	**8.0000e-004**	**0.0401**						**124.3122**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093						2,225.4336
Paving	0.5812					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**1.1421**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**						**2,225.4336**

3.7 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0526	0.0387	0.4060	1.2500e-003	0.1483	8.7000e-004	0.1492	0.0393	8.0000e-004	0.0401						124.3122
Total	**0.0526**	**0.0387**	**0.4060**	**1.2500e-003**	**0.1483**	**8.7000e-004**	**0.1492**	**0.0393**	**8.0000e-004**	**0.0401**						**124.3122**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	14.0464	51.7066	138.8515	0.5504	63.9596	0.3904	64.3499	17.0626	0.3634	17.4260						55,856.2582
Unmitigated	14.5805	54.8418	152.9935	0.6185	72.5165	0.4342	72.9507	19.3453	0.4043	19.7496						62,752.0966

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
City Park	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Elementary School	638.55	0.00	0.00	1,174,696	1,036,082
General Office Building	0.00	0.00	0.00		
Health Club	649.88	391.31	501.19	846,726	746,813
Other Asphalt Surfaces	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Regional Shopping Center	402.10	532.68	269.06	580,080	511,630
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	10,929.80	13,110.62	11,334.51	27,634,856	24,373,943

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Elementary School	13.00	5.00	5.00	65.00	30.00	5.00	63	25	12
General Office Building	13.00	5.00	5.00	33.00	48.00	19.00	77	19	4
Health Club	13.00	5.00	5.00	16.90	64.10	19.00	52	39	9
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Racquet Club	13.00	5.00	5.00	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
City Park	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Elementary School	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
General Office Building	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Health Club	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Other Asphalt Surfaces	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Racquet Club	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Recreational Swimming Pool	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Regional Shopping Center	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Single Family Housing	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.9363	8.0229	3.5622	0.0511		0.6469	0.6469		0.6469	0.6469						10,275.2648
NaturalGas Unmitigated	1.0263	8.7937	3.9041	0.0560		0.7091	0.7091		0.7091	0.7091						11,262.6101

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	2090.73	0.0226	0.2050	0.1722	1.2300e-003		0.0156	0.0156		0.0156	0.0156						247.4294
General Office Building	25.8332	2.8000e-004	2.5300e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004						3.0573
Health Club	1355.28	0.0146	0.1329	0.1116	8.0000e-004		0.0101	0.0101		0.0101	0.0101						160.3924
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	448.46	4.8400e-003	0.0440	0.0369	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003						53.0735
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	69.2105	7.5000e-004	6.7900e-003	5.7000e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004						8.1908
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**1.0263**	**8.7937**	**3.9041**	**0.0560**		**0.7091**	**0.7091**		**0.7091**	**0.7091**						**11,262.6101**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	1.8922	0.0204	0.1855	0.1558	1.1100e-003		0.0141	0.0141		0.0141	0.0141						223.9343
General Office Building	0.0232594	2.5000e-004	2.2800e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						2.7527
Health Club	1.25402	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003						148.4086
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	0.414953	4.4700e-003	0.0407	0.0342	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003						49.1081
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	0.0622894	6.7000e-004	6.1100e-003	5.1300e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004						7.3717
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.9363**	**8.0229**	**3.5622**	**0.0511**		**0.6469**	**0.6469**		**0.6469**	**0.6469**						**10,275.2648**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	71.8815	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Unmitigated	71.8815	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181

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	19.3832					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	49.3095					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1889	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Total	**71.8815**	**1.2272**	**106.4642**	**5.6400e-003**		**0.5918**	**0.5918**		**0.5918**	**0.5918**						**196.8181**

6.2 Area by SubCategory

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	19.3832					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	49.3095					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1889	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Total	**71.8815**	**1.2272**	**106.4642**	**5.6400e-003**		**0.5918**	**0.5918**		**0.5918**	**0.5918**						**196.8181**

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

Institute Recycling and Composting Services

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

Olsen-Chandler - San Luis Obispo County APCD Air District, Winter

NOTE: Does not include residential adjustment for fleet mix or solar PV, calculated separately.

Olsen-Chandler

San Luis Obispo County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.58	1000sqft	0.01	576.00	0
Elementary School	495.00	Student	0.95	41,383.67	0
Other Asphalt Surfaces	97.60	Acre	97.60	4,251,456.00	0
City Park	45.30	Acre	45.30	1,973,268.00	0
City Park	33.80	Acre	33.80	1,472,328.00	0
Health Club	18.75	1000sqft	11.50	18,752.00	0
Racquet Club	6.21	1000sqft	3.80	6,205.00	0
Recreational Swimming Pool	0.00	1000sqft	1.10	1,789.00	0
Recreational Swimming Pool	0.00	1000sqft	0.70	1,154.00	0
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046
Regional Shopping Center	10.66	1000sqft	0.24	10,659.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Includes RPS adjustment.

Land Use - Provided by the applicant team.

Construction Phase - Based on provided phase durations. Architectural Coating, starts five months after building construction and stops at the end of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment use based on model defaults.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Const trips based on model defaults.

On-road Fugitive Dust -

Demolition - Demolition of 3,400 building square footage.

Grading - Based on model defaults.

Architectural Coating - Residential low-VOC content: 50 g/L, per mitigation requirements. Non-Residential low-VOC content: 100 g/L.

Vehicle Trips - Trip-gen rates for residential and school based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. Other uses derived from the traffic analysis prepared for this project.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -
Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	PhaseEndDate	7/13/2021	1/7/2020
tblConstructionPhase	PhaseEndDate	6/14/2022	2/7/2020
tblConstructionPhase	PhaseEndDate	10/29/2024	6/9/2020
tblConstructionPhase	PhaseEndDate	8/4/2048	6/9/2023
tblConstructionPhase	PhaseEndDate	4/12/2050	8/11/2023
tblConstructionPhase	PhaseStartDate	7/14/2021	1/8/2020
tblConstructionPhase	PhaseStartDate	6/15/2022	2/8/2020
tblConstructionPhase	PhaseStartDate	10/30/2024	6/10/2020
tblConstructionPhase	PhaseStartDate	8/5/2048	6/10/2023
tblLandUse	LandUseSquareFeet	580.00	576.00
tblLandUse	LandUseSquareFeet	18,750.00	18,752.00
tblLandUse	LandUseSquareFeet	6,210.00	6,205.00
tblLandUse	LandUseSquareFeet	0.00	1,789.00
tblLandUse	LandUseSquareFeet	0.00	1,154.00
tblLandUse	LandUseSquareFeet	10,660.00	10,659.00
tblLandUse	LotAcreage	0.43	11.50
tblLandUse	LotAcreage	0.14	3.80

tblLandUse	LotAcreage	0.00	1.10
tblLandUse	LotAcreage	0.00	0.70
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	21.35	0.00
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	17.40	0.00
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	32.93	34.66
tblVehicleTrips	WD_TR	14.03	0.00
tblVehicleTrips	WD_TR	33.82	0.00
tblVehicleTrips	WD_TR	42.70	37.72
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79

tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	66.3224	184.5031	223.7649	0.7114	51.7979	2.3338	54.1317	13.8873	2.2093	16.0966						72,662.3857
2021	63.6301	168.2127	203.2421	0.6954	51.7992	1.7296	53.5288	13.8878	1.6332	15.5210						71,099.4826
2022	61.8452	158.0078	187.7679	0.6790	51.8004	1.5127	53.3131	13.8882	1.4284	15.3166						69,497.8760
2023	59.5761	133.1616	171.2454	0.6598	51.8017	1.1968	52.9984	13.8887	1.1276	15.0163						67,595.5298
Maximum	**66.3224**	**184.5031**	**223.7649**	**0.7114**	**51.8017**	**2.3338**	**54.1317**	**13.8887**	**2.2093**	**16.0966**						**72,662.3857**

2.1 Overall Construction (Maximum Daily Emission)

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	64.6937	179.2163	224.7911	0.7114	51.7979	2.1045	53.9023	13.8873	2.0467	15.9340						72,662.3857
2021	62.2436	164.8368	204.5556	0.6954	51.7992	1.6755	53.4747	13.8878	1.6365	15.5243						71,099.4826
2022	60.6678	156.5668	189.2971	0.6790	51.8004	1.6206	53.4210	13.8882	1.5841	15.4724						69,497.8760
2023	58.5450	133.0567	172.8965	0.6598	51.8017	1.4248	53.2265	13.8887	1.3970	15.2857						67,595.5298
Maximum	**64.6937**	**179.2163**	**224.7911**	**0.7114**	**51.8017**	**2.1045**	**53.9023**	**13.8887**	**2.0467**	**15.9340**						**72,662.3857**

	ROG	NOx	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	**2.08**	**1.59**	**-0.70**	**0.00**	**0.00**	**-0.78**	**-0.02**	**0.00**	**-4.15**	**-0.43**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	71.8815	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Energy	1.0263	8.7937	3.9041	0.0560		0.7091	0.7091		0.7091	0.7091						11,262.6101
Mobile	13.8386	56.2516	154.5161	0.5938	72.5165	0.4354	72.9520	19.3453	0.4055	19.7508						60,265.0457
Total	**86.7464**	**66.2725**	**264.8844**	**0.6555**	**72.5165**	**1.7364**	**74.2529**	**19.3453**	**1.7064**	**21.0517**						**71,724.4739**

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	71.8815	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Energy	0.9363	8.0229	3.5622	0.0511		0.6469	0.6469		0.6469	0.6469						10,275.2648
Mobile	13.3073	52.9211	141.2552	0.5283	63.9596	0.3916	64.3512	17.0626	0.3647	17.4272						53,620.5128
Total	**86.1251**	**62.1711**	**251.2815**	**0.5850**	**63.9596**	**1.6304**	**65.5900**	**17.0626**	**1.6034**	**18.6660**						**64,092.5956**

	ROG	NOx	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	**0.72**	**6.19**	**5.14**	**10.75**	**11.80**	**6.10**	**11.67**	**11.80**	**6.04**	**11.33**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.64**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	400	
2	Site Preparation	Site Preparation	1/8/2020	2/7/2020	5	240	
3	Grading	Grading	2/8/2020	6/9/2020	5	620	
4	Building Construction	Building Construction	6/10/2020	6/9/2023	5	6200	
5	Architectural Coating	Architectural Coating	11/10/2020	6/9/2023	5	440	
6	Paving	Paving	6/10/2023	8/11/2023	5	440	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1550

Acres of Paving: 97.6

Residential Indoor: 4,343,625; Residential Outdoor: 1,447,875; Non-Residential Indoor: 120,778; Non-Residential Outdoor: 40,259; Striped Parking Area: 255,087 (Architectural Coating – sqft)

OffRoad Equipment

Olsen-Chandler - San Luis Obispo County APCD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	15.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	3,813.00	1,413.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	763.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					8.6400e-003	0.0000	8.6400e-003	1.3100e-003	0.0000	1.3100e-003						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**8.6400e-003**	**1.6587**	**1.6673**	**1.3100e-003**	**1.5419**	**1.5432**						**3,774.1536**

3.2 Demolition - 2020

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	3.3000e-004	0.0119	2.7100e-003	3.0000e-005	0.0398	5.0000e-005	0.0399	9.7900e-003	5.0000e-005	9.8400e-003						3.1571
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0735**	**0.0727**	**0.5207**	**1.3600e-003**	**0.1881**	**1.0000e-003**	**0.1891**	**0.0491**	**9.3000e-004**	**0.0501**						**135.3604**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3700e-003	0.0000	3.3700e-003	5.1000e-004	0.0000	5.1000e-004						0.0000
Off-Road	0.9246	18.3130	24.6739	0.0388		0.8627	0.8627		0.8627	0.8627						3,774.1536
Total	**0.9246**	**18.3130**	**24.6739**	**0.0388**	**3.3700e-003**	**0.8627**	**0.8661**	**5.1000e-004**	**0.8627**	**0.8632**						**3,774.1536**

3.2 Demolition - 2020

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	3.3000e-004	0.0119	2.7100e-003	3.0000e-005	0.0398	5.0000e-005	0.0399	9.7900e-003	5.0000e-005	9.8400e-003						3.1571
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0735**	**0.0727**	**0.5207**	**1.3600e-003**	**0.1881**	**1.0000e-003**	**0.1891**	**0.0491**	**9.3000e-004**	**0.0501**						**135.3604**

3.3 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
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216						3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**						**3,714.8975**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0878	0.0729	0.6216	1.5900e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						158.6439
Total	**0.0878**	**0.0729**	**0.6216**	**1.5900e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**158.6439**

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					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730						0.0000
Off-Road	0.9312	19.0656	22.9600	0.0380		0.9462	0.9462		0.9462	0.9462						3,714.8975
Total	**0.9312**	**19.0656**	**22.9600**	**0.0380**	**7.0458**	**0.9462**	**7.9920**	**3.8730**	**0.9462**	**4.8191**						**3,714.8975**

3.3 Site Preparation - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0878	0.0729	0.6216	1.5900e-003	0.1780	1.1400e-003	0.1791	0.0472	1.0500e-003	0.0483						158.6439
Total	**0.0878**	**0.0729**	**0.6216**	**1.5900e-003**	**0.1780**	**1.1400e-003**	**0.1791**	**0.0472**	**1.0500e-003**	**0.0483**						**158.6439**

3.4 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					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965						0.0000
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000						6,054.4257
Total	**4.4501**	**50.1975**	**31.9583**	**0.0620**	**8.6733**	**2.1739**	**10.8472**	**3.5965**	**2.0000**	**5.5965**						**6,054.4257**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0975	0.0810	0.6907	1.7700e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						176.2710
Total	**0.0975**	**0.0810**	**0.6907**	**1.7700e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**176.2710**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3826	0.0000	3.3826	1.4026	0.0000	1.4026						0.0000
Off-Road	1.5231	29.9782	36.7226	0.0620		1.2994	1.2994		1.2994	1.2994						6,054.4257
Total	**1.5231**	**29.9782**	**36.7226**	**0.0620**	**3.3826**	**1.2994**	**4.6820**	**1.4026**	**1.2994**	**2.7021**						**6,054.4257**

3.4 Grading - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0975	0.0810	0.6907	1.7700e-003	0.1977	1.2600e-003	0.1990	0.0524	1.1700e-003	0.0536						176.2710
Total	**0.0975**	**0.0810**	**0.6907**	**1.7700e-003**	**0.1977**	**1.2600e-003**	**0.1990**	**0.0524**	**1.1700e-003**	**0.0536**						**176.2710**

