Air Quality & Greenhouse Gas Assessment

Stoneridge Commerce Center Specific Plan

Riverside County, California

Prepared For:

County of Riverside Planning Department
4080 Lemon Street, 12th Floor
Riverside, California

Owner Applicant:

Richland Planned Communities, Inc.
3161 Michelson Drive, Suite 425
Irvine, California

December 2020

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ATTACHMENTS

LIST OF ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
µg/m3	Micrograms per cubic meter; ppm = parts per million
2016 AQMP	2016 Air Quality Management Plan
2016 RTP/SCS	2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy
AB	Assembly Bill
AERMOD	USEPA air toxic dispersion model
ATCM	Airborne toxics control measure
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CC&Rs	Covenants, Codes, and Restrictions
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	Methane
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
DOC	Department of Conservation
DPM	Diesel particulate matter
EMFAC	EMission FACtor model
EO	Executive Order
GHG	Greenhouse gas
HRA	Health risk assessment
I-	Interstate
IPCC	Intergovernmental Panel on Climate Change
LOS	Level of service
LSTs	Localized significance threshold
MATES IV	Multiple Air Toxics Exposure Study in the South Coast Air Basin
N_2O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO_2	Nitrogen dioxide
NOP	Notice of Preparation
NOx	Nitric oxides

LIST OF ACRONYMS AND ABBREVIATIONS

NSR	New Source Review
O_3	Ozone
OEHHA	California Office of Environmental Health Hazard Assessment's
OPR	Office of Planning and Research
PM_{10}	Coarse particulate matter
$PM_{2.5}$	Fine particulate matter
ppb	Parts per billion
ppm	Parts per million
Project	Stoneridge Commerce Center Specific Plan
RCPG	Regional Comprehensive Plan and Guide
RECLAIM	Regional Clean Air Incentives Market
REL	Reference Exposure Level
Risk Reduction Plan	Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles
ROGs	Reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
sf	Square-foot
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO_2	Sulfur dioxide
SoCAB	South Coast Air Basin
SOx	Sulfur oxides
SRA	Source receptor area
SSAB	Salton Sea Air Basin
Strategy	Mobile Source Strategy
TACs	Toxic air contaminants
USEPA	U.S. Environmental Protection Agency
VOCs	Volatile organic compounds

1.0 INTRODUCTION

This report documents the results of an Air Quality and Greenhouse Gas (GHG) Emissions Assessment completed for the Stoneridge Commerce Center Specific Plan Project (Project), which includes the development of a 582.6-acre site in the western portion of unincorporated Riverside County (County), California. This assessment was prepared using methodologies and assumptions recommended in the rules and regulations of the South Coast Air Quality Management District (SCAQMD). Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and greenhouse gas (GHG) emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

1.1 Project Location and Description

The Project site is located in the western portion of unincorporated Riverside County (see Figure 1. *Project Vicinity*), more specifically within the Lakeview/ Nuevo community. The Project site is a 582.6-acre property located south of the Ramona Expressway, north of Nuevo Road, east of Foothill Drive, and west of the future extension of Menifee Road. Under existing conditions, the Project site is vacant and undeveloped but has been disturbed in the past by agricultural activities and on-going discing for fire abatement purposes. The site is generally bound by Ramona Expressway with undeveloped land to the north, undeveloped/ agricultural land with residents beyond to the east, Nuevo Road and undeveloped/ agricultural land to the south, and undeveloped/ agricultural land to the west with Lakeside Middle School, Sierra Vista Elementary School and residents beyond.

The Project is proposing two separate land use plans for the Project site. The "Primary Land Use Plan" anticipates that the Project would be constructed with Ramona Expressway providing primary access from the north and Nuevo Road providing access from the south and would include a mix of light industrial, business park, commercial retail, open space conservation, open space conservation habitat, and major roadways (see Figure 2. *Primary Land Use Plan*). The "Alternative Land Use Plan" would accommodate the same land uses but anticipates the construction of a regional transportation facility, the "Mid-County Parkway (MCP)," a segment of which, along with an interchange, are planned to traverse the northwestern portions of the Project site (see Figure 3. *Alternative Land Use Plan*). The Riverside County Transportation Commission has not secured or identified funding for the segment of the MCP which traverses the Project area, and therefore the timing of this segment of the MCP and the associated interchange is unknown at this time. As such, both land use plans are evaluated in this analysis. Table 1 provides a statistical summary of each land use plan for the various land uses proposed by the Project.

Table 1-1. Land Use Plan Statistical Summary	
Land Use Designation	**Acres**
Primary Land Use Plan	
Light Industrial	389.2
Business Park	49.1
Commercial Retail	8.0
Open Space-Conservation	17.4
Open Space- Conservation Habitat	81.6
Circulation	37.3
Total:	**582.6**
Alternative Land Use Plan	
Light Industrial	389.2
Business Park	51.5
Commercial Retail	8.5
Open Space-Conservation	17.4
Open Space- Conservation Habitat	81.6
Circulation	34.4
Total:	**582.6**

Notes: Under the Alternative Land Use Plan, the MCP would span 8.5 acres of Business Park and 0.2 acre of Commercial Retail lands, and thus this acreage would not be developed with Business Park or Commercial Retail land uses.

The Primary Land Use Plan would allow for 8,476,776 square feet of light industrial uses, 1,069,398 square feet of business park uses, and 121,968 square feet of commercial retail uses.

The Alternative Land Use Plan would allow for 8,476,776 square feet of light industrial uses, 936,540 square feet of business park uses, 126,542 square feet of commercial retail uses.

In addition to proposed onsite improvements, offsite improvements would be necessary under either land use plan. Specifically, off-site improvements include the construction of water lines and a booster station within Walnut Street, between Old Evans Road and the Ramona Expressway. An existing water tank located near the easterly terminus of Walnut Street and south of Ramona Expressway would be demolished and replaced by two new water tanks. The Project Applicant also would improve offsite portions of Antelope Road (between the southwestern Project boundary and Nuevo Road, and between the northwestern Project boundary and Ramona Expressway) and Nuevo Road (between proposed Antelope Road and Pico Avenue). A sewer lift station is also proposed near the intersection of Nuevo Road and Pico Avenue, south of Nuevo Road, and the Project Applicant also would construct water mains

within Nuevo Road from the existing points of connection located east and west of the Project site (see Figure 4. *Offsite Infrastructure*). These improvements would disturb 31.4 acres of land.

Project construction would require blasting in order to remove non-ripple materials at an area off the Project site, between the northwest corner of the Project site and Lakeside Middle School (approximately 620 feet from the Middle School).

Location: N:\2019\2019-075 Stoneridge\MAPS\Location_Vicinity\Stoneridge_Vicinity_V1.mxd (AMM)-amyers 7/10/2019

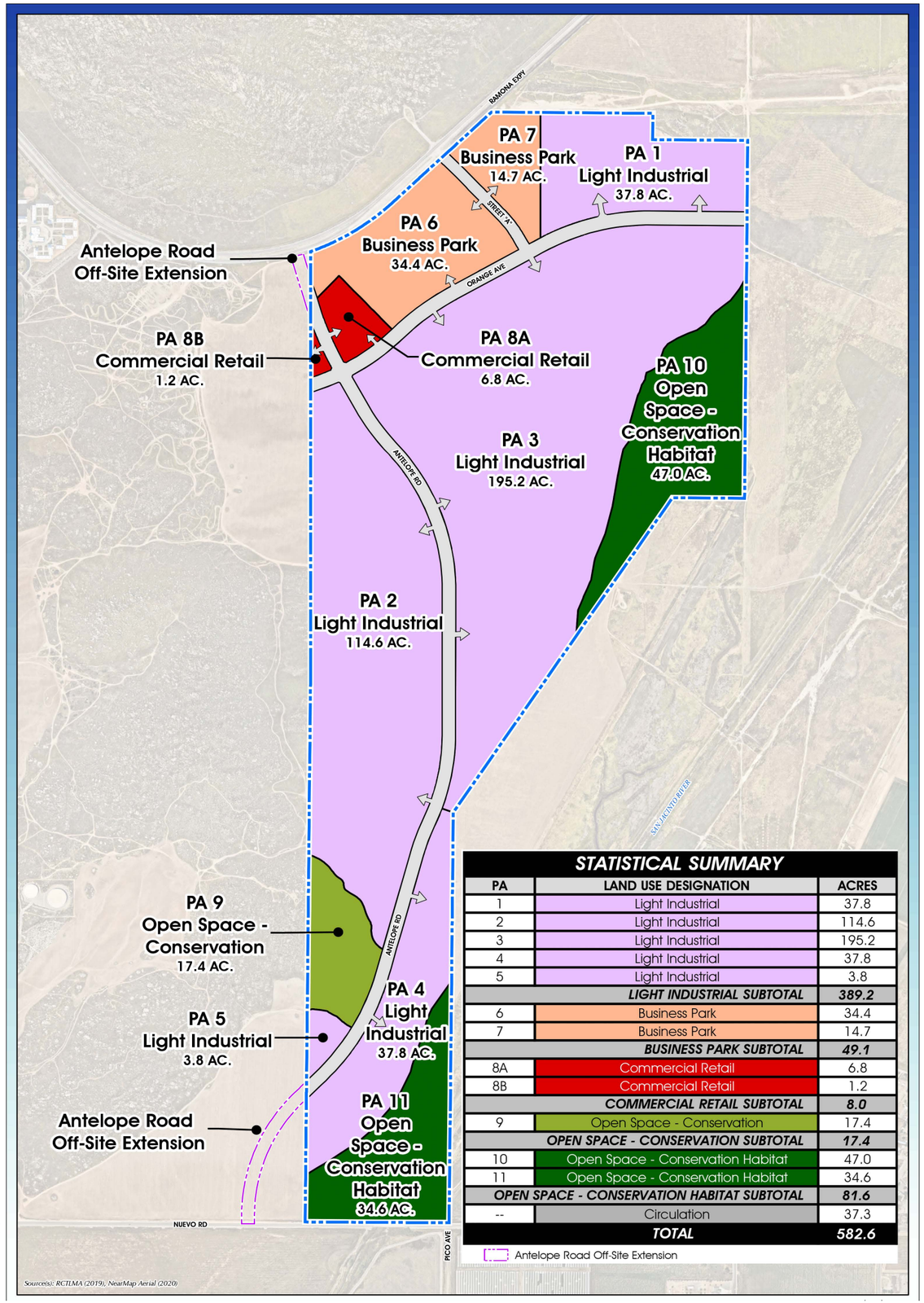
Map Date: 7/10/2019

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 1. Project Vicinity

2019-075 Stoneridge



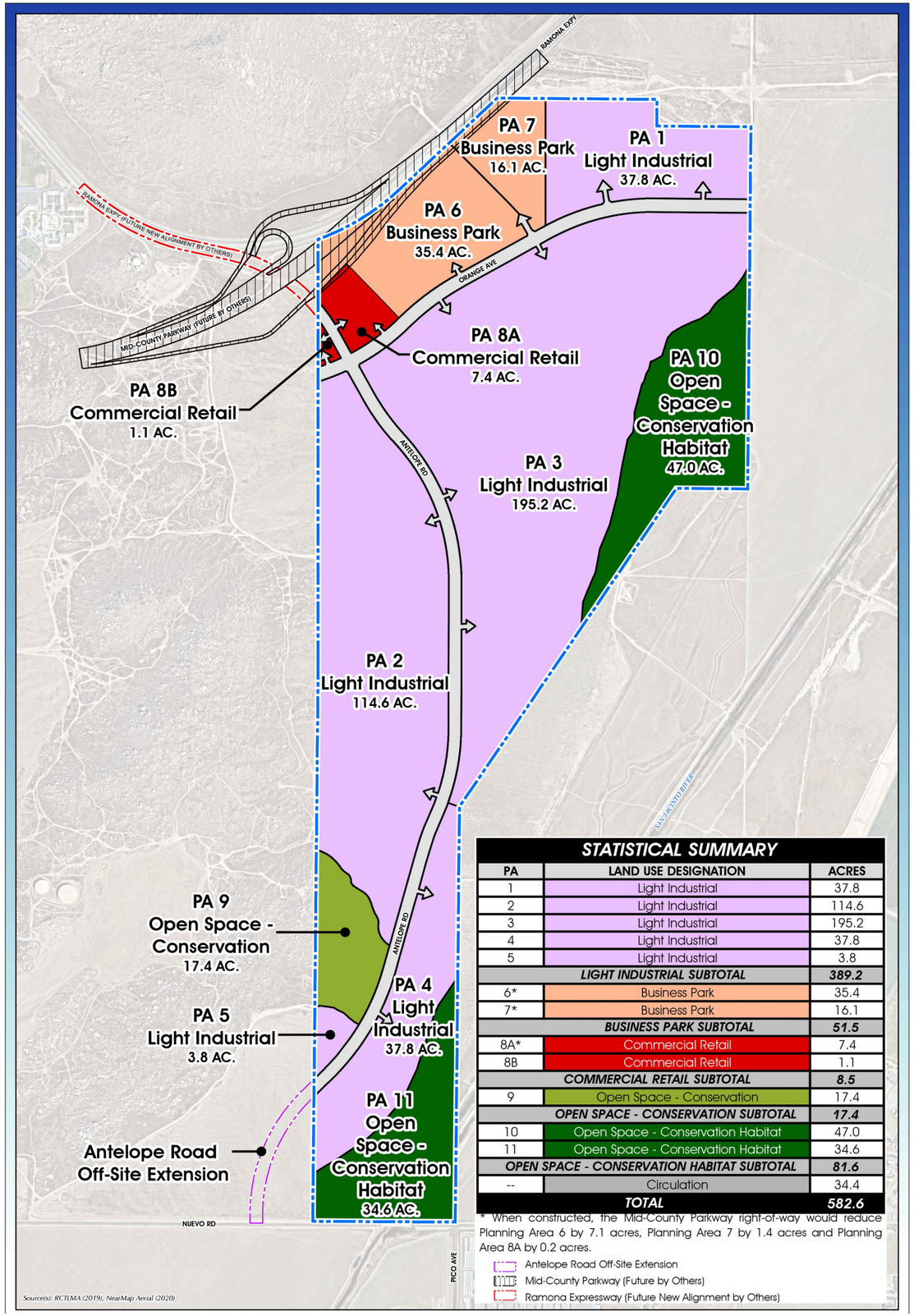
STATISTICAL SUMMARY		
PA	LAND USE DESIGNATION	ACRES
1	Light Industrial	37.8
2	Light Industrial	114.6
3	Light Industrial	195.2
4	Light Industrial	37.8
5	Light Industrial	3.8
	LIGHT INDUSTRIAL SUBTOTAL	***389.2***
6	Business Park	34.4
7	Business Park	14.7
	BUSINESS PARK SUBTOTAL	***49.1***
8A	Commercial Retail	6.8
8B	Commercial Retail	1.2
	COMMERCIAL RETAIL SUBTOTAL	***8.0***
9	Open Space - Conservation	17.4
	OPEN SPACE - CONSERVATION SUBTOTAL	***17.4***
10	Open Space - Conservation Habitat	47.0
11	Open Space - Conservation Habitat	34.6
	OPEN SPACE - CONSERVATION HABITAT SUBTOTAL	***81.6***
--	Circulation	37.3
	TOTAL	***582.6***

Antelope Road Off-Site Extension

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Map Date: *7/7/2020*
Photo (or Base) Source: *T&N Planning 2020*

Figure 2. Primary Land Use Plan



STATISTICAL SUMMARY		
PA	LAND USE DESIGNATION	ACRES
1	Light Industrial	37.8
2	Light Industrial	114.6
3	Light Industrial	195.2
4	Light Industrial	37.8
5	Light Industrial	3.8
	LIGHT INDUSTRIAL SUBTOTAL	***389.2***
6*	Business Park	35.4
7*	Business Park	16.1
	BUSINESS PARK SUBTOTAL	***51.5***
8A*	Commercial Retail	7.4
8B	Commercial Retail	1.1
	COMMERCIAL RETAIL SUBTOTAL	***8.5***
9	Open Space - Conservation	17.4
	OPEN SPACE - CONSERVATION SUBTOTAL	***17.4***
10	Open Space - Conservation Habitat	47.0
11	Open Space - Conservation Habitat	34.6
	OPEN SPACE - CONSERVATION HABITAT SUBTOTAL	***81.6***
--	Circulation	34.4
	TOTAL	***582.6***

* When constructed, the Mid-County Parkway right-of-way would reduce Planning Area 6 by 7.1 acres, Planning Area 7 by 1.4 acres and Planning Area 8A by 0.2 acres.