3.5 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						2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**						**2,568.6345**

3.5 Building Construction - 2020

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
Vendor	5.4189	145.1021	47.0554	0.2767	6.5589	0.8165	7.3755	1.8890	0.7811	2.6701						29,480.9464
Worker	18.5904	15.4413	131.6798	0.3373	37.6958	0.2411	37.9369	9.9977	0.2224	10.2201						33,606.0722
Total	**24.0092**	**160.5434**	**178.7352**	**0.6140**	**44.2548**	**1.0576**	**45.3123**	**11.8867**	**1.0035**	**12.8902**						**63,087.0186**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.6345
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.6345**

3.5 Building Construction - 2020

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
Vendor	5.4189	145.1021	47.0554	0.2767	6.5589	0.8165	7.3755	1.8890	0.7811	2.6701						29,480.9464
Worker	18.5904	15.4413	131.6798	0.3373	37.6958	0.2411	37.9369	9.9977	0.2224	10.2201						33,606.0722
Total	**24.0092**	**160.5434**	**178.7352**	**0.6140**	**44.2548**	**1.0576**	**45.3123**	**11.8867**	**1.0035**	**12.8902**						**63,087.0186**

3.5 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						2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**						**2,568.7643**

3.5 Building Construction - 2021

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
Vendor	4.4592	132.6853	41.7274	0.2747	6.5603	0.3967	6.9570	1.8895	0.3795	2.2690						29,295.1205
Worker	17.3485	13.8059	119.2579	0.3257	37.6958	0.2334	37.9293	9.9977	0.2153	10.2130						32,458.5516
Total	**21.8077**	**146.4912**	**160.9853**	**0.6003**	**44.2561**	**0.6302**	**44.8863**	**11.8872**	**0.5948**	**12.4820**						**61,753.6721**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,568.7643
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,568.7643**

3.5 Building Construction - 2021

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
Vendor	4.4592	132.6853	41.7274	0.2747	6.5603	0.3967	6.9570	1.8895	0.3795	2.2690						29,295.1205
Worker	17.3485	13.8059	119.2579	0.3257	37.6958	0.2334	37.9293	9.9977	0.2153	10.2130						32,458.5516
Total	**21.8077**	**146.4912**	**160.9853**	**0.6003**	**44.2561**	**0.6302**	**44.8863**	**11.8872**	**0.5948**	**12.4820**						**61,753.6721**

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612						2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**						**2,569.6322**

3.5 Building Construction - 2022

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
Vendor	4.1255	126.0866	38.5744	0.2724	6.5615	0.3497	6.9112	1.8900	0.3345	2.2244						29,086.9758
Worker	16.3134	12.4132	109.1709	0.3139	37.6958	0.2268	37.9227	9.9977	0.2092	10.2069						31,296.7322
Total	**20.4389**	**138.4998**	**147.7453**	**0.5863**	**44.2573**	**0.5766**	**44.8339**	**11.8876**	**0.5437**	**12.4313**						**60,383.7080**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,569.6322
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,569.6322**

3.5 Building Construction - 2022

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
Vendor	4.1255	126.0866	38.5744	0.2724	6.5615	0.3497	6.9112	1.8900	0.3345	2.2244						29,086.9758
Worker	16.3134	12.4132	109.1709	0.3139	37.6958	0.2268	37.9227	9.9977	0.2092	10.2069						31,296.7322
Total	**20.4389**	**138.4998**	**147.7453**	**0.5863**	**44.2573**	**0.5766**	**44.8339**	**11.8876**	**0.5437**	**12.4313**						**60,383.7080**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**						**2,570.4061**

3.5 Building Construction - 2023

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
Vendor	3.1524	104.0849	33.6497	0.2674	6.5627	0.1610	6.7237	1.8904	0.1539	2.0443						28,594.3384
Worker	15.3555	11.1564	99.6084	0.3021	37.6958	0.2210	37.9168	9.9977	0.2037	10.2014						30,121.4637
Total	**18.5079**	**115.2413**	**133.2582**	**0.5695**	**44.2585**	**0.3820**	**44.6405**	**11.8881**	**0.3576**	**12.2457**						**58,715.8021**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6739	14.2261	17.8738	0.0269		0.9036	0.9036		0.9036	0.9036						2,570.4061
Total	**0.6739**	**14.2261**	**17.8738**	**0.0269**		**0.9036**	**0.9036**		**0.9036**	**0.9036**						**2,570.4061**

3.5 Building Construction - 2023

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
Vendor	3.1524	104.0849	33.6497	0.2674	6.5627	0.1610	6.7237	1.8904	0.1539	2.0443						28,594.3384
Worker	15.3555	11.1564	99.6084	0.3021	37.6958	0.2210	37.9168	9.9977	0.2037	10.2014						30,121.4637
Total	**18.5079**	**115.2413**	**133.2582**	**0.5695**	**44.2585**	**0.3820**	**44.6405**	**11.8881**	**0.3576**	**12.2457**						**58,715.8021**

3.6 Architectural Coating - 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					
Archit. Coating	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2422	1.6838	1.8314	2.9700e-003		0.1109	0.1109		0.1109	0.1109						281.9928
Total	**36.4733**	**1.6838**	**1.8314**	**2.9700e-003**		**0.1109**	**0.1109**		**0.1109**	**0.1109**						**281.9928**

3.6 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.7200	3.0899	26.3498	0.0675	7.5431	0.0482	7.5914	2.0006	0.0445	2.0451						6,724.7399
Total	**3.7200**	**3.0899**	**26.3498**	**0.0675**	**7.5431**	**0.0482**	**7.5914**	**2.0006**	**0.0445**	**2.0451**						**6,724.7399**

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	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9928
Total	**36.2906**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9928**

3.6 Architectural Coating - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.7200	3.0899	26.3498	0.0675	7.5431	0.0482	7.5914	2.0006	0.0445	2.0451						6,724.7399
Total	**3.7200**	**3.0899**	**26.3498**	**0.0675**	**7.5431**	**0.0482**	**7.5914**	**2.0006**	**0.0445**	**2.0451**						**6,724.7399**

3.6 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	36.2311					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						281.9309
Total	**36.4500**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**						**281.9309**

3.6 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.4715	2.7626	23.8641	0.0652	7.5431	0.0467	7.5898	2.0006	0.0431	2.0437						6,495.1154
Total	**3.4715**	**2.7626**	**23.8641**	**0.0652**	**7.5431**	**0.0467**	**7.5898**	**2.0006**	**0.0431**	**2.0437**						**6,495.1154**

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	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9309
Total	**36.2906**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9309**

3.6 Architectural Coating - 2021

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.4715	2.7626	23.8641	0.0652	7.5431	0.0467	7.5898	2.0006	0.0431	2.0437						6,495.1154
Total	**3.4715**	**2.7626**	**23.8641**	**0.0652**	**7.5431**	**0.0467**	**7.5898**	**2.0006**	**0.0431**	**2.0437**						**6,495.1154**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817						281.9062
Total	**36.4357**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**						**281.9062**

3.6 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.2644	2.4839	21.8456	0.0628	7.5431	0.0454	7.5885	2.0006	0.0419	2.0424						6,262.6296
Total	**3.2644**	**2.4839**	**21.8456**	**0.0628**	**7.5431**	**0.0454**	**7.5885**	**2.0006**	**0.0419**	**2.0424**						**6,262.6296**

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	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.9062
Total	**36.2906**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.9062**

3.6 Architectural Coating - 2022

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.2644	2.4839	21.8456	0.0628	7.5431	0.0454	7.5885	2.0006	0.0419	2.0424						6,262.6296
Total	**3.2644**	**2.4839**	**21.8456**	**0.0628**	**7.5431**	**0.0454**	**7.5885**	**2.0006**	**0.0419**	**2.0424**						**6,262.6296**

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708						281.8690
Total	**36.4228**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**						**281.8690**

3.6 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.0727	2.2324	19.9321	0.0604	7.5431	0.0442	7.5873	2.0006	0.0408	2.0414						6,027.4526
Total	**3.0727**	**2.2324**	**19.9321**	**0.0604**	**7.5431**	**0.0442**	**7.5873**	**2.0006**	**0.0408**	**2.0414**						**6,027.4526**

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	36.2311					0.0000	0.0000		0.0000	0.0000						0.0000
Off-Road	0.0594	1.3570	1.8324	2.9700e-003		0.0951	0.0951		0.0951	0.0951						281.8690
Total	**36.2906**	**1.3570**	**1.8324**	**2.9700e-003**		**0.0951**	**0.0951**		**0.0951**	**0.0951**						**281.8690**

3.6 Architectural Coating - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	3.0727	2.2324	19.9321	0.0604	7.5431	0.0442	7.5873	2.0006	0.0408	2.0414						6,027.4526
Total	**3.0727**	**2.2324**	**19.9321**	**0.0604**	**7.5431**	**0.0442**	**7.5873**	**2.0006**	**0.0408**	**2.0414**						**6,027.4526**

3.7 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694						2,225.4336
Paving	0.5812					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**1.6139**	**10.1917**	**14.5842**	**0.0228**		**0.5102**	**0.5102**		**0.4694**	**0.4694**						**2,225.4336**

3.7 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0604	0.0439	0.3919	1.1900e-003	0.1483	8.7000e-004	0.1492	0.0393	8.0000e-004	0.0401						118.4951
Total	**0.0604**	**0.0439**	**0.3919**	**1.1900e-003**	**0.1483**	**8.7000e-004**	**0.1492**	**0.0393**	**8.0000e-004**	**0.0401**						**118.4951**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5609	11.2952	17.2957	0.0228		0.6093	0.6093		0.6093	0.6093						2,225.4336
Paving	0.5812					0.0000	0.0000		0.0000	0.0000						0.0000
Total	**1.1421**	**11.2952**	**17.2957**	**0.0228**		**0.6093**	**0.6093**		**0.6093**	**0.6093**						**2,225.4336**

3.7 Paving - 2023

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0604	0.0439	0.3919	1.1900e-003	0.1483	8.7000e-004	0.1492	0.0393	8.0000e-004	0.0401						118.4951
Total	**0.0604**	**0.0439**	**0.3919**	**1.1900e-003**	**0.1483**	**8.7000e-004**	**0.1492**	**0.0393**	**8.0000e-004**	**0.0401**						**118.4951**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	13.3073	52.9211	141.2552	0.5283	63.9596	0.3916	64.3512	17.0626	0.3647	17.4272						53,620.5128
Unmitigated	13.8386	56.2516	154.5161	0.5938	72.5165	0.4354	72.9520	19.3453	0.4055	19.7508						60,265.0457

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
City Park	0.00	0.00	0.00		
City Park	0.00	0.00	0.00		
Elementary School	638.55	0.00	0.00	1,174,696	1,036,082
General Office Building	0.00	0.00	0.00		
Health Club	649.88	391.31	501.19	846,726	746,813
Other Asphalt Surfaces	0.00	0.00	0.00		
Racquet Club	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Recreational Swimming Pool	0.00	0.00	0.00		
Regional Shopping Center	402.10	532.68	269.06	580,080	511,630
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	10,929.80	13,110.62	11,334.51	27,634,856	24,373,943

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
City Park	13.00	5.00	5.00	33.00	48.00	19.00	66	28	6
Elementary School	13.00	5.00	5.00	65.00	30.00	5.00	63	25	12
General Office Building	13.00	5.00	5.00	33.00	48.00	19.00	77	19	4
Health Club	13.00	5.00	5.00	16.90	64.10	19.00	52	39	9
Other Asphalt Surfaces	13.00	5.00	5.00	0.00	0.00	0.00	0	0	0
Racquet Club	13.00	5.00	5.00	11.50	69.50	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Recreational Swimming Pool	13.00	5.00	5.00	33.00	48.00	19.00	52	39	9
Regional Shopping Center	13.00	5.00	5.00	16.30	64.70	19.00	54	35	11
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
City Park	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Elementary School	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
General Office Building	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Health Club	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Other Asphalt Surfaces	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Racquet Club	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Recreational Swimming Pool	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Regional Shopping Center	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Single Family Housing	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.9363	8.0229	3.5622	0.0511		0.6469	0.6469		0.6469	0.6469						10,275.2648
NaturalGas Unmitigated	1.0263	8.7937	3.9041	0.0560		0.7091	0.7091		0.7091	0.7091						11,262.6101

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	2090.73	0.0226	0.2050	0.1722	1.2300e-003		0.0156	0.0156		0.0156	0.0156						247.4294
General Office Building	25.8332	2.8000e-004	2.5300e-003	2.1300e-003	2.0000e-005		1.9000e-004	1.9000e-004		1.9000e-004	1.9000e-004						3.0573
Health Club	1355.28	0.0146	0.1329	0.1116	8.0000e-004		0.0101	0.0101		0.0101	0.0101						160.3924
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	448.46	4.8400e-003	0.0440	0.0369	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003						53.0735
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	69.2105	7.5000e-004	6.7900e-003	5.7000e-003	4.0000e-005		5.2000e-004	5.2000e-004		5.2000e-004	5.2000e-004						8.1908
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**1.0263**	**8.7937**	**3.9041**	**0.0560**		**0.7091**	**0.7091**		**0.7091**	**0.7091**						**11,262.6101**

5.2 Energy by Land Use - NaturalGas

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Elementary School	1.8922	0.0204	0.1855	0.1558	1.1100e-003		0.0141	0.0141		0.0141	0.0141						223.9343
General Office Building	0.0232594	2.5000e-004	2.2800e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004						2.7527
Health Club	1.25402	0.0135	0.1229	0.1033	7.4000e-004		9.3400e-003	9.3400e-003		9.3400e-003	9.3400e-003						148.4086
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Racquet Club	0.414953	4.4700e-003	0.0407	0.0342	2.4000e-004		3.0900e-003	3.0900e-003		3.0900e-003	3.0900e-003						49.1081
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Regional Shopping Center	0.0622894	6.7000e-004	6.1100e-003	5.1300e-003	4.0000e-005		4.6000e-004	4.6000e-004		4.6000e-004	4.6000e-004						7.3717
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.9363**	**8.0229**	**3.5622**	**0.0511**		**0.6469**	**0.6469**		**0.6469**	**0.6469**						**10,275.2648**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	71.8815	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Unmitigated	71.8815	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181

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	19.3832					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	49.3095					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1889	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Total	**71.8815**	**1.2272**	**106.4642**	**5.6400e-003**		**0.5918**	**0.5918**		**0.5918**	**0.5918**						**196.8181**