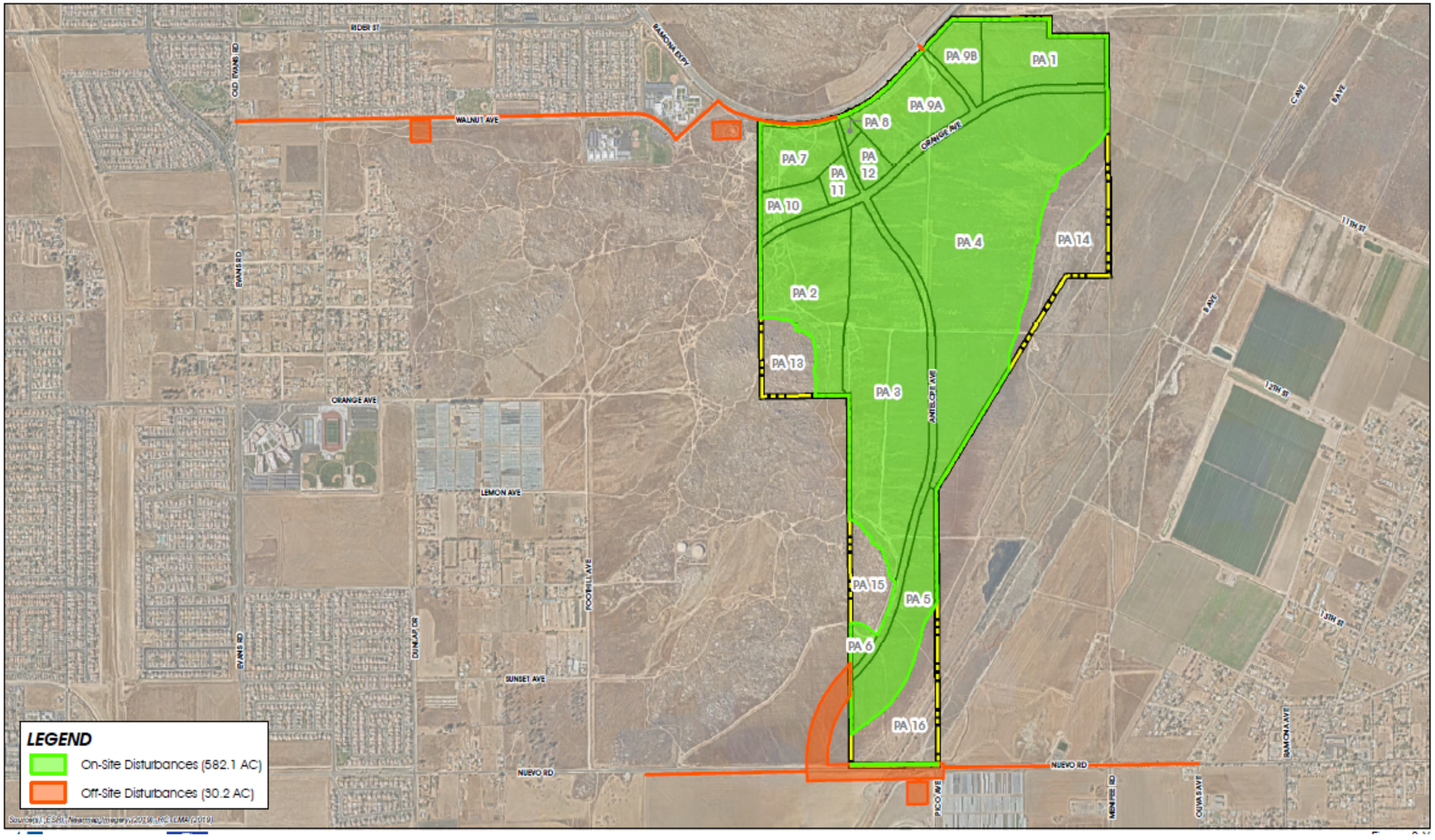
Antelope Road Off-Site Extension
Mid-County Parkway (Future by Others)
Ramona Expressway (Future New Alignment by Others)

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Map Date: *7/7/2020*
Photo (or Base) Source: *T&N Planning 2020*

Figure 3. Alternative Land Use Plan

2019-075 Stoneridge Commerce Center Specific Plan



Map Date: *7/7/2020*
Photo (or Base) Source: *T&B Planning 2020*

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 4. Offsite Infrastructure

2.0 AIR QUALITY

2.1 Air Quality Setting

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the South Coast Air Basin (SoCAB), which encompasses the Project site, pursuant to the regulatory authority of the SCAQMD.

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following section describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project area.

2.1.1 South Coast Air Basin

CARB divides the state into air basins that share similar meteorological and topographical features. The Project site lies in the SoCAB, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter (SCAQMD 1993).

Temperature and Precipitation

The air basin is part of a semi-permanent high-pressure zone in the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The annual average temperature varies little throughout the 6,645-square-mile SoCAB, ranging from the low 60s to the high 80s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas (SCAQMD 1993).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all annual rains fall between November and April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains.

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent, and low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 1993).

Wind

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

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

The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 1993).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, two similarly distinct types of temperature inversions control the vertical depth through which pollutants are mixed. These inversions are the marine/subsidence inversion and the radiation inversion. The height of the base of the inversion at any given time is known as the "mixing height." The combination of winds and inversions is a critical determinant leading to highly degraded air quality in the summer and generally good air quality in the winter in Riverside County (SCAQMD 1993).

2.1.2 Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O_3), coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1.

Table 2-1. Criteria Air Pollutants- Summary of Common Sources and Effects

Pollutant	Major Manmade Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	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.
NO_2	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O_3	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N_2O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	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.
PM_{10} & $PM_{2.5}$	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	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).
SO_2	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: California Air Pollution Control Officers Association (CAPCOA 2013)

Carbon Monoxide

CO, in the urban environment, is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances (i.e., up to 600 feet or 185 meters) of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the SoCAB are in compliance with the state and federal one- and eight-hour standards.

Nitrogen Oxides

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides (NOx). Motor vehicle emissions are the main source of NOx in urban areas. NO_x is very toxic to animals and humans because of its ability to form nitric acid with water in

the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO_x increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of NO_x, such as NO and NO_2, attribute to the formation of O_3 and $PM_{2.5}$. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

Ozone

O_3 is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or ROG and NO_x undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NOx forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level O_3 to form. Ground-level O_3 is the primary constituent of smog. Because O_3 formation occurs over extended periods of time, both O_3 and its precursors are transported by wind and high O_3 concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when O_3 levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O_3 exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

Particulate Matter

Particulate matter includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM_{10}) and smaller than or equal to 2.5 microns in diameter ($PM_{2.5}$). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM_{10} is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM_{10} generally settles out of the atmosphere rapidly and is not readily transported over large distances. $PM_{2.5}$ is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO_x, sulfur oxides (SOx) and VOCs. $PM_{2.5}$ can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high $PM_{2.5}$ and PM_{10} levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease. According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM_{10} and $PM_{2.5}$. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM_{10} and

$PM_{2.5}$. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

2.1.3 Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Additionally, diesel engines emit a complex mixture of air pollutants composed of gaseous and solid material. The solid emissions in diesel exhaust are known as diesel particulate matter (DPM). In 1998, California identified DPM as a TAC based on its potential to cause cancer, premature death, and other health problems (e.g., asthma attacks and other respiratory symptoms). Those most vulnerable are children (whose lungs are still developing) and the elderly (who may have other serious health problems). Overall, diesel engine emissions are responsible for the majority of California's known cancer risk from outdoor air pollutants. Diesel engines also contribute to California's $PM_{2.5}$ air quality problems. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

Diesel Exhaust

Most recently, CARB identified DPM as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine (USEPA 2002). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

2.1.4 Ambient Air Quality

Ambient air quality at the Project site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout

California. The Perris (237 ½ North D Street, Perris) air quality monitoring station, located approximately 3.5 miles southwest of the Specific Plan area, is the closest station to the site. The Perris monitoring station monitors ambient concentrations of O_3 and PM_{10}, two of the three pollutants in nonattainment of air quality standards in the Project region. $PM_{2.5}$ ambient concentrations are monitored at the Riverside – Rubidoux (5888 Mission Boulevard, Riverside) air quality monitoring station, located approximately 18.4 miles northwest of the Specific Plan area. NO_2 and CO concentrations are monitored at the air basin level. Ambient emission concentrations will vary due to localized variations in emission sources and climate and should be considered "generally" representative of ambient concentrations in the development area.

Table 2-2 summarizes the published data concerning O_3, $PM_{10,}$ and $PM_{2.5}$ since 2016 from the Perris monitoring station and Riverside – Rubidoux monitoring station for each year that the monitoring data is provided. O_3, PM_{10} and $PM_{2.5}$ are the pollutant species most potently affecting the Project region. Table 2-2 also summarizes the published data concerning NO_2 and CO.