6.2 Area by SubCategory

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	19.3832					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	49.3095					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1889	1.2272	106.4642	5.6400e-003		0.5918	0.5918		0.5918	0.5918						196.8181
Total	**71.8815**	**1.2272**	**106.4642**	**5.6400e-003**		**0.5918**	**0.5918**		**0.5918**	**0.5918**						**196.8181**

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

Institute Recycling and Composting Services

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 FILES FOR RESIDENTIAL FLEET MIX ADJUSTMENT

District Accepted Fleet Mix for Residential Projects

	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
2013	0.5322	0.1901	0.1671	0.0628	0.0020	0.0011	0.0097	0.0243	0.0000	0.0047	0.0032	0.0012	0.0016
2014	0.5352	0.1905	0.1673	0.0609	0.0019	0.0010	0.0095	0.0232	0.0000	0.0047	0.0030	0.0012	0.0016
2015	0.5376	0.1911	0.1676	0.0591	0.0018	0.0010	0.0096	0.0219	0.0000	0.0047	0.0029	0.0011	0.0016
2016	0.5398	0.1917	0.1674	0.0576	0.0018	0.0010	0.0094	0.0213	0.0000	0.0046	0.0028	0.0011	0.0015
2017	0.5410	0.1927	0.1671	0.0563	0.0017	0.0010	0.0093	0.0210	0.0000	0.0045	0.0028	0.0011	0.0015
2018	0.5412	0.1941	0.1669	0.0553	0.0017	0.0009	0.0092	0.0209	0.0000	0.0045	0.0027	0.0011	0.0015
2019	0.5411	0.1955	0.1669	0.0545	0.0016	0.0009	0.0091	0.0208	0.0000	0.0044	0.0026	0.0011	0.0015
2020	0.5402	0.1972	0.1668	0.0540	0.0016	0.0009	0.0091	0.0206	0.0000	0.0044	0.0026	0.0011	0.0015
2021	0.5373	0.2000	0.1671	0.0542	0.0014	0.0009	0.0090	0.0206	0.0000	0.0044	0.0026	0.0009	0.0016
2022	0.5343	0.2030	0.1673	0.0545	0.0013	0.0009	0.0086	0.0207	0.0000	0.0044	0.0025	0.0007	0.0018
2023	0.5305	0.2058	0.1673	0.0550	0.0011	0.0009	0.0085	0.0218	0.0000	0.0043	0.0025	0.0004	0.0019
2024	0.5277	0.2090	0.1675	0.0556	0.0009	0.0009	0.0080	0.0214	0.0000	0.0043	0.0025	0.0002	0.0020
2025	0.5244	0.2120	0.1677	0.0563	0.0008	0.0009	0.0076	0.0212	0.0000	0.0043	0.0025	0.0001	0.0022
2026	0.5215	0.2146	0.1681	0.0569	0.0008	0.0009	0.0075	0.0203	0.0000	0.0044	0.0025	0.0002	0.0023
2027	0.5185	0.2170	0.1684	0.0575	0.0008	0.0010	0.0074	0.0195	0.0000	0.0044	0.0025	0.0005	0.0025
2028	0.5159	0.2192	0.1686	0.0582	0.0008	0.0010	0.0074	0.0187	0.0000	0.0044	0.0025	0.0007	0.0026
2029	0.5134	0.2212	0.1688	0.0587	0.0008	0.0010	0.0074	0.0181	0.0000	0.0044	0.0025	0.0009	0.0028
2030	0.5110	0.2231	0.1690	0.0593	0.0008	0.0010	0.0074	0.0173	0.0000	0.0044	0.0025	0.0012	0.0030
2031	0.5076	0.2254	0.1693	0.0598	0.0008	0.0010	0.0074	0.0174	0.0000	0.0044	0.0026	0.0012	0.0031
2032	0.5044	0.2274	0.1696	0.0602	0.0008	0.0010	0.0075	0.0176	0.0000	0.0044	0.0026	0.0012	0.0033
2033	0.5014	0.2291	0.1700	0.0606	0.0008	0.0010	0.0075	0.0178	0.0000	0.0044	0.0027	0.0012	0.0035
2034	0.4987	0.2308	0.1703	0.0609	0.0008	0.0010	0.0076	0.0180	0.0000	0.0044	0.0027	0.0012	0.0036
2035	0.4960	0.2323	0.1707	0.0613	0.0008	0.0010	0.0076	0.0182	0.0000	0.0044	0.0027	0.0012	0.0038
2036	0.4933	0.2333	0.1709	0.0615	0.0008	0.0010	0.0077	0.0191	0.0000	0.0044	0.0029	0.0012	0.0039
2037	0.4907	0.2341	0.1710	0.0618	0.0009	0.0010	0.0078	0.0202	0.0000	0.0044	0.0030	0.0011	0.0040
2038	0.4883	0.2348	0.1712	0.0620	0.0009	0.0010	0.0078	0.0213	0.0000	0.0044	0.0031	0.0011	0.0041
2039	0.4857	0.2356	0.1714	0.0623	0.0009	0.0010	0.0079	0.0223	0.0000	0.0043	0.0032	0.0011	0.0043
2040	0.4834	0.2363	0.1716	0.0625	0.0009	0.0010	0.0079	0.0233	0.0000	0.0043	0.0033	0.0011	0.0044

NOTE: Obtained from the SJVAPCD. The recommended fleet mix was compared to SJVAPCD default fleet mixes contained in CalEEMod to derived adjustment factors, which were then applied to the default fleet mix for San Luis Obispo County. Adjusted fleet mixes were applied to proposed residential land uses only. All other land uses were based on CalEEMod default fleet mix assumptions.

RESIDENTIAL MOBILE-SOURCE EMISSIONS FLEET MIX ADJUSTMENT CALCULATION - WITHOUT MITIGATION

	DAILY MOBILE-SOURCE EMISSIONS - SUMMER WITHOUT MITIGATION										
						PM10			PM2.5		
SCENARIO/YEAR	ROG	NOX	ROG+NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
DEFAULT 2024	18.3169	76.8844	95.2013	309.7726	0.7261	65.5519	1.8489	67.4008	17.5032	1.8111	19.3143
ADJUSTED 2024	14.956	22.9351	37.8911	178.1067	0.5412	65.0065	0.479	65.4856	17.2899	0.4446	17.7345
DIFFERENCE	-3.3609	-53.9493	-57.3102	-131.666	-0.1849	-0.5454	-1.3699	-1.9152	-0.2133	-1.3665	-1.5798
DEFAULT 2030	12.8323	48.5773	61.4096	137.0068	0.5569	65.4508	0.3898	65.8406	17.4604	0.363	17.8234
ADJUSTED 2030	10.183	17.6917	27.8747	119.4822	0.4589	65.1834	0.3479	65.5313	17.3646	0.3225	17.687
DIFFERENCE	-2.6493	-30.8856	-33.5349	-17.5246	-0.098	-0.2674	-0.0419	-0.3093	-0.0958	-0.0405	-0.1364

	DAILY MOBILE-SOURCE EMISSIONS - WINTER WITHOUT MITIGATION										
						PM10			PM2.5		
SCENARIO/YEAR	ROG	NOX	ROG+NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
DEFAULT 2024	17.6081	69.7003	87.3084	312.5333	0.6998	65.5519	0.581	66.1329	17.5032	0.5431	18.0463
ADJUSTED 2024	13.9992	25.1982	39.1974	178.1828	0.5173	65.0065	0.4792	65.4857	17.2899	0.4447	17.7346
DIFFERENCE	-3.6089	-44.5021	-48.111	-134.351	-0.1825	-0.5454	-0.1018	-0.6472	-0.2133	-0.0984	-0.3117
DEFAULT 2030	12.1861	49.8578	62.0439	138.0882	0.5347	65.4508	0.3909	65.8417	17.4604	0.3641	17.8244
ADJUSTED 2030	9.4068	19.0495	28.4563	118.6142	0.4391	65.1834	0.348	65.5314	17.3646	0.3226	17.6871
DIFFERENCE	-2.7793	-30.8083	-33.5876	-19.474	-0.0956	-0.2674	-0.0429	-0.3103	-0.0958	-0.0415	-0.1373

	ANNUAL MOBILE-SOURCE EMISSIONS - WITHOUT MITIGATION											
						PM10			PM2.5			
SCENARIO/YEAR	ROG	NOX	ROG+NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT	MTCO2e
DEFAULT 2024	2.5401	10.2642	12.8043	29.2673	0.0949	9.3932	0.0852	9.4784	2.5135	0.0796	2.5931	8708.357
ADJUSTED 2024	2.0222	3.656	5.6782	25.878	0.0766	9.313	0.0704	9.3834	2.4821	0.0653	2.5474	6937.462
DIFFERENCE	-0.5179	-6.6082	-7.1261	-3.3893	-0.0183	-0.0802	-0.0148	-0.095	-0.0314	-0.0143	-0.0457	-1770.9
DEFAULT 2030	1.7623	7.3553	9.1176	20.001	0.0793	9.3783	0.0573	9.4357	2.5072	0.0534	2.5606	7299.266
ADJUSTED 2030	1.3628	2.7769	4.1397	17.2622	0.065	9.339	0.0511	9.3901	2.4931	0.0474	2.5405	5904.186
DIFFERENCE	-0.3995	-4.5784	-4.9779	-2.7388	-0.0143	-0.0393	-0.0062	-0.0456	-0.0141	-0.006	-0.0201	-1395.08

RESIDENTIAL MOBILE-SOURCE EMISSIONS FLEET MIX ADJUSTMENT CALCULATION - WITH MITIGATION

	DAILY MOBILE-SOURCE EMISSIONS - SUMMER WITH MITIGATION										
						PM10			PM2.5		
SCENARIO/YEAR	ROG	NOX	ROG+NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
DEFAULT 2024	17.6126	62.5379	80.1505	291.2123	0.6474	57.8168	1.7291	59.5459	15.4379	1.6951	17.133
ADJUSTED 2024	14.5539	29.7265	44.2804	271.6176	0.5341	57.3358	1.641	58.9768	115.2497	1.61	16.8597
DIFFERENCE	-3.0587	-32.8114	-35.8701	-19.5947	-0.1133	-0.481	-0.0881	-0.5691	99.8118	-0.0851	-0.2733
DEFAULT 2030	12.3503	45.7477	58.098	124.2427	0.4954	57.7276	0.3503	58.0779	15.4	0.3261	15.7262
ADJUSTED 2030	9.929	16.2231	26.1521	108.3549	0.4067	57.4918	0.3132	57.805	15.3155	0.2903	15.6058
DIFFERENCE	-2.4213	-29.5246	-31.9459	-15.8878	-0.0887	-0.2358	-0.0371	-0.2729	-0.0845	-0.0358	-0.1204

	DAILY MOBILE-SOURCE EMISSIONS - WINTER WITH MITIGATION										
						PM10			PM2.5		
SCENARIO/YEAR	ROG	NOX	ROG+NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT
DEFAULT 2024	16.9103	64.6939	81.6042	185.2245	0.5693	57.8168	0.5208	58.3376	15.4379	0.4867	15.9246
ADJUSTED 2024	13.6161	22.8804	36.4965	163.1621	0.4584	57.3358	0.4304	57.7661	15.2497	0.3994	15.6491
DIFFERENCE	-3.2942	-41.8135	-45.1077	-22.0624	-0.1109	-0.481	-0.0904	-0.5715	-0.1882	-0.0873	-0.2755
DEFAULT 2030	11.7066	46.8518	58.5584	126.1194	0.4756	57.7276	0.3514	58.079	15.4	0.3272	15.7272
ADJUSTED 2030	9.1635	17.4462	26.6097	108.4251	0.3892	57.4918	0.3133	57.8051	15.3155	0.2904	15.6059
DIFFERENCE	-2.5431	-29.4056	-31.9487	-17.6943	-0.0864	-0.2358	-0.0381	-0.2739	-0.0845	-0.0368	-0.1213

	ANNUAL MOBILE-SOURCE EMISSIONS - WITH MITIGATION											
						PM10			PM2.5			
SCENARIO/YEAR	ROG	NOX	ROG+NOX	CO	SO2	FUG	EXH	TOT	FUG	EXH	TOT	MTCO2e
DEFAULT 2024	2.4375	9.5285	11.966	26.736	0.0844	8.2848	0.0763	8.3611	2.2169	0.0713	2.2882	7743.172
ADJUSTED 2024	1.9652	3.3185	5.2837	23.6418	0.0679	8.214	0.0632	8.2773	2.1892	0.0587	2.2479	6147.017
DIFFERENCE	-0.4723	-6.21	-6.6823	-3.0942	-0.0165	-0.0708	-0.0131	-0.0838	-0.0277	-0.0126	-0.0403	-1596.15
DEFAULT 2030	1.6918	6.9137	8.6055	18.2301	0.0705	8.2717	0.0515	8.3232	2.2113	0.048	2.2593	6494.913
ADJUSTED 2030	1.3267	2.5429	3.8696	15.7449	0.0576	8.237	0.046	8.283	2.1989	0.0427	2.2416	5232.392
DIFFERENCE	-0.3651	-4.3708	-4.7359	-2.4852	-0.0129	-0.0347	-0.0055	-0.0402	-0.0124	-0.0053	-0.0177	-1262.52

ELECTRICITY ADJUSTMENT FOR RESIDENTIAL SOLAR PV

ANNUAL WITHOUT SOLAR MTCO2e		
	WITHOUT MITIGATION	WITH MITIGATION
DEFAULT 2024	1755.408	1656.014
DEFAULT 2030	1305.336	1230.523
ADJUSTED 2024	877.704	828.007
DIFFERENCE	-877.704	-828.007
ADJUSTED 2030	652.668	615.2615
DIFFERENCE	-652.668	-1845.7845

NOTE: Assumes a minimum 50% reduction in electricity use/emissions (CEC 2019).

Olsen-Chandler (Residential Fleet Mix-Without Adjustment)

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	8.2800e-003	0.0830	0.0544	1.0000e-004	0.0000	4.1500e-003	4.1500e-003	0.0000	3.8500e-003	3.8500e-003						8.5596
Maximum	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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	8.2800e-003	0.0830	0.0544	1.0000e-004	0.0000	4.1500e-003	4.1500e-003	0.0000	3.8500e-003	3.8500e-003						8.5596
Maximum	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

	ROG	**NOx**	**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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2020**	**3-31-2020**	0.0913	0.0913
		Highest	0.0913	0.0913

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	12.2618	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Energy	0.1795	1.5335	0.6525	9.7900e-003		0.1240	0.1240		0.1240	0.1240						3,743.8921
Mobile	2.5401	10.2642	29.2673	0.0949	9.3932	0.0852	9.4784	2.5135	0.0796	2.5931						8,708.3569
Waste						0.0000	0.0000		0.0000	0.0000						680.7979
Water						0.0000	0.0000		0.0000	0.0000						199.3388
Total	**14.9813**	**12.0004**	**47.5136**	**0.1056**	**9.3932**	**0.3066**	**9.6998**	**2.5135**	**0.3011**	**2.8146**						**13,361.8267**

2.2 Overall Operational

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	12.2618	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Energy	0.1637	1.3989	0.5953	8.9300e-003		0.1131	0.1131		0.1131	0.1131						3,474.9577
Mobile	2.4375	9.5285	26.7360	0.0844	8.2848	0.0763	8.3611	2.2169	0.0713	2.2882						7,743.1719
Waste						0.0000	0.0000		0.0000	0.0000						285.9351
Water						0.0000	0.0000		0.0000	0.0000						164.7350
Total	**14.8630**	**11.1302**	**44.9252**	**0.0942**	**8.2848**	**0.2869**	**8.5717**	**2.2169**	**0.2819**	**2.4988**						**11,698.2406**

	ROG	NOx	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	**0.79**	**7.25**	**5.45**	**10.78**	**11.80**	**6.43**	**11.63**	**11.80**	**6.36**	**11.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**12.45**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	0.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

3.2 Demolition - 2020

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	2.4375	9.5285	26.7360	0.0844	8.2848	0.0763	8.3611	2.2169	0.0713	2.2882						7,743.1719
Unmitigated	2.5401	10.2642	29.2673	0.0949	9.3932	0.0852	9.4784	2.5135	0.0796	2.5931						8,708.3569

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Single Family Housing	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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						1,845.2245
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						1,957.4093
NaturalGas Mitigated	0.1637	1.3989	0.5953	8.9300e-003		0.1131	0.1131		0.1131	0.1131						1,629.7332
NaturalGas Unmitigated	0.1795	1.5335	0.6525	9.7900e-003		0.1240	0.1240		0.1240	0.1240						1,786.4828

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					
Apartments Low Rise	2.32534e+006	0.0125	0.1072	0.0456	6.8000e-004		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003						124.8263
Single Family Housing	3.09543e+007	0.1669	1.4263	0.6070	9.1000e-003		0.1153	0.1153		0.1153	0.1153						1,661.6565
Total		**0.1795**	**1.5335**	**0.6525**	**9.7800e-003**		**0.1240**	**0.1240**		**0.1240**	**0.1240**						**1,786.4828**

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					
Apartments Low Rise	2.16474e+006	0.0117	0.0998	0.0425	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003						116.2051
Single Family Housing	2.81949e+007	0.1520	1.2992	0.5528	8.2900e-003		0.1050	0.1050		0.1050	0.1050						1,513.5281
Total		**0.1637**	**1.3989**	**0.5953**	**8.9300e-003**		**0.1131**	**0.1131**		**0.1131**	**0.1131**						**1,629.7332**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	991526				202.0011
Single Family Housing	8.61646e+006				1,755.4083
Total					**1,957.4093**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	928743				189.2104
Single Family Housing	8.12858e+006				1,656.0142
Total					**1,845.2245**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	12.2618	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Unmitigated	12.2618	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410

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	3.3555					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.3773					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5290	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Total	**12.2618**	**0.2027**	**17.5938**	**9.3000e-004**		**0.0975**	**0.0975**		**0.0975**	**0.0975**						**29.4410**

6.2 Area by SubCategory

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	3.3555					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.3773					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5290	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Total	**12.2618**	**0.2027**	**17.5938**	**9.3000e-004**		**0.0975**	**0.0975**		**0.0975**	**0.0975**						**29.4410**

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				164.7350
Unmitigated				199.3388

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	14.8551 / 9.36518				35.1502
Single Family Housing	69.389 / 43.7453				164.1886
Total					**199.3388**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.8841 / 8.79391				29.0484
Single Family Housing	55.5112 / 41.0768				135.6866
Total					**164.7350**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				285.9351
Unmitigated				680.7979

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	104.88				52.7443
Single Family Housing	1248.86				628.0536
Total					**680.7979**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	44.0496				22.1526
Single Family Housing	524.521				263.7825
Total					**285.9351**

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

Olsen-Chandler (Residential Fleet Mix-Without Adjustment)

San Luis Obispo County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	3.3121	33.2010	21.7532	0.0388	0.0000	1.6587	1.6587	0.0000	1.5419	1.5419						3,774.1536
Maximum	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

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	3.3121	33.2010	21.7532	0.0388	0.0000	1.6587	1.6587	0.0000	1.5419	1.5419						3,774.1536
Maximum	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

	ROG	**NOx**	**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**

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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Energy	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667
Mobile	18.3169	67.2533	199.5678	0.6668	65.5519	0.5786	66.1304	17.5032	0.5407	18.0440						67,423.0787
Total	**86.7953**	**76.8844**	**309.7726**	**0.7261**	**65.5519**	**1.8489**	**67.4008**	**17.5032**	**1.8111**	**19.3143**						**78,410.2310**

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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Energy	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
Mobile	17.6126	62.5379	181.3212	0.5928	57.8168	0.5184	58.3351	15.4379	0.4844	15.9222						59,950.8982
Total	**86.0048**	**71.4318**	**291.2123**	**0.6474**	**57.8168**	**1.7291**	**59.5459**	**15.4379**	**1.6951**	**17.1330**						**69,991.2732**

	ROG	NOx	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	**0.91**	**7.09**	**5.99**	**10.84**	**11.80**	**6.48**	**11.65**	**11.80**	**6.40**	**11.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.74**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	0.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	17.6126	62.5379	181.3212	0.5928	57.8168	0.5184	58.3351	15.4379	0.4844	15.9222						59,950.8982
Unmitigated	18.3169	67.2533	199.5678	0.6668	65.5519	0.5786	66.1304	17.5032	0.5407	18.0440						67,423.0787

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Single Family Housing	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
NaturalGas Unmitigated	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**0.9833**	**8.4026**	**3.5756**	**0.0536**		**0.6794**	**0.6794**		**0.6794**	**0.6794**						**10,790.4667**

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.8970**	**7.6653**	**3.2619**	**0.0489**		**0.6198**	**0.6198**		**0.6198**	**0.6198**						**9,843.6894**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Unmitigated	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2061	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Total	**67.4951**	**1.2286**	**106.6293**	**5.6300e-003**		**0.5910**	**0.5910**		**0.5910**	**0.5910**						**196.6856**

6.2 Area by SubCategory

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2061	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Total	**67.4951**	**1.2286**	**106.6293**	**5.6300e-003**		**0.5910**	**0.5910**		**0.5910**	**0.5910**						**196.6856**

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

Institute Recycling and Composting Services

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

Olsen-Chandler (Residential Fleet Mix-Without Adjustment)

San Luis Obispo County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	3.3121	33.2010	21.7532	0.0388	0.0000	1.6587	1.6587	0.0000	1.5419	1.5419						3,774.1536
Maximum	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

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	3.3121	33.2010	21.7532	0.0388	0.0000	1.6587	1.6587	0.0000	1.5419	1.5419						3,774.1536
Maximum	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

	ROG	**NOx**	**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**

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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Energy	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667
Mobile	17.6081	69.7003	202.3284	0.6405	65.5519	0.5810	66.1329	17.5032	0.5431	18.0463						64,763.5281
Total	**86.0865**	**79.3315**	**312.5333**	**0.6998**	**65.5519**	**1.8514**	**67.4033**	**17.5032**	**1.8134**	**19.3167**						**75,750.6803**

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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Energy	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
Mobile	16.9103	64.6939	185.2245	0.5693	57.8168	0.5208	58.3376	15.4379	0.4867	15.9246						57,568.0319
Total	**85.3024**	**73.5878**	**295.1157**	**0.6239**	**57.8168**	**1.7316**	**59.5483**	**15.4379**	**1.6975**	**17.1353**						**67,608.4069**

	ROG	NOx	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	**0.91**	**7.24**	**5.57**	**10.85**	**11.80**	**6.47**	**11.65**	**11.80**	**6.40**	**11.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.75**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	0.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	16.9103	64.6939	185.2245	0.5693	57.8168	0.5208	58.3376	15.4379	0.4867	15.9246						57,568.0319
Unmitigated	17.6081	69.7003	202.3284	0.6405	65.5519	0.5810	66.1329	17.5032	0.5431	18.0463						64,763.5281

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192
Single Family Housing	0.588806	0.027737	0.198305	0.114471	0.022249	0.005748	0.012759	0.019721	0.002316	0.001163	0.004776	0.000758	0.001192

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
NaturalGas Unmitigated	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**0.9833**	**8.4026**	**3.5756**	**0.0536**		**0.6794**	**0.6794**		**0.6794**	**0.6794**						**10,790.4667**

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.8970**	**7.6653**	**3.2619**	**0.0489**		**0.6198**	**0.6198**		**0.6198**	**0.6198**						**9,843.6894**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Unmitigated	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2061	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Total	**67.4951**	**1.2286**	**106.6293**	**5.6300e-003**		**0.5910**	**0.5910**		**0.5910**	**0.5910**						**196.6856**

6.2 Area by SubCategory

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2061	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Total	**67.4951**	**1.2286**	**106.6293**	**5.6300e-003**		**0.5910**	**0.5910**		**0.5910**	**0.5910**						**196.6856**

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

Institute Recycling and Composting Services

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

Olsen-Chandler (Residential Fleet Mix-Without Adjustment)

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56

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	8.4400e-003	0.0832	0.0557	1.0000e-004	3.6000e-004	4.1500e-003	4.5100e-003	1.0000e-004	3.8600e-003	3.9500e-003						8.8619
Maximum	**8.4400e-003**	**0.0832**	**0.0557**	**1.0000e-004**	**3.6000e-004**	**4.1500e-003**	**4.5100e-003**	**1.0000e-004**	**3.8600e-003**	**3.9500e-003**						**8.8619**

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	8.4400e-003	0.0832	0.0557	1.0000e-004	3.6000e-004	4.1500e-003	4.5100e-003	1.0000e-004	3.8600e-003	3.9500e-003						8.8619
Maximum	**8.4400e-003**	**0.0832**	**0.0557**	**1.0000e-004**	**3.6000e-004**	**4.1500e-003**	**4.5100e-003**	**1.0000e-004**	**3.8600e-003**	**3.9500e-003**						**8.8619**

	ROG	**NOx**	**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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2020**	**3-31-2020**	0.0916	0.0916
		Highest	0.0916	0.0916

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	12.2578	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Energy	0.1795	1.5335	0.6525	9.7900e-003		0.1240	0.1240		0.1240	0.1240						3,091.8189
Mobile	1.7623	7.3553	20.0010	0.0793	9.3783	0.0573	9.4357	2.5072	0.0534	2.5606						7,299.2658
Waste						0.0000	0.0000		0.0000	0.0000						680.7979
Water						0.0000	0.0000		0.0000	0.0000						201.8553
Total	**14.1995**	**9.0912**	**38.2083**	**0.0900**	**9.3783**	**0.2789**	**9.6573**	**2.5072**	**0.2750**	**2.7822**						**11,303.1740**

2.2 Overall Operational

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	12.2578	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Energy	0.1637	1.3989	0.5953	8.9300e-003		0.1131	0.1131		0.1131	0.1131						2,860.2567
Mobile	1.6918	6.9137	18.2301	0.0705	8.2717	0.0515	8.3232	2.2113	0.0480	2.2593						6,494.9126
Waste						0.0000	0.0000		0.0000	0.0000						285.9351
Water						0.0000	0.0000		0.0000	0.0000						164.9946
Total	**14.1133**	**8.5149**	**36.3801**	**0.0804**	**8.2717**	**0.2622**	**8.5339**	**2.2113**	**0.2587**	**2.4700**						**9,835.5352**

	ROG	NOx	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	**0.61**	**6.34**	**4.78**	**10.68**	**11.80**	**5.98**	**11.63**	**11.80**	**5.93**	**11.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**12.98**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.6000e-004	1.5000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004						0.3023
Total	**1.6000e-004**	**1.5000e-004**	**1.2900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**						**0.3023**

3.2 Demolition - 2020

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.6000e-004	1.5000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004						0.3023
Total	**1.6000e-004**	**1.5000e-004**	**1.2900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**						**0.3023**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.6918	6.9137	18.2301	0.0705	8.2717	0.0515	8.3232	2.2113	0.0480	2.2593						6,494.9126
Unmitigated	1.7623	7.3553	20.0010	0.0793	9.3783	0.0573	9.4357	2.5072	0.0534	2.5606						7,299.2658

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Single Family Housing	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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						1,230.5236
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						1,305.3362
NaturalGas Mitigated	0.1637	1.3989	0.5953	8.9300e-003		0.1131	0.1131		0.1131	0.1131						1,629.7332
NaturalGas Unmitigated	0.1795	1.5335	0.6525	9.7900e-003		0.1240	0.1240		0.1240	0.1240						1,786.4828

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					
Apartments Low Rise	2.32534e+006	0.0125	0.1072	0.0456	6.8000e-004		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003						124.8263
Single Family Housing	3.09543e+007	0.1669	1.4263	0.6070	9.1000e-003		0.1153	0.1153		0.1153	0.1153						1,661.6565
Total		**0.1795**	**1.5335**	**0.6525**	**9.7800e-003**		**0.1240**	**0.1240**		**0.1240**	**0.1240**						**1,786.4828**

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					
Apartments Low Rise	2.16474e+006	0.0117	0.0998	0.0425	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003						116.2051
Single Family Housing	2.81949e+007	0.1520	1.2992	0.5528	8.2900e-003		0.1050	0.1050		0.1050	0.1050						1,513.5281
Total		**0.1637**	**1.3989**	**0.5953**	**8.9300e-003**		**0.1131**	**0.1131**		**0.1131**	**0.1131**						**1,629.7332**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	991526				134.7083
Single Family Housing	8.61646e+006				1,170.6278
Total					**1,305.3361**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	928743				126.1786
Single Family Housing	8.12858e+006				1,104.3450
Total					**1,230.5236**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	12.2578	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Unmitigated	12.2578	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361