Table 2-2. Summary of Ambient Air Quality Data

Pollutant Standards	2017	2018	2019
O_3			
Max 1-hour concentration (ppm)	0.120	0.117	0.118
Max 8-hour concentration (ppm) (state/federal)	0.106 / 0.105	0.103 / 0.103	0.096 / 0.095
Number of days above 1-hour standard (state/federal)	33 / 0	31 / 0	28 / 0
Number of days above 8-hour standard (state/federal)	86 / 80	68 / 67	66 / 64
NO_2			
Max 1-hour concentration (ppb) (state/federal)	65.0 / 65.1	55.0 / 55.4	56.0 / 56.0
Number of days above 1-hour standard (state/federal)	0 / 0	0 / 0	0 / 0
CO			
Max concentration (ppm) (state/federal)	3.58 / 3.58	4.67 / 4.67	3.96 / 3.96
Number of days above standard (state/federal)	0 / 0	0 / 0	0 / 0
PM_{10}			
Max 24-hour concentration (µg/m3) (state/federal)	75.4 / 75.4	64.4 / 64.4	92.1 / 97.0
Number of days above 24-hour standard (state/federal)	68.7 / 0	12.1 / 0	24.5 / 0
$PM_{2.5}$			
Max 24-hour concentration (µg/m3) (state/federal)	50.3 / 50.3	68.3 / 66.3	57.6 / 55.7
Number of days above federal 24-hour standard	7.2	3.1	5.2

Source: CARB 2020
CO values are specific to the years 2010, 2011, and 2012, the latest available data for the South Coast Air Basin.
µg/m3 = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion
* = Insufficient data available

The USEPA and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the SoCAB is included in Table 2-3.

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, PM_{10}, and $PM_{2.5}$ (CARB 2018).

Table 2-3. Attainment Status of Criteria Pollutants in the Western Riverside County Portion of South Coast Air Basin

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment

Source: CARB 2018

2.1.5 Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The nearest existing noise-sensitive land uses to the Project site are Lakeside Middle School and Sierra Vista Elementary School to the west of the northern portion of the site, with a residential development beyond. Lakeside Middle School is located closest to the Project site boundary approximately 2,000 feet

(0.4 miles) to the west. The installation of the proposed offsite water line would occur south of the Middle School, largely within the Walnut Avenue right-of-way.

It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary.

2.2 Regulatory Framework

2.2.1 Federal

Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants. On April 2, 2007, the Supreme Court found that carbon dioxide (CO_2) is an air pollutant covered by the CAA; however, no NAAQS have been established for CO_2.

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

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 lists the federal attainment status of the SoCAB for the criteria pollutants.

2.2.2 State

California Clean Air Act

The California Clean Air Act (CCAA) allows the State to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency (CalEPA), is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. The 2016 Air Quality Management Plan (2016 AQMP) is the SIP for the SoCAB. The 2016 AQMP is a regional blueprint for achieving air quality standards and healthful air in the SoCAB and those portions of the Salton Sea Air Basin that are under SCAQMD's jurisdiction. The 2016 AQMP represents a new approach, focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts is to reduce emissions from mobile sources. The AQMP relies on a regional and multi-level partnership of governmental agencies at the federal, state, regional, and local levels. These agencies (USEPA, CARB, local governments, Southern California Association of Governments [SCAG] and the SCAQMD) are the primary agencies that implement the AQMP programs. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including SCAG's latest Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. The 2016 AQMP includes integrated strategies and measures to meet the NAAQS. The current status of the SIPs for the SoCAB's nonattainment pollutants are shown below:

- On November 28, 2007, CARB submitted a SIP revision to the USEPA for O_3, $PM_{2.5}$ (1997 Standard), CO, and NO_2 in the SoCAB. This revision is identified as the "2007 South Coast SIP". The 2007 South Coast SIP demonstrates attainment of the federal $PM_{2.5}$ standard in the SoCAB by 2014 and attainment of the federal eight-hour O_3 standard by 2023. This SIP also includes a request to reclassify the O_3 attainment designation from "severe" to "extreme". The USEPA approved the redesignation effective June 4, 2010. The "extreme" designation requires the attainment of the eight-hour O_3 standard in the SoCAB by June 2024. CARB approved $PM_{2.5}$ SIP revisions in April 2011 and the O_3 SIP revisions in July 2011. The USEPA approved the $PM_{2.5}$ SIP in 2013 and has approved 46 of the 61 1997 8-hour O_3 SIP requirements (USEPA 2018a). In 2014, the USEPA proposed a finding that the SoCAB has attained the 1997 $PM_{2.5}$ standards. In 2016, the USEPA determined that the SoCAB had attained the 1997 $PM_{2.5}$ standards; however the SoCAB was not redesignated as an attainment area because the USEPA had not approved a maintenance plan and additional requirements under the CAA had not been met (USEPA 2018b).

- In 2012, the SCAQMD adopted the 2012 AQMP, which was a regional and multiagency effort (the SCAQMD, CARB, SCAG, and the USEPA). The primary purposes of the 2012 AQMP were to demonstrate attainment of the federal 24-hour $PM_{2.5}$ standard by 2014 and to update the USEPA-approved 8-hour Ozone Control Plan. In 2012, the 2012 AQMP was submitted to CARB and the USEPA for concurrent review and approval for inclusion in the SIP. The 2012 AQMP was approved by CARB on January 25, 2013.
- In 2017, the SCAQMD adopted the 2016 AQMP. The 2016 AQMP includes strategies and measures to meet the following NAAQS:
    - 2008 8-hour O_3 (75 parts per billion [ppb]) by 2013
    - 2012 Annual $PM_{2.5}$ (12 µg/m^3) by 2025
    - 1997 8-hour O_3 (80 ppb) by 2023
    - 1979 1-hour O_3 (120 ppb) by 2022
    - 2006 24-hour $PM_{2.5}$ (35 µg/m^3) by 2019

Tanner Air Toxics Act & Air Toxics "Hot Spots" Information and Assessment Act

CARB's Statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by Senate Bill (SB) 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Mobile Source Strategy

In 2016 CARB released the update to the Mobile Source Strategy (Strategy). This demonstrates how the state will meet air quality standards, achieve GHG emission reduction targets, decrease health risks from transportation emissions, and reduce petroleum consumption over the next 15 years. This includes engine technology that is effectively 90 percent cleaner than today's current standards, with clean, renewable fuels comprising half the fuels burned.

The strategy also relies on the increased use of renewable fuels to ensure that air pollutant reductions are achieved while meeting the ongoing demand for liquid and gaseous fuels in applications where combustion technologies remain, including in heavy-duty trucks and equipment and light-duty hybrid vehicles. The estimated benefits of the Mobile Source Strategy in reducing emissions from mobile sources includes an 80 percent reduction of O_3-forming emissions (ROG and NOx), and a 45 percent reduction in DPM emissions in the SoCAB from current levels. Statewide, the Strategy would also result in a 45 percent reduction of GHG emissions and a 50 percent reduction in the consumption of petroleum-based fuels.

Governor's Sustainable Freight Action Plan

Under the Governor's Sustainable Freight Action Plan strategy, CARB is working with agency partners and stakeholders to implement a broad program that includes regulations, incentives, and policies designed to support the transformation to a more sustainable freight system and reduce community impacts from freight operations in California. The Governor's Sustainable Freight Action Plan identifies strategies and actions to achieve a sustainable freight transportation system that meets California's environmental, energy, mobility, safety and economic needs. The plan also identifies and initiates corridor-level freight pilot projects within the state's primary trade corridors that integrate advanced technologies, alternative fuels, freight and fuel infrastructure and local economic development opportunities. The plan seeks to improve the state freight system efficiency 25 percent by "increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030" as well as to deploy over 100,000 zero-emission freight vehicles and equipment and maximizing near-zero equipment and equipment powered by renewable energy by 2030.

Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (Risk Reduction Plan) in October 2000. The Risk Reduction Plan's goals include an 85 percent reduction in DPM by 2020 from the 2000 baseline (CARB 2000). The Risk Reduction Plan includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

In 2008, CARB approved the Truck and Bus Regulation to significantly reduce PM and NO_X emissions from existing diesel vehicles operating in California. The regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavier trucks had to be retrofitted with PM filters beginning January 1, 2012, and older trucks had to be replaced by January 1, 2015. By January1, 2023, nearly all trucks and buses will need to have 2010-model-year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks by reporting and there are a number of extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of CARB's ATCM *to Limit Diesel-Fueled Commercial Motor Vehicle Idling* is to reduce public exposure to DPM and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles.[1] The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

CARB Final Regulation Order, *Requirements to Reduce Idling Emissions from New and In-Use Trucks*, beginning in 2008, requires that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged.

2.2.3 Local

South Coast Air Quality Management District

The SCAQMD is the air pollution control agency for Orange County and the urban portions of Los Angeles, Riverside, and San Bernardino counties, including the Project site. The agency's primary responsibility is ensuring that the NAAQS and CAAQS are attained and maintained in the SoCAB. The SCAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the Proposed Project:

- **Rule 201 & Rule 203 (Permit to Construct & Permit to Operate)** – Rule 201 requires a "Permit to Construct" prior to the installation of any equipment "the use of which may cause the issuance of air contaminants . . ." and Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate.
- **Rule 402 (Nuisance)** – This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a

[1] *The ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is codified in Title 13 of the* CCR*, Chapter 10, § 2485.*

natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403 (Fugitive Dust)** – This rule requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

  a) Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
  b) All onsite roads will be paved as soon as feasible or watered periodically or chemically stabilized.
  c) All material transported offsite will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
  d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
  e) Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 1113 (Architectural Coatings)** – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

- **Rule 1401** (**New Source Review of Toxic Air Contaminants**) – This rule requires new source review of any new, relocated, or modified permit units that emit TACs. The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

Additionally, the SCAQMD has adopted the Air Toxics Control Plan (March 2000, revised March 26, 2004), which is a planning document designed to examine the overall direction of the SCAQMD's air toxics control program. It includes development and implementation of strategic initiatives to monitor and control air toxics emissions. Control strategies that are deemed viable and are within the SCAQMD's jurisdiction will each be brought to the SCAQMD Board for further consideration through the normal public review process. Strategies that are to be implemented by other agencies will be developed in a cooperative effort, and the progress will be reported back to the Board periodically.

The SCAQMD has conducted an in-depth analysis of the TACs and their resulting health risks for all of Southern California. This study, the Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV," shows that cancer risk has decreased more than 50 percent between MATES III (2008a) and MATES IV (2015). MATES IV is the most comprehensive dataset documenting the ambient air toxic levels and health risks associated with the SoCAB emissions. The SCAQMD is currently in the process of developing MATES V. The MATES IV study represents the baseline health risk for a cumulative analysis. MATES IV estimates the average excess cancer risk level from exposure to TACs is less than 400 in one

million basin-wide. These model estimates were based on monitoring data collected at 10 fixed sites within the SoCAB. None of the fixed monitoring sites are within the local area of the Project site. However, MATES IV has extrapolated the excess cancer risk levels throughout the basin by modeling the specific grids. MATES IV modeling predicted an excess cancer risk of 427 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68 percent of the total risk shown in MATES-IV.

County of Riverside General Plan Air Quality Element

The County General Plan Air Quality Element identifies goals, policies and programs that are meant to balance the County's actions regarding land use, circulation and other issues with their potential effects on air quality. The Air Quality Element addresses ambient air quality standards set forth by the USEPA and CARB. The Air Quality Element contains policies designed to establish a regional basis for improving air quality. The following relevant and applicable policies from the County's Air Quality Element have been identified for the Project:

AQ 1.1: Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.

AQ 1.4: Coordinate with the SCAQMD and MDAQMD to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.

AQ 2.1: The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.

AQ 2.2: Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.

AQ 2.3: Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.

AQ 3.1: Allow the market place, as much as possible, to determine the most economical approach to relieve congestion and cut emissions.

AQ 3.3: Encourage large employers and commercial/industrial complexes to create Transportation Management Associations.

AQ 4.1: Require the use of all feasible building materials/methods which reduce emissions.

AQ 4.2: Require the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.

AQ 4.6: Require stationary air pollution sources to comply with applicable air district rules and control measures.

AQ 4.7: To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions as established by the SCAQMD, MDAQMD, SCAB, the Environmental Protection Agency and the California Air Resources Board.

AQ 4.9: Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.

County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses

The logistics industry is a well-established sector of the Riverside County economy that has contributed to local job growth, fueled by societal growth trends in e-commerce and coupled with our strategic location along a major trade corridor that connects to the Ports of Los Angeles and Long Beach. It is expected that Riverside County will continue to see strong demand for growth in the logistics industry. However, it is also recognized that the construction and operations of logistics and warehouse projects in close proximity to residences or other sensitive land uses may negatively affect the quality of life of those existing communities. The County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses provides a framework through which large-scale logistics and warehouse projects, such as that proposed by the Project, can be designed and operated in a way that lessens their impact on surrounding communities and the environment. It is meant to apply Best Management Practices to help minimize potential impacts to sensitive receptors and is intended to be used in conjunction with the County's Land Use Ordinance, which provides development requirements for said projects, and the California Environmental Quality Act (CEQA). This policy provides a series of development and operational criteria applicable to logistics and warehouse projects that include any building larger than 250,000 square feet in size that are implemented to supplement project-level mitigation measures in order to further reduce impacts related to logistics and warehousing development and operations. The specific policy provisions germane to the Project include the following:

1.1 An "Air Quality" study shall be prepared in accordance with the Air Quality Management District (AQMD) guidelines.

1.2 A "Health Risk Assessment" shall be prepared when a proposed warehouse/distribution facility is located within 1,000 feet of a sensitive receptor, in accordance with AQMD guidelines.

2.1 During construction of the warehouse/distribution facility, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards.

2.2 All excavators, graders, rubber-tired dozers, and similar "off-road" construction equipment shall be CARB Tier 3 Certified engines or better.

2.3 The maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day.

2.4 Construction contractors shall utilize construction equipment, with properly operating and maintained mufflers, consistent with manufacturers' standards.

2.6 The surrounding streets shall be swept on a regular basis to remove any construction related debris and dirt.

2.7 Appropriate dust control measures that meet the SCAQMD standards shall be implemented for grading and construction activity.

2.8 Construction equipment maintenance records and data sheets, which includes equipment design specifications and equipment emission control tier classifications, as well as any other records necessary to verify compliance with items 2.1-2.7 above, shall be kept onsite and furnished to the County upon request.

2.9 Construction Contractors shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.

3.2 Warehouse/distribution facilities should be generally designed so that truck bays and loading docks are a minimum of 300 feet away from the property line of sensitive receptors, measured from the dock building door. This distance may be reduced if the site design includes berms or other similar features to appropriately shield and buffer the sensitive receptors from the active truck operations areas. Other setbacks appropriate to the site's zoning classification shall be incorporated in the design.

3.3 Warehouse/distribution facilities shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from sensitive receptors. The general queuing and spill-over of trucks onto surrounding public streets shall be prevented. Commercial trucks shall not be parked in the public road right-of-way or nearby residential areas.

3.4 Driveways shall be placed, to the maximum extent practicable, on streets that do not have fronting sensitive receptors adjacent.

3.5 Sites shall clearly mark entry and exit points for trucks and service vehicles.

3.6 Sites shall be densely screened with landscaping along all bordering streets and adjacent sensitive receptors, with trees spaced at no less than 50 feet on center. Fifty percent of the landscape screening shall include a minimum of 36-inch box trees. Facility operators will be responsible to establish a long-term maintenance mechanism to assure that the landscaping remains in place and functional in accordance with the approved landscaping plan.

3.8 Dock doors shall be located where they are not readily visible from sensitive receptors or major roads. If it is necessary to site dock doors where they may be visible, a method to screen the dock doors shall be implemented. A combination of landscaping, berms, walls, and similar features shall be considered.

4.1 Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty Trucks ("HHD") accessing the site use year CARB 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the County.

4.2 Facility operators shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.

4.3 Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

4.4 Facility operators shall coordinate with CARB and SCAQMD to obtain the latest information about regional air quality concentrations, health risks, and trucking regulations.

5.1 Signs should be posted in the appropriate locations that trucks should not idle for more than five (5) minutes and that truck drivers should turn off their engines when not in use.

5.2 Signs should be posted in the appropriate locations that clearly show the designated entry and exit points for trucks and service vehicles.

5.3 Signs should be posted in the appropriate locations that state parking and maintenance of all trucks is to be conducted within designated areas and not within the surrounding community or on public streets.

5.4 Signs should be posted in the appropriate locations and/or handouts should be provided that show the locations of nearest food options, fueling, truck maintenance services, and other similar convenience services, if these services are not available onsite.

5.5 Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information should be provided to the County and updated annually, and signs should be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community.

6.3 Given the potential for community impacts related to the construction and operation of logistics and warehouse facilities, the applicant for any new facility may be required to provide a supplemental funding contribution, which would be applied to further off-set potential air quality impacts to the community and provide a community benefit above and beyond any CEQA related mitigation measures. Said financial contribution would generally be determined by the Transportation and Land Management Agency based on the level of NOx emissions generated by the project that exceeds the regional NOx significance thresholds established by the appropriate AQMD. Said supplemental funding contribution will be collected on a one-time basis. Funds collected under said supplemental funding program will be subject to designation for use by the Board of Supervisors and will generally be used for projects that directly benefit the impacted community wherein the project is located. The types of projects that the Board of Supervisors may designate for use of these funds include, but are not limited to:

- Projects that directly offset NOx reductions above and beyond what is required by existing air quality regulations;
- Projects that generally improve air quality such as paving of dirt roads, installation of additional trees and landscaping;
- Projects that provide an enhanced buffer between the new facility and sensitive receptors; and

- Projects that lead to reduced emissions by promoting alternate forms of transportation such as bicycle lanes, new sidewalks, bus turnouts, or other transit-related uses.