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	3.3555					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.3773					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5251	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Total	**12.2578**	**0.2024**	**17.5547**	**9.3000e-004**		**0.0976**	**0.0976**		**0.0976**	**0.0976**						**29.4361**

6.2 Area by SubCategory

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	3.3555					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.3773					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5251	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Total	**12.2578**	**0.2024**	**17.5547**	**9.3000e-004**		**0.0976**	**0.0976**		**0.0976**	**0.0976**						**29.4361**

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				164.9946
Unmitigated				201.8553

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	14.8551 / 9.36518				35.5940
Single Family Housing	69.389 / 43.7453				166.2613
Total					**201.8552**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.8841 / 8.79391				29.0942
Single Family Housing	55.5112 / 41.0768				135.9004
Total					**164.9946**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				285.9351
Unmitigated				680.7979

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	104.88				52.7443
Single Family Housing	1248.86				628.0536
Total					**680.7979**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	44.0496				22.1526
Single Family Housing	524.521				263.7825
Total					**285.9351**

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

Olsen-Chandler (Residential Fleet Mix-Without Adjustment)

San Luis Obispo County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56

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	3.3763	33.2545	22.2857	0.0402	0.1483	1.6597	1.8079	0.0393	1.5427	1.5821						3,912.8496
Maximum	**3.3763**	**33.2545**	**22.2857**	**0.0402**	**0.1483**	**1.6597**	**1.8079**	**0.0393**	**1.5427**	**1.5821**						**3,912.8496**

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	3.3763	33.2545	22.2857	0.0402	0.1483	1.6597	1.8079	0.0393	1.5427	1.5821						3,912.8496
Maximum	**3.3763**	**33.2545**	**22.2857**	**0.0402**	**0.1483**	**1.6597**	**1.8079**	**0.0393**	**1.5427**	**1.5821**						**3,912.8496**

	ROG	**NOx**	**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**

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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Energy	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667
Mobile	12.8323	48.5773	137.0068	0.5569	65.4508	0.3898	65.8406	17.4604	0.3630	17.8234						56,497.2952
Total	**81.2869**	**58.2064**	**246.9746**	**0.6161**	**65.4508**	**1.6607**	**67.1115**	**17.4604**	**1.6340**	**19.0943**						**67,484.4151**

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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Energy	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
Mobile	12.3503	45.7477	124.2427	0.4954	57.7276	0.3503	58.0779	15.4000	0.3261	15.7262						50,273.3615
Total	**80.7186**	**54.6395**	**233.8968**	**0.5500**	**57.7276**	**1.5616**	**59.2892**	**15.4000**	**1.5375**	**16.9375**						**60,313.7041**

	ROG	NOx	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	**0.70**	**6.13**	**5.30**	**10.74**	**11.80**	**5.97**	**11.66**	**11.80**	**5.91**	**11.30**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.63**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0642**	**0.0535**	**0.5325**	**1.3900e-003**	**0.1483**	**9.5000e-004**	**0.1492**	**0.0393**	**8.8000e-004**	**0.0402**						**138.6960**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0642**	**0.0535**	**0.5325**	**1.3900e-003**	**0.1483**	**9.5000e-004**	**0.1492**	**0.0393**	**8.8000e-004**	**0.0402**						**138.6960**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	12.3503	45.7477	124.2427	0.4954	57.7276	0.3503	58.0779	15.4000	0.3261	15.7262						50,273.3615
Unmitigated	12.8323	48.5773	137.0068	0.5569	65.4508	0.3898	65.8406	17.4604	0.3630	17.8234						56,497.2952

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Single Family Housing	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
NaturalGas Unmitigated	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**0.9833**	**8.4026**	**3.5756**	**0.0536**		**0.6794**	**0.6794**		**0.6794**	**0.6794**						**10,790.4667**

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.8970**	**7.6653**	**3.2619**	**0.0489**		**0.6198**	**0.6198**		**0.6198**	**0.6198**						**9,843.6894**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Unmitigated	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1823	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Total	**67.4713**	**1.2265**	**106.3922**	**5.6300e-003**		**0.5916**	**0.5916**		**0.5916**	**0.5916**						**196.6532**

6.2 Area by SubCategory

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1823	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Total	**67.4713**	**1.2265**	**106.3922**	**5.6300e-003**		**0.5916**	**0.5916**		**0.5916**	**0.5916**						**196.6532**

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

Institute Recycling and Composting Services

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

Olsen-Chandler (Residential Fleet Mix-Without Adjustment)

San Luis Obispo County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56

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	3.3853	33.2618	22.2712	0.0401	0.1483	1.6597	1.8079	0.0393	1.5427	1.5821						3,906.3569
Maximum	**3.3853**	**33.2618**	**22.2712**	**0.0401**	**0.1483**	**1.6597**	**1.8079**	**0.0393**	**1.5427**	**1.5821**						**3,906.3569**

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	3.3853	33.2618	22.2712	0.0401	0.1483	1.6597	1.8079	0.0393	1.5427	1.5821						3,906.3569
Maximum	**3.3853**	**33.2618**	**22.2712**	**0.0401**	**0.1483**	**1.6597**	**1.8079**	**0.0393**	**1.5427**	**1.5821**						**3,906.3569**

	ROG	**NOx**	**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**

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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Energy	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667
Mobile	12.1861	49.8578	138.0882	0.5347	65.4508	0.3909	65.8417	17.4604	0.3641	17.8244						54,264.2122
Total	**80.6407**	**59.4869**	**248.0560**	**0.5940**	**65.4508**	**1.6619**	**67.1126**	**17.4604**	**1.6350**	**19.0954**						**65,251.3321**

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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Energy	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
Mobile	11.7066	46.8518	126.1194	0.4756	57.7276	0.3514	58.0790	15.4000	0.3272	15.7272						48,267.0978
Total	**80.0749**	**55.7436**	**235.7735**	**0.5301**	**57.7276**	**1.5627**	**59.2903**	**15.4000**	**1.5385**	**16.9386**						**58,307.4404**

	ROG	NOx	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	**0.70**	**6.29**	**4.95**	**10.75**	**11.80**	**5.97**	**11.66**	**11.80**	**5.90**	**11.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.64**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0731**	**0.0607**	**0.5180**	**1.3300e-003**	**0.1483**	**9.5000e-004**	**0.1492**	**0.0393**	**8.8000e-004**	**0.0402**						**132.2033**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0731**	**0.0607**	**0.5180**	**1.3300e-003**	**0.1483**	**9.5000e-004**	**0.1492**	**0.0393**	**8.8000e-004**	**0.0402**						**132.2033**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	11.7066	46.8518	126.1194	0.4756	57.7276	0.3514	58.0790	15.4000	0.3272	15.7272						48,267.0978
Unmitigated	12.1861	49.8578	138.0882	0.5347	65.4508	0.3909	65.8417	17.4604	0.3641	17.8244						54,264.2122

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759
Single Family Housing	0.610645	0.025081	0.199254	0.104456	0.014638	0.004440	0.012550	0.019914	0.002247	0.001059	0.004248	0.000708	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
NaturalGas Unmitigated	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**0.9833**	**8.4026**	**3.5756**	**0.0536**		**0.6794**	**0.6794**		**0.6794**	**0.6794**						**10,790.4667**

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.8970**	**7.6653**	**3.2619**	**0.0489**		**0.6198**	**0.6198**		**0.6198**	**0.6198**						**9,843.6894**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Unmitigated	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1823	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Total	**67.4713**	**1.2265**	**106.3922**	**5.6300e-003**		**0.5916**	**0.5916**		**0.5916**	**0.5916**						**196.6532**

6.2 Area by SubCategory

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1823	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Total	**67.4713**	**1.2265**	**106.3922**	**5.6300e-003**		**0.5916**	**0.5916**		**0.5916**	**0.5916**						**196.6532**

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

Institute Recycling and Composting Services

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

Olsen-Chandler (Residential Fleet Mix-With Adjustment)

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Olsen-Chandler (Residential Fleet Mix-With Adjustment) - San Luis Obispo County APCD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	1.0000e-003
tblFleetMix	HHD	0.02	1.0000e-003
tblFleetMix	LDA	0.59	0.61
tblFleetMix	LDA	0.59	0.61
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LHD1	0.02	1.0000e-004
tblFleetMix	LHD1	0.02	1.0000e-004
tblFleetMix	LHD2	5.7480e-003	1.0000e-004
tblFleetMix	LHD2	5.7480e-003	1.0000e-004
tblFleetMix	MCY	4.7760e-003	1.0000e-003
tblFleetMix	MCY	4.7760e-003	1.0000e-003
tblFleetMix	MDV	0.11	0.04
tblFleetMix	MDV	0.11	0.04
tblFleetMix	MH	1.1920e-003	3.6000e-003
tblFleetMix	MH	1.1920e-003	3.6000e-003
tblFleetMix	MHD	0.01	1.0000e-004
tblFleetMix	MHD	0.01	1.0000e-004
tblFleetMix	OBUS	2.3160e-003	1.0000e-004
tblFleetMix	OBUS	2.3160e-003	1.0000e-004
tblFleetMix	SBUS	7.5800e-004	1.0000e-004
tblFleetMix	SBUS	7.5800e-004	1.0000e-004
tblFleetMix	UBUS	1.1630e-003	2.9000e-003

tblFleetMix	UBUS	1.1630e-003	2.9000e-003
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	8.2800e-003	0.0830	0.0544	1.0000e-004	0.0000	4.1500e-003	4.1500e-003	0.0000	3.8500e-003	3.8500e-003						8.5596
Maximum	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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	8.2800e-003	0.0830	0.0544	1.0000e-004	0.0000	4.1500e-003	4.1500e-003	0.0000	3.8500e-003	3.8500e-003						8.5596
Maximum	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

	ROG	**NOx**	**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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2020**	**3-31-2020**	0.0913	0.0913
		Highest	0.0913	0.0913

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	12.2618	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Energy	0.1795	1.5335	0.6525	9.7900e-003		0.1240	0.1240		0.1240	0.1240						3,743.8921
Mobile	2.0222	3.6560	25.8780	0.0766	9.3130	0.0704	9.3834	2.4821	0.0653	2.5474						6,937.4618
Waste						0.0000	0.0000		0.0000	0.0000						680.7979
Water						0.0000	0.0000		0.0000	0.0000						199.3388
Total	**14.4634**	**5.3922**	**44.1244**	**0.0873**	**9.3130**	**0.2919**	**9.6049**	**2.4821**	**0.2868**	**2.7689**						**11,590.9316**

2.2 Overall Operational

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	12.2618	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Energy	0.1637	1.3989	0.5953	8.9300e-003		0.1131	0.1131		0.1131	0.1131						3,474.9577
Mobile	1.9652	3.3185	23.6418	0.0679	8.2140	0.0632	8.2773	2.1892	0.0587	2.2479						6,147.0170
Waste						0.0000	0.0000		0.0000	0.0000						285.9351
Water						0.0000	0.0000		0.0000	0.0000						164.7350
Total	**14.3907**	**4.9201**	**41.8309**	**0.0777**	**8.2140**	**0.2738**	**8.4879**	**2.1892**	**0.2693**	**2.4585**						**10,102.0858**

	ROG	NOx	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	**0.50**	**8.75**	**5.20**	**10.96**	**11.80**	**6.18**	**11.63**	**11.80**	**6.12**	**11.21**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**12.84**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	0.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

3.2 Demolition - 2020

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9652	3.3185	23.6418	0.0679	8.2140	0.0632	8.2773	2.1892	0.0587	2.2479						6,147.0170
Unmitigated	2.0222	3.6560	25.8780	0.0766	9.3130	0.0704	9.3834	2.4821	0.0653	2.5474						6,937.4618

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.611000	0.150000	0.190000	0.040000	0.000100	0.000100	0.000100	0.001000	0.000100	0.002900	0.001000	0.000100	0.003600
Single Family Housing	0.611000	0.150000	0.190000	0.040000	0.000100	0.000100	0.000100	0.001000	0.000100	0.002900	0.001000	0.000100	0.003600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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						1,845.2245
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						1,957.4093
NaturalGas Mitigated	0.1637	1.3989	0.5953	8.9300e-003		0.1131	0.1131		0.1131	0.1131						1,629.7332
NaturalGas Unmitigated	0.1795	1.5335	0.6525	9.7900e-003		0.1240	0.1240		0.1240	0.1240						1,786.4828

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					
Apartments Low Rise	2.32534e+006	0.0125	0.1072	0.0456	6.8000e-004		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003						124.8263
Single Family Housing	3.09543e+007	0.1669	1.4263	0.6070	9.1000e-003		0.1153	0.1153		0.1153	0.1153						1,661.6565
Total		**0.1795**	**1.5335**	**0.6525**	**9.7800e-003**		**0.1240**	**0.1240**		**0.1240**	**0.1240**						**1,786.4828**

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					
Apartments Low Rise	2.16474e+006	0.0117	0.0998	0.0425	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003						116.2051
Single Family Housing	2.81949e+007	0.1520	1.2992	0.5528	8.2900e-003		0.1050	0.1050		0.1050	0.1050						1,513.5281
Total		**0.1637**	**1.3989**	**0.5953**	**8.9300e-003**		**0.1131**	**0.1131**		**0.1131**	**0.1131**						**1,629.7332**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	991526				202.0011
Single Family Housing	8.61646e+006				1,755.4083
Total					**1,957.4093**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	928743				189.2104
Single Family Housing	8.12858e+006				1,656.0142
Total					**1,845.2245**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	12.2618	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Unmitigated	12.2618	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410

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	3.3555					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.3773					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5290	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Total	**12.2618**	**0.2027**	**17.5938**	**9.3000e-004**		**0.0975**	**0.0975**		**0.0975**	**0.0975**						**29.4410**

6.2 Area by SubCategory

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	3.3555					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.3773					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5290	0.2027	17.5938	9.3000e-004		0.0975	0.0975		0.0975	0.0975						29.4410
Total	**12.2618**	**0.2027**	**17.5938**	**9.3000e-004**		**0.0975**	**0.0975**		**0.0975**	**0.0975**						**29.4410**

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				164.7350
Unmitigated				199.3388

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	14.8551 / 9.36518				35.1502
Single Family Housing	69.389 / 43.7453				164.1886
Total					**199.3388**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.8841 / 8.79391				29.0484
Single Family Housing	55.5112 / 41.0768				135.6866
Total					**164.7350**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				285.9351
Unmitigated				680.7979

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	104.88				52.7443
Single Family Housing	1248.86				628.0536
Total					**680.7979**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	44.0496				22.1526
Single Family Housing	524.521				263.7825
Total					**285.9351**