2.3 Air Quality Emissions Impact Assessment

2.3.1 Thresholds of Significance

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would do any of the following:

1) Conflict with or obstruct implementation of any applicable air quality plan.

2) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

3) Expose sensitive receptors to substantial pollutant concentrations.

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

SCAQMD Regional Thresholds

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make the above determinations. According to the SCAQMD, an air quality impact is considered significant if the Proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SCAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown in Table 2-4.

Table 2-4. SCAQMD Regional Significance Thresholds – Pounds per Day

Air Pollutant	Construction Activities	Operations
Reactive Organic Gas	75	55
Carbon Monoxide	550	550
Nitrogen Oxide	100	55
Sulfur Oxide	150	150
Coarse Particulate Matter	150	150
Fine Particulate Matter	55	55

Source: SCAQMD 1993 ($PM_{2.5}$ threshold adopted June 1, 2007)

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Localized Significance Thresholds

In addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs represent the maximum emissions that can be generated at a Project site without expecting to cause or substantially contribute to an exceedance of the most stringent national or state ambient air quality standards. LSTs are based on the ambient concentrations of that pollutant within the Project source receptor area (SRA), as demarcated by the SCAQMD, and the distance to the nearest sensitive receptor. LST analysis for construction is applicable for all projects that disturb five acres or less on a single day. The Specific Plan is located within SCAQMD SRA 24 (Perris Valley). Table 2-5 shows the LSTs for a one-acre, two-acre, and five-acre project site in SRA 24 with sensitive receptors located within 25 meters of the Project site (as previously described, the nearest sensitive receptor is Lakeside Middle School, located approximately 2,000 feet (610 meters) to the west. However, the installation of the proposed offsite water line would occur just south of the Middle School, largely within the Walnut Avenue right-of-way. It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary).

Table 2-5. Local Significance Thresholds at or within 25 Meters of a Sensitive Receptor

Project Size	Pollutant (pounds per day Construction/Operations)			
	NO_2	CO	PM_{10}	$PM_{2.5}$
1 Acre	118 / 118	602 / 602	4 / 1	3 / 1
2 Acres	170 / 170	883 / 883	7 / 2	4 / 1
5 Acres	270 / 270	1,577 / 1,577	13 / 4	8 / 2

Source: SCAQMD 2009

Toxic Air Contaminant Thresholds

The SCAQMD regulates levels of air toxics through a permitting process that covers both construction and operation. The SCAQMD has adopted Rule 1401 for both new and modified sources that use materials classified as air toxics. The SCAQMD CEQA Guidelines for permit processing consider the following types of projects significant:

- Any project involving the emission of a carcinogenic or toxic air contaminant identified in SCAQMD Rule 1401 that exceeds the maximum individual cancer risk of 10 in one million if the project is constructed with best available control strategy for toxics (T-BACT) using the procedures in SCAQMD Rule 1401.

- Any project that could accidentally release an acutely hazardous material or routinely release a toxic air contaminant posing an acute health hazard above an acute or chronic hazard index of 1.0.

2.3.2 Methodology

Air quality impacts were assessed in accordance with methodologies recommended by the County of Riverside General Plan and the SCAQMD. Onsite construction-related (including worker commutes and vendors), area source, and energy source emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2016.3.2 for both the Primary Land Use Plan and Alternative Land Use Plan. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Construction haul truck emissions and operational mobile source emissions under both the Primary Land Use Plan and Alternative Land Use Plan are calculated with the 2017 version of the EMission FACtor model (EMFAC) developed by CARB. EMFAC 2017 is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to estimate changes in future emissions from on-road mobile sources. The most recent version of this model, EMFAC 2017, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled by speed, and number of starts per day. The most important improvement in EMFAC 2017 is the integration of the new data and methods to estimate emissions from diesel trucks and buses. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment.

Construction-generated air pollutant emissions under both the Primary Land Use Plan and Alternative Land Use Plan, including proposed offsite improvements spanning 31.4 acres, were primarily calculated using CalEEMod model defaults for Riverside County. The Project is required to implement SCAQMD Rule 403. As previously stated, Rule 403 requires fugitive dust sources to implement best available control measures for all sources, and all forms of visible PM are prohibited from crossing any property line. SCAQMD-identified best available control measures that are able to be applied in CalEEMod include sweeping/cleaning adjacent roadway access areas daily, washing equipment tires before leaving the construction site, water exposed surfaces three times daily, and limit speeds on unpaved roads to 15 miles per hour (mph). Since CalEEMod does not differentiate between required best available control measures and mitigation measures, these applied Rule 403 activities are incorporated into the CalEEMod mitigation module. Additionally, off-road construction equipment was modeled as CARB Tier 3 Certified engines and all on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with the requirements of the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses (also see Mitigation Measure AQ-1 below).

Emissions from blasting, which would occur with implementation of either the Primary Land Use Plan or Alternative Land Use Plan, were calculated based on the USEPA AP-42 Compilation of Air Emissions Factors (1998; 1980). It is noted that the USEPA AP-42 emissions factors for explosives are based on studies conducted between 22 and 40 years ago. However, no updated emission factors from blasting explosives are available. In addition, PM_{10} and $PM_{2.5}$ emissions factors are derived from methods for blasting at western surface coal mines; thus, these emission factors may overestimate the emissions from blasting hard rock. As previously described, construction would require blasting in order to remove non-ripple materials at an area off the Project site, between the northwest corner of the Project site and Lakeside Middle School (approximately 620 feet from the Middle School). Operational air pollutant emissions for both land use scenarios were based on the Project site plans and the estimated traffic trip generation rates and Project fleet mix from Urban Crossroads (2020).

Additionally, construction related DPM concentrations and associated dispersion generated from both off-road equipment and construction haul trucks, which are expected to haul 68,877 cubic yards of blasted rock material offsite under either the Primary Land Use Plan or Alternative Land Use Plan, were modeled using the USEPA's AERMOD air toxic dispersion model. AERMOD is a steady-state plume model that incorporates air dispersion based on planetary boundary layer turbulence structure and scaling concepts, including treatment of both surface and elevated sources, and both simple and complex terrain. The resultant concentration values at vicinity sensitive receptors were then used to calculate chronic and carcinogenic health risk using the standardized equations contained in the California Office of Environmental Health Hazard Assessment's (OEHHA) Guidance Manual for Preparation of Health Risk Assessments (2015). Similarly, DPM concentrations and dispersion generated during Project operations from heavy-duty delivery trucks were modeled using the USEPA's AERMOD air toxic dispersion model for both the Primary Land Use Plan and Alternative Land Use Plan. The resultant concentration values at vicinity sensitive receptors were then used to calculate chronic and carcinogenic health risk using the standardized equations contained in the OEHHA Guidance Manual for Preparation of Health Risk Assessments (2015).

2.3.3 Impact Analysis

Project Construction-Generated Criteria Air Quality Emissions

Regional Construction Significance Analysis

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Four basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, the use of asphalt or other oil-based substances during paving activities, and the application of paint. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation.

As previously described, the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses contains several policy provisions that address air pollutant generated during construction of warehouse/distribution projects proposing building space larger than 250,000 square feet in size. These provisions would apply to the construction of the Project under either the Primary Land Use Plan or Alternative Land Use Plan (also see Mitigation Measure AQ-1 below). For instance, Provision 2.1 states that during construction of the warehouse/distribution facility, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards. Project construction is expected to haul 68,877 cubic yards of blasted rock and soil material offsite and therefore Provision 2.1 would substantially reduce emissions compared with a typical construction project. Provision 2.2 requires that all excavators, graders, rubber-tired dozers, and similar "off-road" construction equipment shall be CARB Tier 3 Certified engines or better, and Provision 2.3 mandates that the maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day. Provision 2.6 of the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses requires surrounding streets be swept on a regular basis to remove any construction related debris and dirt, and 2.7 further requires dust control measures that meet the SCAQMD standards be implemented for grading and construction activity. Construction equipment maintenance records and data sheets, which includes equipment design specifications and equipment emission control tier classifications, as well as any other records necessary to verify compliance with Provisions 2.1-2.7 above, shall be kept onsite and furnished to the County upon request per Provision 2.8. Also, Provision 2.9 states that construction contractors prohibit truck drivers from idling more than five minutes and require operators to turn off engines when not in use, in compliance with CARB regulations. Lastly, Provision 5.5 institutes that each proposed facility designate a Compliance Officer responsible for implementing the measures described herein and/or in the Project conditions of approval and mitigation measures. Contact information must be provided to the County and updated annually, and signs should be posted in visible locations providing the contact information of the Compliance Officer to the surrounding community.

Per Provision 2.7, construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities. As required by Provision 2.2, all off-road construction equipment shall be CARB Tier 3 Certified engines or better. The first federal standards (Tier 1) for new off-road diesel engines were adopted in 1994 for engines over 50 horsepower and were phased in from 1996 to 2000. In 1996, a Statement of Principles pertaining to off-road diesel engines was signed between the USEPA, CARB, and engine makers (including Caterpillar, Cummins, Deere, Detroit Diesel, Deutz, Isuzu, Komatsu, Kubota, Mitsubishi, Navistar, New Holland, WisCon, and Yanmar). On August 27, 1998, the EPA signed the final rule reflecting the provisions of the Statement of Principles. The 1998 regulation introduced Tier 1 standards for equipment under 50 horsepower and increasingly more stringent Tier 2 and Tier 3 standards for all equipment with phase-in schedules from 2000 to 2008. As a result, all off-road, diesel-fueled construction equipment manufactured in 2006 or later has been manufactured to Tier 3 standards. The Tier 3 standards can reduce NOx and PM emissions by as much as 64 and 39 percent, respectively. By requiring the use of Tier 3 construction

equipment used during construction would substantially reduce temporary NO_x and PM emissions impacts generated during Project construction.

Construction-generated emissions associated with each the Primary Land Use Plan and Alternative Land Use Plan were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. The duration of construction has been adjusted to reflect a start date in the summer of 2021 and an anticipated opening year in the year 2030. The CalEEMod model defaults for the number of construction equipment employed was doubled for all construction phases with accelerated timelines. Construction–generated emissions were calculated to account for the construction of the entire Specific Plan simultaneously in order to identify the worst-case construction emissions potential. However, the actual construction of the Project site would be dependent on several factors, including timing of Project approvals, market conditions, and/or Project funding. As such, this analysis accounts for minor modifications as Project plans evolve from conceptual planning to final mapping. If construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover. Construction haul truck emissions are calculated separately with EMFAC2017. Emissions from haul trucks contributes to air pollution for the first three years of construction. Emissions from blasting were calculated based on the USEPA AP-42 Compilation of Air Emissions Factors (1998; 1980). See Attachment A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Primary Land Use Plan

Predicted maximum daily construction-generated emissions for the Primary Land Use Plan are summarized in Table 2-6. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance.

Table 2-6. Primary Land Use Plan Construction-Related Emissions (Regional Significance Analysis)

Construction Year	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction in 2021 (including material export)	2.05	39.97	47.43	0.08	16.32	9.75
Construction in 2022 (including material export)	3.25	61.80	75.02	0.13	16.32	9.75
Construction in 2023 (including material export)	3.24	61.79	74.92	0.13	9.73	5.52
Construction in 2024	68.29	66.13	85.71	0.18	6.38	4.13
Construction in 2025	67.84	65.95	84.95	0.17	6.38	4.13
Construction in 2026	67.77	65.78	84.30	0.17	6.38	4.13
Construction in 2027	67.71	65.62	83.79	0.17	6.38	4.13
Construction in 2028	67.65	65.48	83.25	0.17	6.38	4.13
Construction in 2029	67.58	65.36	82.79	0.17	6.38	4.13
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. All off-road construction equipment was modeled as CARB Tier 3 Certified engines, consistent with County requirements. All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with County requirements. Building construction, paving, and painting are assumed to occur simultaneously. Construction emissions taken from the season (summer or winter) with the highest output.

As shown in Table 2-6, emissions generated during typical construction under the Primary Land Use Plan, including the implementation of offsite infrastructure that would disturb 31.4 acres of land, would not exceed the SCAQMD's regional thresholds of significance on their own.

Blasting Emissions

Construction would require blasting in order to remove non-ripple materials at an area off the Project site, between the northwest corner of the Project site and Lakeside Middle School. The blasting area would span 1.85 acres and involve an excavation depth of four feet below design grades resulting in approximately 68,877 cubic yards of excavation. The exact duration of blasting activities and anticipated amount of explosive material to be used daily is not known at the time of this analysis. Thus, for the purposes of this analysis, emissions generated from a range of blasting rates is disclosed in Table 2-7.

Table 2-7. Blasting Emissions

Rate of Blasting	Tons of Explosives Denotated Daily	Pollutant (pounds per day)				
		NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
20 Days	1.72	29.27	11.37	3.44	0.07	0.00
15 Days	2.30	39.03	153.83	4.59	0.19	0.01
10 Days	3.44	58.55	230.74	6.89	0.78	0.05
5 Days	6.89	117.09	461.48	13.78	8.83	0.51
3.5 Days	9.84	167.27	659.25	19.68	30.75	1.77

Source: AP-42 Compilation of Air Emissions Factors 1998; 1980. Refer to Attachment A for Model Data Outputs.
Notes: Emission projections are based on varying time spans to blast 68,877 cubic yards of hard rock. The shorter the time span, the more explosives used daily. Emissions from loading and hauling the blasted material offsite are accounted for in Table 2.6, which includes emissions generated from 14 haul truck trips traveling 20 miles per trip each day over the course of three years and a maximum of 4 excavators, 6 dozers, and 8 tractor loaders operating 8 hours per day over the course of site preparation and grading activities.

As shown in Table 2-7, the greater amount of days used to blast 68,877 cubic yards of hard rock generates the least daily emissions. For instance, 20 days of blasting would require the detonation of 1.72 tons of explosives daily over those 20 days while 3.5 days of blasting would require the detonation of 9.84 tons of explosives daily over three days.

Blasting 68,877 cubic yards of hard rock over the course of 10 days has been compared with the amount of daily construction emissions identified in Table 2-7. In comparison to the emissions projected to be generated under typical construction activities as shown in Table 2-6, blasting could be conducted in 10 days (3.44 tons of explosives daily) during the first year of construction without exceeding the SCAQMD significance thresholds of 100 pounds per day of NO_x or 550 pounds per day of CO. However, this rate of blasting conducted in any other year of construction would result in the NO_x threshold being exceeded. Mitigation Measure AQ-1 is recommended in order to ensure the rate of blasting activity is conducted in a manner which daily significance thresholds are not exceeded. Furthermore, Mitigation Measure AQ-1 provides measures to ensure County Good Neighbor Policy provisions are required throughout all future construction of the Specific Plan.

Recommended Mitigation Measure

AQ-1: Prior to the certificate of construction-related permits for each future project in the Specific Plan, the Project Applicant shall demonstrate to the satisfaction of the County of Riverside Planning Department that the following measures would be implemented during Project construction.

- During blasting activities, the construction contractor shall implement all feasible engineering controls to control fugitive dust including exhaust ventilation, blasting cabinets and enclosures, vacuum blasters, drapes, water curtains or wet blasting. Watering methods, such as water sprays and water applications shall be implemented

during blasting or any activity that would release dust particles to reduce fugitive dust emissions.

- Daily blasting activity shall be limited to the use of 1.72 tons of explosives daily.
- All future construction projects in the Specific Plan shall adhere to the germane policy provisions in the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses, whether said project proposes buildings of 250,000 square feet or not. Germane provisions included, but are not limited to, the following:

    1. During construction of any Specific Plan facility, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards.
    2. All excavators, graders, rubber-tired dozers, and similar "off-road" construction equipment shall be CARB Tier 3 Certified engines or better.
    3. The maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day.
    4. Construction contractors shall utilize construction equipment, with properly operating and maintained mufflers, consistent with manufacturers' standards.
    5. The surrounding streets shall be swept on a regular basis to remove any construction related debris and dirt.
    6. Appropriate dust control measures that meet the SCAQMD standards shall be implemented for grading and construction activity.
    7. Construction equipment maintenance records and data sheets, which includes equipment design specifications and equipment emission control tier classifications, as well as any other records necessary to verify compliance with items 1 - 6 above, shall be kept onsite and furnished to the County upon request.
    8. Construction Contractors shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.

Adherence to Mitigation Measure AQ-1 would ensure that development allowed under the Primary Land Use Plan of the Specific Plan would be constructed in a manner that daily pollutants would be generated at levels below SCAQMD significance thresholds. With implementation of Mitigation Measure AQ-1, criteria pollutant emissions generated during construction of the Primary Land Use Plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. Further, since the Project's emissions do not exceed SCAQMD thresholds, no exceedance of the ambient air quality standards would occur, and no regional health effects from Project criteria pollutants would occur.