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

Olsen-Chandler (Residential Fleet Mix-With Adjustment)

San Luis Obispo County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Olsen-Chandler (Residential Fleet Mix-With Adjustment) - San Luis Obispo County APCD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	1.0000e-003
tblFleetMix	HHD	0.02	1.0000e-003
tblFleetMix	LDA	0.59	0.61
tblFleetMix	LDA	0.59	0.61
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LHD1	0.02	1.0000e-004
tblFleetMix	LHD1	0.02	1.0000e-004
tblFleetMix	LHD2	5.7480e-003	1.0000e-004
tblFleetMix	LHD2	5.7480e-003	1.0000e-004
tblFleetMix	MCY	4.7760e-003	1.0000e-003
tblFleetMix	MCY	4.7760e-003	1.0000e-003
tblFleetMix	MDV	0.11	0.04
tblFleetMix	MDV	0.11	0.04
tblFleetMix	MH	1.1920e-003	3.6000e-003
tblFleetMix	MH	1.1920e-003	3.6000e-003
tblFleetMix	MHD	0.01	1.0000e-004
tblFleetMix	MHD	0.01	1.0000e-004
tblFleetMix	OBUS	2.3160e-003	1.0000e-004
tblFleetMix	OBUS	2.3160e-003	1.0000e-004
tblFleetMix	SBUS	7.5800e-004	1.0000e-004
tblFleetMix	SBUS	7.5800e-004	1.0000e-004
tblFleetMix	UBUS	1.1630e-003	2.9000e-003

tblFleetMix	UBUS	1.1630e-003	2.9000e-003
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	3.3121	33.2010	21.7532	0.0388	0.0000	1.6587	1.6587	0.0000	1.5419	1.5419						3,774.1536
Maximum	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

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	3.3121	33.2010	21.7532	0.0388	0.0000	1.6587	1.6587	0.0000	1.5419	1.5419						3,774.1536
Maximum	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

	ROG	**NOx**	**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**

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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Energy	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667
Mobile	14.9560	22.9351	178.1067	0.5412	65.0065	0.4790	65.4856	17.2899	0.4446	17.7345						54,039.4668
Total	**83.4344**	**32.5663**	**288.3116**	**0.6004**	**65.0065**	**1.7494**	**66.7559**	**17.2899**	**1.7150**	**19.0048**						**65,026.6191**

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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Energy	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
Mobile	14.5539	20.8326	161.7264	0.4795	57.3358	0.4302	57.7660	15.2497	0.3993	15.6489						47,874.9023
Total	**82.9461**	**29.7265**	**271.6176**	**0.5341**	**57.3358**	**1.6410**	**58.9768**	**15.2497**	**1.6100**	**16.8597**						**57,915.2773**

	ROG	NOx	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	**0.59**	**8.72**	**5.79**	**11.05**	**11.80**	**6.20**	**11.65**	**11.80**	**6.12**	**11.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.94**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	0.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	14.5539	20.8326	161.7264	0.4795	57.3358	0.4302	57.7660	15.2497	0.3993	15.6489						47,874.9023
Unmitigated	14.9560	22.9351	178.1067	0.5412	65.0065	0.4790	65.4856	17.2899	0.4446	17.7345						54,039.4668

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.611000	0.150000	0.190000	0.040000	0.000100	0.000100	0.000100	0.001000	0.000100	0.002900	0.001000	0.000100	0.003600
Single Family Housing	0.611000	0.150000	0.190000	0.040000	0.000100	0.000100	0.000100	0.001000	0.000100	0.002900	0.001000	0.000100	0.003600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
NaturalGas Unmitigated	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**0.9833**	**8.4026**	**3.5756**	**0.0536**		**0.6794**	**0.6794**		**0.6794**	**0.6794**						**10,790.4667**

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.8970**	**7.6653**	**3.2619**	**0.0489**		**0.6198**	**0.6198**		**0.6198**	**0.6198**						**9,843.6894**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Unmitigated	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2061	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Total	**67.4951**	**1.2286**	**106.6293**	**5.6300e-003**		**0.5910**	**0.5910**		**0.5910**	**0.5910**						**196.6856**

6.2 Area by SubCategory

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2061	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Total	**67.4951**	**1.2286**	**106.6293**	**5.6300e-003**		**0.5910**	**0.5910**		**0.5910**	**0.5910**						**196.6856**

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

Institute Recycling and Composting Services

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

Olsen-Chandler (Residential Fleet Mix-With Adjustment)

San Luis Obispo County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2024
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	447.45	**CH4 Intensity (lb/MWhr)**	0.02	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Olsen-Chandler (Residential Fleet Mix-With Adjustment) - San Luis Obispo County APCD Air District, Winter

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2.

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions.

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Olsen-Chandler (Residential Fleet Mix-With Adjustment) - San Luis Obispo County APCD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	1.0000e-003
tblFleetMix	HHD	0.02	1.0000e-003
tblFleetMix	LDA	0.59	0.61
tblFleetMix	LDA	0.59	0.61
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LHD1	0.02	1.0000e-004
tblFleetMix	LHD1	0.02	1.0000e-004
tblFleetMix	LHD2	5.7480e-003	1.0000e-004
tblFleetMix	LHD2	5.7480e-003	1.0000e-004
tblFleetMix	MCY	4.7760e-003	1.0000e-003
tblFleetMix	MCY	4.7760e-003	1.0000e-003
tblFleetMix	MDV	0.11	0.04
tblFleetMix	MDV	0.11	0.04
tblFleetMix	MH	1.1920e-003	3.6000e-003
tblFleetMix	MH	1.1920e-003	3.6000e-003
tblFleetMix	MHD	0.01	1.0000e-004
tblFleetMix	MHD	0.01	1.0000e-004
tblFleetMix	OBUS	2.3160e-003	1.0000e-004
tblFleetMix	OBUS	2.3160e-003	1.0000e-004
tblFleetMix	SBUS	7.5800e-004	1.0000e-004
tblFleetMix	SBUS	7.5800e-004	1.0000e-004
tblFleetMix	UBUS	1.1630e-003	2.9000e-003

tblFleetMix	UBUS	1.1630e-003	2.9000e-003
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.02
tblProjectCharacteristics	CO2IntensityFactor	641.35	447.45
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblTripsAndVMT	WorkerTripNumber	15.00	0.00
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	3.3121	33.2010	21.7532	0.0388	0.0000	1.6587	1.6587	0.0000	1.5419	1.5419						3,774.1536
Maximum	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

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	3.3121	33.2010	21.7532	0.0388	0.0000	1.6587	1.6587	0.0000	1.5419	1.5419						3,774.1536
Maximum	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

	ROG	**NOx**	**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**

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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Energy	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667
Mobile	13.9992	25.1982	178.1828	0.5173	65.0065	0.4792	65.4857	17.2899	0.4447	17.7346						51,645.2258
Total	**82.4776**	**34.8294**	**288.3876**	**0.5765**	**65.0065**	**1.7495**	**66.7561**	**17.2899**	**1.7151**	**19.0050**						**62,632.3781**

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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Energy	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
Mobile	13.6161	22.8804	163.1621	0.4584	57.3358	0.4304	57.7661	15.2497	0.3994	15.6491						45,761.4303
Total	**82.0082**	**31.7743**	**273.0533**	**0.5130**	**57.3358**	**1.6411**	**58.9769**	**15.2497**	**1.6101**	**16.8598**						**55,801.8052**

	ROG	NOx	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	**0.57**	**8.77**	**5.32**	**11.02**	**11.80**	**6.20**	**11.65**	**11.80**	**6.12**	**11.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.91**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	0.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**						**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive 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	13.6161	22.8804	163.1621	0.4584	57.3358	0.4304	57.7661	15.2497	0.3994	15.6491						45,761.4303
Unmitigated	13.9992	25.1982	178.1828	0.5173	65.0065	0.4792	65.4857	17.2899	0.4447	17.7346						51,645.2258

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.611000	0.150000	0.190000	0.040000	0.000100	0.000100	0.000100	0.001000	0.000100	0.002900	0.001000	0.000100	0.003600
Single Family Housing	0.611000	0.150000	0.190000	0.040000	0.000100	0.000100	0.000100	0.001000	0.000100	0.002900	0.001000	0.000100	0.003600

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
NaturalGas Unmitigated	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**0.9833**	**8.4026**	**3.5756**	**0.0536**		**0.6794**	**0.6794**		**0.6794**	**0.6794**						**10,790.4667**

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.8970**	**7.6653**	**3.2619**	**0.0489**		**0.6198**	**0.6198**		**0.6198**	**0.6198**						**9,843.6894**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Unmitigated	67.4951	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2061	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Total	**67.4951**	**1.2286**	**106.6293**	**5.6300e-003**		**0.5910**	**0.5910**		**0.5910**	**0.5910**						**196.6856**

6.2 Area by SubCategory

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.2061	1.2286	106.6293	5.6300e-003		0.5910	0.5910		0.5910	0.5910						196.6856
Total	**67.4951**	**1.2286**	**106.6293**	**5.6300e-003**		**0.5910**	**0.5910**		**0.5910**	**0.5910**						**196.6856**

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

Institute Recycling and Composting Services

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

Olsen-Chandler (Residential Fleet Mix-With Adjustment)

San Luis Obispo County APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Olsen-Chandler (Residential Fleet Mix-With Adjustment) - San Luis Obispo County APCD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	1.5000e-003
tblFleetMix	HHD	0.02	1.5000e-003
tblFleetMix	LDA	0.61	0.60
tblFleetMix	LDA	0.61	0.60
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LHD1	0.01	1.0000e-003
tblFleetMix	LHD1	0.01	1.0000e-003
tblFleetMix	LHD2	4.4400e-003	5.0000e-004
tblFleetMix	LHD2	4.4400e-003	5.0000e-004
tblFleetMix	MCY	4.2480e-003	1.0000e-003
tblFleetMix	MCY	4.2480e-003	1.0000e-003
tblFleetMix	MDV	0.10	0.05
tblFleetMix	MDV	0.10	0.05
tblFleetMix	MH	7.5900e-004	4.0000e-003
tblFleetMix	MH	7.5900e-004	4.0000e-003
tblFleetMix	MHD	0.01	2.0000e-003
tblFleetMix	MHD	0.01	2.0000e-003
tblFleetMix	OBUS	2.2470e-003	1.0000e-003
tblFleetMix	OBUS	2.2470e-003	1.0000e-003
tblFleetMix	SBUS	7.0800e-004	9.0000e-004
tblFleetMix	SBUS	7.0800e-004	9.0000e-004
tblFleetMix	UBUS	1.0590e-003	3.0000e-003

tblFleetMix	UBUS	1.0590e-003	3.0000e-003
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	8.4400e-003	0.0832	0.0557	1.0000e-004	3.6000e-004	4.1500e-003	4.5100e-003	1.0000e-004	3.8600e-003	3.9500e-003						8.8619
Maximum	**8.4400e-003**	**0.0832**	**0.0557**	**1.0000e-004**	**3.6000e-004**	**4.1500e-003**	**4.5100e-003**	**1.0000e-004**	**3.8600e-003**	**3.9500e-003**						**8.8619**

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	8.4400e-003	0.0832	0.0557	1.0000e-004	3.6000e-004	4.1500e-003	4.5100e-003	1.0000e-004	3.8600e-003	3.9500e-003						8.8619
Maximum	**8.4400e-003**	**0.0832**	**0.0557**	**1.0000e-004**	**3.6000e-004**	**4.1500e-003**	**4.5100e-003**	**1.0000e-004**	**3.8600e-003**	**3.9500e-003**						**8.8619**

	ROG	**NOx**	**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**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2020**	**3-31-2020**	0.0916	0.0916
		Highest	0.0916	0.0916

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	12.2578	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Energy	0.1795	1.5335	0.6525	9.7900e-003		0.1240	0.1240		0.1240	0.1240						3,091.8189
Mobile	1.3628	2.7769	17.2622	0.0650	9.3390	0.0511	9.3901	2.4931	0.0474	2.5405						5,904.1864
Waste						0.0000	0.0000		0.0000	0.0000						680.7979
Water						0.0000	0.0000		0.0000	0.0000						155.7858
Total	**13.8000**	**4.5128**	**35.4694**	**0.0757**	**9.3390**	**0.2727**	**9.6117**	**2.4931**	**0.2690**	**2.7621**						**9,862.0252**

2.2 Overall Operational

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	12.2578	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Energy	0.1637	1.3989	0.5953	8.9300e-003		0.1131	0.1131		0.1131	0.1131						2,860.2567
Mobile	1.3267	2.5429	15.7449	0.0576	8.2370	0.0460	8.2830	2.1989	0.0427	2.2416						5,232.3920
Waste						0.0000	0.0000		0.0000	0.0000						285.9351
Water						0.0000	0.0000		0.0000	0.0000						128.1390
Total	**13.7482**	**4.1442**	**33.8949**	**0.0675**	**8.2370**	**0.2567**	**8.4937**	**2.1989**	**0.2534**	**2.4523**						**8,536.1590**

	ROG	NOx	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	**0.38**	**8.17**	**4.44**	**10.91**	**11.80**	**5.86**	**11.63**	**11.80**	**5.80**	**11.22**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**13.44**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.6000e-004	1.5000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004						0.3023
Total	**1.6000e-004**	**1.5000e-004**	**1.2900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**						**0.3023**

3.2 Demolition - 2020

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	8.2800e-003	0.0830	0.0544	1.0000e-004		4.1500e-003	4.1500e-003		3.8500e-003	3.8500e-003						8.5596
Total	**8.2800e-003**	**0.0830**	**0.0544**	**1.0000e-004**	**0.0000**	**4.1500e-003**	**4.1500e-003**	**0.0000**	**3.8500e-003**	**3.8500e-003**						**8.5596**

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	1.6000e-004	1.5000e-004	1.2900e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004						0.3023
Total	**1.6000e-004**	**1.5000e-004**	**1.2900e-003**	**0.0000**	**3.6000e-004**	**0.0000**	**3.6000e-004**	**1.0000e-004**	**0.0000**	**1.0000e-004**						**0.3023**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3267	2.5429	15.7449	0.0576	8.2370	0.0460	8.2830	2.1989	0.0427	2.2416						5,232.3920
Unmitigated	1.3628	2.7769	17.2622	0.0650	9.3390	0.0511	9.3901	2.4931	0.0474	2.5405						5,904.1864

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.600000	0.150000	0.185000	0.050100	0.001000	0.000500	0.002000	0.001500	0.001000	0.003000	0.001000	0.000900	0.004000
Single Family Housing	0.600000	0.150000	0.185000	0.050100	0.001000	0.000500	0.002000	0.001500	0.001000	0.003000	0.001000	0.000900	0.004000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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						1,230.5236
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						1,305.3362
NaturalGas Mitigated	0.1637	1.3989	0.5953	8.9300e-003		0.1131	0.1131		0.1131	0.1131						1,629.7332
NaturalGas Unmitigated	0.1795	1.5335	0.6525	9.7900e-003		0.1240	0.1240		0.1240	0.1240						1,786.4828

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					
Apartments Low Rise	2.32534e+006	0.0125	0.1072	0.0456	6.8000e-004		8.6600e-003	8.6600e-003		8.6600e-003	8.6600e-003						124.8263
Single Family Housing	3.09543e+007	0.1669	1.4263	0.6070	9.1000e-003		0.1153	0.1153		0.1153	0.1153						1,661.6565
Total		**0.1795**	**1.5335**	**0.6525**	**9.7800e-003**		**0.1240**	**0.1240**		**0.1240**	**0.1240**						**1,786.4828**

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					
Apartments Low Rise	2.16474e+006	0.0117	0.0998	0.0425	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003						116.2051
Single Family Housing	2.81949e+007	0.1520	1.2992	0.5528	8.2900e-003		0.1050	0.1050		0.1050	0.1050						1,513.5281
Total		**0.1637**	**1.3989**	**0.5953**	**8.9300e-003**		**0.1131**	**0.1131**		**0.1131**	**0.1131**						**1,629.7332**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	991526				134.7083
Single Family Housing	8.61646e+006				1,170.6278
Total					**1,305.3361**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	928743				126.1786
Single Family Housing	8.12858e+006				1,104.3450
Total					**1,230.5236**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	12.2578	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Unmitigated	12.2578	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361

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	3.3555					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.3773					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5251	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Total	**12.2578**	**0.2024**	**17.5547**	**9.3000e-004**		**0.0976**	**0.0976**		**0.0976**	**0.0976**						**29.4361**

6.2 Area by SubCategory

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	3.3555					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	8.3773					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	0.5251	0.2024	17.5547	9.3000e-004		0.0976	0.0976		0.0976	0.0976						29.4361
Total	**12.2578**	**0.2024**	**17.5547**	**9.3000e-004**		**0.0976**	**0.0976**		**0.0976**	**0.0976**						**29.4361**

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				128.1390
Unmitigated				155.7858

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	14.8551 / 9.36518				27.4704
Single Family Housing	69.389 / 43.7453				128.3155
Total					**155.7858**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	11.8841 / 8.79391				22.5953
Single Family Housing	55.5112 / 41.0768				105.5438
Total					**128.1390**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated				285.9351
Unmitigated				680.7979

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	104.88				52.7443
Single Family Housing	1248.86				628.0536
Total					**680.7979**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	44.0496				22.1526
Single Family Housing	524.521				263.7825
Total					**285.9351**

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

Olsen-Chandler (Residential Fleet Mix-With Adjustment)

San Luis Obispo County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Olsen-Chandler (Residential Fleet Mix-With Adjustment) - San Luis Obispo County APCD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	1.5000e-003
tblFleetMix	HHD	0.02	1.5000e-003
tblFleetMix	LDA	0.61	0.60
tblFleetMix	LDA	0.61	0.60
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LHD1	0.01	1.0000e-003
tblFleetMix	LHD1	0.01	1.0000e-003
tblFleetMix	LHD2	4.4400e-003	5.0000e-004
tblFleetMix	LHD2	4.4400e-003	5.0000e-004
tblFleetMix	MCY	4.2480e-003	1.0000e-003
tblFleetMix	MCY	4.2480e-003	1.0000e-003
tblFleetMix	MDV	0.10	0.05
tblFleetMix	MDV	0.10	0.05
tblFleetMix	MH	7.5900e-004	4.0000e-003
tblFleetMix	MH	7.5900e-004	4.0000e-003
tblFleetMix	MHD	0.01	2.0000e-003
tblFleetMix	MHD	0.01	2.0000e-003
tblFleetMix	OBUS	2.2470e-003	1.0000e-003
tblFleetMix	OBUS	2.2470e-003	1.0000e-003
tblFleetMix	SBUS	7.0800e-004	9.0000e-004
tblFleetMix	SBUS	7.0800e-004	9.0000e-004
tblFleetMix	UBUS	1.0590e-003	3.0000e-003

tblFleetMix	UBUS	1.0590e-003	3.0000e-003
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	3.3763	33.2545	22.2857	0.0402	0.1483	1.6597	1.8079	0.0393	1.5427	1.5821						3,912.8496
Maximum	**3.3763**	**33.2545**	**22.2857**	**0.0402**	**0.1483**	**1.6597**	**1.8079**	**0.0393**	**1.5427**	**1.5821**						**3,912.8496**

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	3.3763	33.2545	22.2857	0.0402	0.1483	1.6597	1.8079	0.0393	1.5427	1.5821						3,912.8496
Maximum	**3.3763**	**33.2545**	**22.2857**	**0.0402**	**0.1483**	**1.6597**	**1.8079**	**0.0393**	**1.5427**	**1.5821**						**3,912.8496**

	ROG	**NOx**	**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**

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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Energy	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667
Mobile	10.1830	17.6917	119.4822	0.4589	65.1834	0.3479	65.5313	17.3646	0.3225	17.6870						45,932.9623
Total	**78.6376**	**27.3208**	**229.4500**	**0.5182**	**65.1834**	**1.6188**	**66.8022**	**17.3646**	**1.5934**	**18.9580**						**56,920.0822**

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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Energy	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
Mobile	9.9290	16.2231	108.3549	0.4067	57.4918	0.3132	57.8050	15.3155	0.2903	15.6058						40,700.9970
Total	**78.2973**	**25.1149**	**218.0090**	**0.4612**	**57.4918**	**1.5245**	**59.0163**	**15.3155**	**1.5016**	**16.8171**						**50,741.3396**

	ROG	NOx	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	**0.43**	**8.07**	**4.99**	**10.99**	**11.80**	**5.83**	**11.66**	**11.80**	**5.76**	**11.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.86**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0642**	**0.0535**	**0.5325**	**1.3900e-003**	**0.1483**	**9.5000e-004**	**0.1492**	**0.0393**	**8.8000e-004**	**0.0402**						**138.6960**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0642	0.0535	0.5325	1.3900e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						138.6960
Total	**0.0642**	**0.0535**	**0.5325**	**1.3900e-003**	**0.1483**	**9.5000e-004**	**0.1492**	**0.0393**	**8.8000e-004**	**0.0402**						**138.6960**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.9290	16.2231	108.3549	0.4067	57.4918	0.3132	57.8050	15.3155	0.2903	15.6058						40,700.9970
Unmitigated	10.1830	17.6917	119.4822	0.4589	65.1834	0.3479	65.5313	17.3646	0.3225	17.6870						45,932.9623

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.600000	0.150000	0.185000	0.050100	0.001000	0.000500	0.002000	0.001500	0.001000	0.003000	0.001000	0.000900	0.004000
Single Family Housing	0.600000	0.150000	0.185000	0.050100	0.001000	0.000500	0.002000	0.001500	0.001000	0.003000	0.001000	0.000900	0.004000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
NaturalGas Unmitigated	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**0.9833**	**8.4026**	**3.5756**	**0.0536**		**0.6794**	**0.6794**		**0.6794**	**0.6794**						**10,790.4667**

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.8970**	**7.6653**	**3.2619**	**0.0489**		**0.6198**	**0.6198**		**0.6198**	**0.6198**						**9,843.6894**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Unmitigated	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1823	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Total	**67.4713**	**1.2265**	**106.3922**	**5.6300e-003**		**0.5916**	**0.5916**		**0.5916**	**0.5916**						**196.6532**

6.2 Area by SubCategory

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1823	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Total	**67.4713**	**1.2265**	**106.3922**	**5.6300e-003**		**0.5916**	**0.5916**		**0.5916**	**0.5916**						**196.6532**

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

Institute Recycling and Composting Services

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

Olsen-Chandler (Residential Fleet Mix-With Adjustment)

San Luis Obispo County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Apartments Low Rise	228.00	Dwelling Unit	14.25	228,000.00	652
Single Family Housing	1,065.00	Dwelling Unit	147.45	1,917,000.00	3046

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.2	**Precipitation Freq (Days)**	44
Climate Zone	4			**Operational Year**	2030
Utility Company	Pacific Gas & Electric Company				
CO2 Intensity (lb/MWhr)	298.3	**CH4 Intensity (lb/MWhr)**	0.013	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Model run is for calculation of mobile-source emission reductions associated with residential fleet mix adjustment only. Refer to other model runs for emissions associated with other sources/land uses.

Land Use - Provided by the applicant team.

Construction Phase - Const does not apply.

Off-road Equipment -

Off-road Equipment - .

Trips and VMT - .

On-road Fugitive Dust -

Demolition - .

Grading - .

Architectural Coating - .

Vehicle Trips - Trip-gen rates for residential based on City of Paso Robles' Travel Demand Forecast Model (Final), prepared by Fehr & Peers (August 5, 2009), Table 2. SF=7.56; MF=5.21

Vehicle Emission Factors - Emission factors based on model defaults.

Vehicle Emission Factors -

Vehicle Emission Factors -

Woodstoves - Assumes no hearths.

Consumer Products - Consumer products, arch coatings, and landscape equipment usage based on model defaults.

Energy Use -

Water And Wastewater - Adjusted for the removal of septic systems from the default assumptions (97.79 Aerobic)

Construction Off-road Equipment Mitigation - Includes 50%CE for watering travel ways, 61%CE for watering disturbed areas, 15 mph onsite speed limit. Use of T3 off-road equipment included.

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Waste Mitigation - Assumes 58% waste reduction, per most current (2017) state-wide diversion rate (CalRecycle https://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/graphs/estdiversion)

Fleet Mix - Fleet mix adjusted based on SLOAPCD-approved use of SJVAPCD-recommended residential fleet mix, adjusted based on SLO County default residential fleet mix, by year.

Olsen-Chandler (Residential Fleet Mix-With Adjustment) - San Luis Obispo County APCD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblFleetMix	HHD	0.02	1.5000e-003
tblFleetMix	HHD	0.02	1.5000e-003
tblFleetMix	LDA	0.61	0.60
tblFleetMix	LDA	0.61	0.60
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT1	0.03	0.15
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LDT2	0.20	0.19
tblFleetMix	LHD1	0.01	1.0000e-003
tblFleetMix	LHD1	0.01	1.0000e-003
tblFleetMix	LHD2	4.4400e-003	5.0000e-004
tblFleetMix	LHD2	4.4400e-003	5.0000e-004
tblFleetMix	MCY	4.2480e-003	1.0000e-003
tblFleetMix	MCY	4.2480e-003	1.0000e-003
tblFleetMix	MDV	0.10	0.05
tblFleetMix	MDV	0.10	0.05
tblFleetMix	MH	7.5900e-004	4.0000e-003
tblFleetMix	MH	7.5900e-004	4.0000e-003
tblFleetMix	MHD	0.01	2.0000e-003
tblFleetMix	MHD	0.01	2.0000e-003
tblFleetMix	OBUS	2.2470e-003	1.0000e-003
tblFleetMix	OBUS	2.2470e-003	1.0000e-003
tblFleetMix	SBUS	7.0800e-004	9.0000e-004
tblFleetMix	SBUS	7.0800e-004	9.0000e-004
tblFleetMix	UBUS	1.0590e-003	3.0000e-003

tblFleetMix	UBUS	1.0590e-003	3.0000e-003
tblLandUse	LotAcreage	345.78	147.45
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.013
tblProjectCharacteristics	CO2IntensityFactor	641.35	298.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	WD_TR	6.59	5.21
tblVehicleTrips	WD_TR	9.52	7.56
tblWater	AerobicPercent	87.46	97.79
tblWater	AerobicPercent	87.46	97.79
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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	3.3853	33.2618	22.2712	0.0401	0.1483	1.6597	1.8079	0.0393	1.5427	1.5821						3,906.3569
Maximum	**3.3853**	**33.2618**	**22.2712**	**0.0401**	**0.1483**	**1.6597**	**1.8079**	**0.0393**	**1.5427**	**1.5821**						**3,906.3569**

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	3.3853	33.2618	22.2712	0.0401	0.1483	1.6597	1.8079	0.0393	1.5427	1.5821						3,906.3569
Maximum	**3.3853**	**33.2618**	**22.2712**	**0.0401**	**0.1483**	**1.6597**	**1.8079**	**0.0393**	**1.5427**	**1.5821**						**3,906.3569**

	ROG	**NOx**	**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**

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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Energy	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667
Mobile	9.4068	19.0495	118.6142	0.4391	65.1834	0.3480	65.5314	17.3646	0.3226	17.6871						43,957.7354
Total	**77.8613**	**28.6786**	**228.5820**	**0.4984**	**65.1834**	**1.6189**	**66.8023**	**17.3646**	**1.5935**	**18.9581**						**54,944.8553**

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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Energy	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
Mobile	9.1635	17.4462	108.4251	0.3892	57.4918	0.3133	57.8051	15.3155	0.2904	15.6059						38,955.6828
Total	**77.5318**	**26.3380**	**218.0792**	**0.4438**	**57.4918**	**1.5246**	**59.0164**	**15.3155**	**1.5017**	**16.8172**						**48,996.0254**

	ROG	NOx	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	**0.42**	**8.16**	**4.59**	**10.96**	**11.80**	**5.82**	**11.66**	**11.80**	**5.76**	**11.29**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**10.83**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2020	1/7/2020	5	200	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
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
Demolition	6	15.00	0.00	0.00	13.00	5.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0731**	**0.0607**	**0.5180**	**1.3300e-003**	**0.1483**	**9.5000e-004**	**0.1492**	**0.0393**	**8.8000e-004**	**0.0402**						**132.2033**

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419						3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**0.0000**	**1.6587**	**1.6587**	**0.0000**	**1.5419**	**1.5419**						**3,774.1536**

3.2 Demolition - 2020

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						0.0000
Worker	0.0731	0.0607	0.5180	1.3300e-003	0.1483	9.5000e-004	0.1492	0.0393	8.8000e-004	0.0402						132.2033
Total	**0.0731**	**0.0607**	**0.5180**	**1.3300e-003**	**0.1483**	**9.5000e-004**	**0.1492**	**0.0393**	**8.8000e-004**	**0.0402**						**132.2033**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Increase Transit Accessibility

Improve Pedestrian Network

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.1635	17.4462	108.4251	0.3892	57.4918	0.3133	57.8051	15.3155	0.2904	15.6059						38,955.6828
Unmitigated	9.4068	19.0495	118.6142	0.4391	65.1834	0.3480	65.5314	17.3646	0.3226	17.6871						43,957.7354

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	1,187.88	1,632.48	1383.96	3,251,683	2,867,984
Single Family Housing	8,051.40	10,554.15	9180.30	21,781,672	19,211,434
Total	9,239.28	12,186.63	10,564.26	25,033,354	22,079,419

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
Apartments Low Rise	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3
Single Family Housing	13.00	5.00	5.00	35.80	21.00	43.20	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.600000	0.150000	0.185000	0.050100	0.001000	0.000500	0.002000	0.001500	0.001000	0.003000	0.001000	0.000900	0.004000
Single Family Housing	0.600000	0.150000	0.185000	0.050100	0.001000	0.000500	0.002000	0.001500	0.001000	0.003000	0.001000	0.000900	0.004000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Install High Efficiency Lighting

Install Energy Efficient Appliances

	ROG	NOx	CO	SO2	Fugitive 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	0.8970	7.6653	3.2619	0.0489		0.6198	0.6198		0.6198	0.6198						9,843.6894
NaturalGas Unmitigated	0.9833	8.4026	3.5756	0.0536		0.6794	0.6794		0.6794	0.6794						10,790.4667

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					
Apartments Low Rise	6370.79	0.0687	0.5871	0.2498	3.7500e-003		0.0475	0.0475		0.0475	0.0475						753.9585
Single Family Housing	84806.4	0.9146	7.8155	3.3257	0.0499		0.6319	0.6319		0.6319	0.6319						10,036.5083
Total		**0.9833**	**8.4026**	**3.5756**	**0.0536**		**0.6794**	**0.6794**		**0.6794**	**0.6794**						**10,790.4667**

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					
Apartments Low Rise	5.93079	0.0640	0.5466	0.2326	3.4900e-003		0.0442	0.0442		0.0442	0.0442						701.8862
Single Family Housing	77.2463	0.8331	7.1188	3.0293	0.0454		0.5756	0.5756		0.5756	0.5756						9,141.8032
Total		**0.8970**	**7.6653**	**3.2619**	**0.0489**		**0.6198**	**0.6198**		**0.6198**	**0.6198**						**9,843.6894**

6.0 Area Detail

6.1 Mitigation Measures Area

Use only Natural Gas Hearths

	ROG	NOx	CO	SO2	Fugitive 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	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Unmitigated	67.4713	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1823	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Total	**67.4713**	**1.2265**	**106.3922**	**5.6300e-003**		**0.5916**	**0.5916**		**0.5916**	**0.5916**						**196.6532**

6.2 Area by SubCategory

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	18.3860					0.0000	0.0000		0.0000	0.0000						0.0000
Consumer Products	45.9030					0.0000	0.0000		0.0000	0.0000						0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						0.0000
Landscaping	3.1823	1.2265	106.3922	5.6300e-003		0.5916	0.5916		0.5916	0.5916						196.6532
Total	**67.4713**	**1.2265**	**106.3922**	**5.6300e-003**		**0.5916**	**0.5916**		**0.5916**	**0.5916**						**196.6532**

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

Institute Recycling and Composting Services

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

LOCALIZED MOBILE-SOURCE CO MODELING

Localized Carbon Monoxide (CO)

Signalized Intersections	Exposure Duration	Carbon Monoxide Concentrations (PPM)					
		Predicted Traffic	Maximum Ambient Background	Persistent Factor	Caculated	California Ambient Air Quality Standard	Exceed Ambient Air Quality Standard?
SR46E/Golden Hill Rd	1 Hour	0.4	2.6	-	3.0	20	No
	8 Hour	0.3	1.5	0.8	1.7	9	No
13th St/Riverside Ave	1 Hour	0.3	2.6	-	2.9	20	No
	8 Hour	0.3	1.5	0.8	1.7	9	No
Niblick Rd/South River Rd	1 Hour	0.4	2.6	-	3.0	20	No
	8 Hour	0.3	1.5	0.8	1.7	9	No

NOTE: Predicted CO concentrations were based on screening criteria identified in the CO Protocol. 1-hour and 8-hour receptors placed at 3 and 7 meters from the roadway edge, respectively; worst-case wind angle/stability class; and highest background CO from the last three years of available data (2004-2006). 8-hour concentrations calculated based on predicted 1-hour concentrations and assuming a persistence factor of 0.8.

Pollutant: CO
Year: 2006
Exceptional Events: Included (if any)
About this report

EPA Air Quality Standards:
Carbon Monoxide: 35 ppm (1-hour), 9 ppm (8-hour)

The following data links are active for the next 10 minutes, after which you must resubmit your query.
Download PDF (printable page)
Download CSV (spreadsheet)

To sort a column in the table below, click on the column heading.

Obs	First Max 8hr	Second Max 8hr	Days 8hr Max >STD	First Max 1hr	Second Max 1hr	Days 1hr Max >STD	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
3612	0.8	0.6	0	1.1	1.1	0	None	1	060792006	3220 South Higuera Street, San Luis Obispo	San Luis Obispo	San Luis Obispo	CA	09

Pollutant: CO
Year: 2005
Exceptional Events: Included (if any)
About this report

EPA Air Quality Standards:
Carbon Monoxide: 35 ppm (1-hour), 9 ppm (8-hour)

The following data links are active for the next 10 minutes, after which you must resubmit your query.
Download PDF (printable page)
Download CSV (spreadsheet)

To sort a column in the table below, click on the column heading.

Obs	First Max 8hr	Second Max 8hr	Days 8hr Max >STD	First Max 1hr	Second Max 1hr	Days 1hr Max >STD	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
5979	1.3	1	0	2.6	1.7	0	None	1	060792002	1160 Marsh St., San Luis Obispo	San Luis Obispo	San Luis Obispo	CA	09
2312	0.7	0.7	0	1.3	1.2	0	None	1	060792006	3220 South Higuera Street, San Luis Obispo	San Luis Obispo	San Luis Obispo	CA	09

Pollutant: CO
Year: 2004
Exceptional Events: Included (if any)
About this report

EPA Air Quality Standards:
Carbon Monoxide: 35 ppm (1-hour), 9 ppm (8-hour)

The following data links are active for the next 10 minutes, after which you must resubmit your query.
Download PDF (printable page)
Download CSV (spreadsheet)

To sort a column in the table below, click on the column heading.

Obs	First Max 8hr	Second Max 8hr	Days 8hr Max >STD	First Max 1hr	Second Max 1hr	Days 1hr Max >STD	Exc Events	Monitor Number	Site ID	Address	City	County	State	EPA Region
8202	1.5	1.5	0	2.6	2.3	0	None	1	060792002	1160 Marsh St., San Luis Obispo	San Luis Obispo	San Luis Obispo	CA	09
3727	1.2	1.1	0	2.1	1.8	0	None	1	060798001	6005 Lewis Avenue, Atascadero, Ca 93422	Atascadero	San Luis Obispo	CA	09

Highest 1-Hour Concentration: 2.6
Highest 8-Hour Concentration: 1.5

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB:
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 20. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EB SR APP EX	-750	-5	-150	-5	AG	1784	0.6	0.0	10.0
B. EB SR APP IN	-150	-5	0	-5	AG	1784	1.7	0.0	10.0
C. EB SR DEP IN	0	-5	150	-5	AG	1419	0.9	0.0	10.0
D. EB SR DEP EX	150	-5	750	-5	AG	1419	0.6	0.0	10.0
E. WB SR APP EX	750	5	150	5	AG	1703	0.6	0.0	10.0
F. WB SR APP IN	150	5	0	5	AG	1703	1.7	0.0	10.0
G. WB SR DEP IN	0	5	-150	5	AG	1777	0.9	0.0	10.0
H. WB SR DEP EX	-150	5	-750	5	AG	1777	0.6	0.0	10.0
I. NB GH APP EX	5	-750	5	-150	AG	858	0.7	0.0	10.0
J. NB GH APP IN	5	-150	5	0	AG	858	1.6	0.0	10.0
K. NB GH DEP IN	5	0	5	150	AG	966	0.9	0.0	10.0
L. NB GH DEP EX	5	150	5	750	AG	966	0.7	0.0	10.0
M. SB GH APP EX	-5	750	-5	150	AG	919	0.7	0.0	10.0
N. SB GH APP IN	-5	150	-5	0	AG	919	1.6	0.0	10.0
O. SB GH DEP IN	-5	0	-5	-150	AG	1102	0.9	0.0	10.0
P. SB GH DEP EX	-5	-150	-5	-750	AG	1102	0.7	0.0	10.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 2

JOB:
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. 1 HR SW	-18	-18	0.0
2. 8 HR SW	-22	-22	0.0
3. 1 HR SE	18	-18	0.0
4. 8 HR SE	22	-22	0.0
5. 1 HR NW	-18	18	0.0
6. 8 HR NW	-22	22	0.0
7. 1 HR NE	18	18	0.0
8. 8 HR NE	22	22	0.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. 1 HR SW	19.	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
2. 8 HR SW	21.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3. 1 HR SE	288.	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0
4. 8 HR SE	290.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
5. 1 HR NW	109.	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
6. 8 HR NW	110.	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
7. 1 HR NE	246.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
8. 8 HR NE	235.	0.3	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB:
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 20. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EB NI APP EX	-750	-5	-150	-5	AG	2047	0.7	0.0	10.0
B. EB NI APP IN	-150	-5	0	-5	AG	2047	1.6	0.0	10.0
C. EB NI DEP IN	0	-5	150	-5	AG	1421	0.9	0.0	10.0
D. EB NI DEP EX	150	-5	750	-5	AG	1421	0.7	0.0	10.0
E. WB NI APP EX	750	5	150	5	AG	1132	0.7	0.0	10.0
F. WB NI APP IN	150	5	0	5	AG	1132	1.6	0.0	10.0
G. WB NI DEP IN	0	5	-150	5	AG	1393	0.9	0.0	10.0
H. WB NI DEP EX	-150	5	-750	5	AG	1393	0.7	0.0	10.0
I. NB SR APP EX	5	-750	5	-150	AG	794	0.7	0.0	10.0
J. NB SR APP IN	5	-150	5	0	AG	794	1.6	0.0	10.0
K. NB SR DEP IN	5	0	5	150	AG	707	0.9	0.0	10.0
L. NB SR DEP EX	5	150	5	750	AG	707	0.7	0.0	10.0
M. SB SR APP EX	-5	750	-5	150	AG	744	0.7	0.0	10.0
N. SB SR APP IN	-5	150	-5	0	AG	744	1.6	0.0	10.0
O. SB SR DEP IN	-5	0	-5	-150	AG	1196	0.9	0.0	10.0
P. SB SR DEP EX	-5	-150	-5	-750	AG	1196	0.7	0.0	10.0

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JOB:
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. 1 HR SW	-18	-18	0.0
2. 8 HR SW	-22	-22	0.0
3. 1 HR SE	18	-18	0.0
4. 8 HR SE	22	-22	0.0
5. 1 HR NW	-18	18	0.0
6. 8 HR NW	-22	22	0.0
7. 1 HR NE	18	18	0.0
8. 8 HR NE	22	22	0.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. 1 HR SW	19.	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
2. 8 HR SW	21.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
3. 1 HR SE	285.	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
4. 8 HR SE	286.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
5. 1 HR NW	161.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
6. 8 HR NW	160.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
7. 1 HR NE	250.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
8. 8 HR NE	249.	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0

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JOB:
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POLLUTANT:

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 0. (M)
BRG= WORST CASE VD= 0.0 CM/S
CLAS= 7 (G) VS= 0.0 CM/S
MIXH= 1000. M AMB= 0.0 PPM
SIGTH= 20. DEGREES TEMP= 15.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (M) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. EB 13 APP EX	-750	-5	-150	-5	AG	537	0.9	0.0	10.0
B. EB 13 APP IN	-150	-5	0	-5	AG	537	1.6	0.0	10.0
C. EB 13 DEP IN	0	-5	150	-5	AG	1423	1.2	0.0	10.0
D. EB 13 DEP EX	150	-5	750	-5	AG	1423	0.9	0.0	10.0
E. WB 13 APP EX	750	5	150	5	AG	1486	0.9	0.0	10.0
F. WB 13 APP IN	150	5	0	5	AG	1486	1.6	0.0	10.0
G. WB 13 DEP IN	0	5	-150	5	AG	596	1.2	0.0	10.0
H. WB 13 DEP EX	-150	5	-750	5	AG	596	0.9	0.0	10.0
I. NB RS APP EX	5	-750	5	-150	AG	358	0.8	0.0	10.0
J. NB RS APP IN	5	-150	5	0	AG	358	1.6	0.0	10.0
K. NB RS DEP IN	5	0	5	150	AG	788	0.9	0.0	10.0
L. NB RS DEP EX	5	150	5	750	AG	788	0.8	0.0	10.0
M. SB RS APP EX	-5	750	-5	150	AG	846	0.8	0.0	10.0
N. SB RS APP IN	-5	150	-5	0	AG	846	1.6	0.0	10.0
O. SB RS DEP IN	-5	0	-5	-150	AG	420	0.9	0.0	10.0
P. SB RS DEP EX	-5	-150	-5	-750	AG	420	0.8	0.0	10.0

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JOB:
RUN: Hour 1 (WORST CASE ANGLE)
POLLUTANT:

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (M) X	Y	Z
1. 1 HR SW	-18	-18	0.0
2. 8 HR SW	-22	-22	0.0
3. 1 HR SE	18	-18	0.0
4. 8 HR SE	22	-22	0.0
5. 1 HR NW	-18	18	0.0
6. 8 HR NW	-22	22	0.0
7. 1 HR NE	18	18	0.0
8. 8 HR NE	22	22	0.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. 1 HR SW	75.	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
2. 8 HR SW	74.	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
3. 1 HR SE	345.	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
4. 8 HR SE	345.	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
5. 1 HR NW	104.	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
6. 8 HR NW	105.	0.3	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
7. 1 HR NE	196.	0.2	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0
8. 8 HR NE	200.	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0