It is acknowledged however that Project construction would overlap with tenet occupancy and operations of portions of the Specific Plan. In other words, after areas of the Specific Plan are fully constructed and occupied, construction emissions would continue to be emitted while the remainder of the site is constructed, and at the same time as partial operation of the Primary Land Use Plan. For instance, while no phasing plan has been developed, in the event that 50 percent of the Specific Plan is constructed and operating while the remainder of construction is still ongoing, daily emissions could be generated at rates of 148.10 pounds per day ROG, 664.00 pounds per day of NO_x, 1,098.89 pounds per day of CO, 6.86 pounds per day of SO_x, 50.10 pounds per day of PM_{10} and 24.20 pounds per day of $PM_{2.5}$. These values are calculated by adding the daily 2024 construction emissions shown in Table 2-6 (the approximate mid-point of total construction), the daily blasting of 1.72 tons of explosive shown in Table 2-7 (consistent with blasting limitations required by Mitigation Measure AQ-1), and half of the predicted operational emissions shown in Table 2-9 below (to account for 50 percent operations of the Primary Land Use Plan). Nonetheless, as shown in Table 2-4 above, the SCAQMD promulgates thresholds for construction and operations separately.

Alternative Land Use Plan

Predicted maximum daily construction-generated emissions for the Alternative Land Use Plan are summarized in Table 2-8. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SCAQMD's thresholds of significance. As shown, construction emissions under the Alternative Land Use Plan would be slightly lower than those estimated under the Primary Land Use Plan. This is due to the slightly reduced building square footage that would be constructed under the Alternative Land Use Plan.

Table 2-8. Alternative Land Use Plan Construction-Related Emissions (Regional Significance Analysis)

Construction Year	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Construction in 2021 (including material export)	1.97	39.92	46.80	0.08	16.19	9.71
Construction in 2022 (including material export)	3.16	61.75	74.34	0.13	16.19	9.71
Construction in 2023 (including material export)	3.15	61.75	74.29	0.13	9.59	5.48
Construction in 2024	64.62	65.94	84.68	0.17	6.12	4.06
Construction in 2025	64.55	65.76	84.00	0.17	6.12	4.05
Construction in 2026	64.49	65.59	83.41	0.17	6.12	4.05
Construction in 2027	64.44	65.44	82.90	0.17	6.12	4.05
Construction in 2028	64.38	65.31	82.46	0.17	6.12	4.05
Construction in 2029	67.32	65.19	82.05	0.17	6.12	4.05
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A for Model Data Outputs.

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. All off-road construction equipment was modeled as CARB Tier 3 Certified engines, consistent with County requirements. All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with County requirements. Building construction, paving, and painting are assumed to occur simultaneously. Construction emissions taken from the season (summer or winter) with the highest output.

As shown in Table 2-8, emissions generated during typical construction under the Alternative Land Use Plan, including the implementation of offsite infrastructure that would disturb 31.4 acres of land, would not exceed the SCAQMD's regional thresholds of significance on their own. Blasting emissions generated under the Alternative Land Use Plan would be identical to those projected in Table 2-7. Similar to the Primary Land Use, Mitigation Measure AQ-1 would be required to ensure that construction emissions generated under the Alternative Land Use Plan would not exceed SCAQMD significance thresholds. Adherence to Mitigation Measure AQ-1 would ensure that criteria pollutant emissions generated during construction of the Alternative Land Use Plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard.

Similar to the Primary Land Use Plan, construction under the Alternative Land Use Plan would overlap with tenet occupancy and operations of portions of the Specific Plan. While no phasing plan has been developed, in the event that 50 percent of the Specific Plan is constructed and operating while construction is ongoing, daily emissions could be generated at rates of 144.11 pounds per day ROG,

655.78 pounds per day of NO_x, 1,087.83 pounds per day of CO, 6.79 pounds per day of SO_x, 49.31 pounds per day of PM_{10} and 23.90 pounds per day of $PM_{2.5}$. These values are calculated by adding the daily 2024 construction emissions shown in Table 2-8 (the approximate mid-point of total construction), the daily blasting of 1.72 tons of explosive shown in Table 2-7 (consistent with blasting limitations required by Mitigation Measure AQ-1), and half of the predicted operational emissions shown in Table 2-10 below (to account for 50 percent operations of the Alternative Land Use Plan). Nonetheless, as shown in Table 2-4 above, the SCAQMD promulgates thresholds for construction and operations separately.

Project Operations Criteria Air Quality Emissions

Regional Operational Significance Analysis

Implementation of the either the Primary Land Use Plan or Alternative Land Use Plan would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and SO_2 as well as ozone precursors such as ROG and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use.

As previously described, the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses contains several policy provisions that address air pollutant generated during construction of warehouse/distribution projects proposing building space larger than 250,000 square feet in size. These provisions would apply to the operations of the Project under either the Primary Land Use Plan or Alternative Land Use Plan (also see Mitigation Measure AQ-2 below). For instance, Provision 3.3 states that warehouse/distribution facilities must be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from sensitive receptors. Such a measure prevents general queuing and spill-over of trucks onto surrounding public streets. This policy provision prohibits commercial trucks from parking in the public road right-of-way or nearby residential areas. Provision 4.1 requires facility operators to maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks and Heavy-Heavy Duty Trucks accessing the site use year CARB 2010 or newer engines. Thus, older model year trucks, which are less efficient and produce greater air pollutant emissions, would be prohibited from visiting the site.

As previously described, operational air pollutant emissions were based on the Project site plans and the estimated traffic trip generation rates and Project fleet mix from Urban Crossroads (2020). Consistent with SCAQMD recommendations, in order to more accurately account for the trip distribution patterns of freight trucks, the average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

Primary Land Use Plan

Long-term operational emissions attributable to the Primary Land Use Plan are identified in Table 2-9 and compared to the regional operational significance thresholds promulgated by the SCAQMD.

Table 2-9. Primary Land Use Plan Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	65.57	0.00	0.98	0.00	0.00	0.00
Energy	3.96	32.39	27.20	0.19	2.46	2.46
Mobile						
Passenger Vehicles	*87.93*	*175.10*	*1,121.14*	*1.79*	*32.06*	*14.62*
Heavy-Duty Trucks	*2.10*	*929.71*	*854.31*	*4.47*	*52.78*	*23.06*
Mobile Source Total	90.03	1,104.81	1,975.45	6.26	84.84	37.68
Total:	**159.56**	**1,137.20**	**2,003.63**	**6.48**	**87.30**	**40.14**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A for Model Data Outputs.

Notes: Emissions projections account for a trip generation rate and fleet mix identified by Urban Crossroads (2020). Specifically, Urban Crossroads estimates the generation of 23,894 average vehicle trips daily, 3,916 of which would be heavy duty trucks, under the Primary Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment. The average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles. Operational emissions taken from the season (summer or winter) with the highest output.

As shown in Table 2-9, the emissions associated with operations under the Primary Land Use Plan would exceed the SCAQMD significance threshold for ROG, NO_x, and CO. As previously described, ROG and NO_x are precursors of O_3, a pollutant for which the SoCAB is classified nonattainment. The SoCAB is classified attainment for CO.

Alternative Land Use Plan

Long-term operational emissions attributable to the Primary Land Use Plan are identified in Table 2-10 and compared to the regional operational significance thresholds promulgated by the SCAQMD.

Table 2-10. Alternative Land Use Plan Operational-Related Emissions (Regional Significance Analysis)

Emission Source	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	65.57	0.00	0.98	0.00	0.00	0.00
Energy	3.96	32.39	27.20	0.19	2.46	2.46
Mobile						
Passenger Vehicles	*87.39*	*174.12*	*1,115.47*	*1.78*	*31.90*	*14.55*
Heavy-Duty Trucks	*2.06*	*914.04*	*839.91*	*4.39*	*51.89*	*22.68*
Mobile Source Total	89.45	1,088.16	1,955.38	6.17	83.79	37.23
Total:	**158.98**	**1,120.55**	**1,983.56**	**6.36**	**86.25**	**39.69**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**Yes**	**Yes**	**Yes**	**No**	**No**	**No**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A for Model Data Outputs.

Notes: Emissions projections account for a trip generation rate and fleet mix identified by Urban Crossroads (2020). Specifically, Urban Crossroads estimates the generation of 23,624 average vehicle trips daily, 3,850 of which would be heavy duty trucks, under the Alternative Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment. The average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles. Operational emissions taken from the season (summer or winter) with the highest output.

As shown in Table 2-10, the emissions associated with operations under the Alternative Land Use Plan would exceed the SCAQMD significance threshold for ROG, NO_x, and CO. As previously described, ROG and NO_x are precursors of O_3, a pollutant for which the SoCAB is classified nonattainment. The SoCAB is classified attainment for CO.

O_3 is produced when ROG and NO_x undergo photochemical reactions that occur only in the presence of sunlight. O_3 is a very difficult pollutant to regulate due to the time it takes to create and the fact that it can be transported away from its source by wind and meteorological air patterns. People with lung disease, children, older adults, and people who are active can be affected when O_3 levels exceed ambient air quality standards. Numerous scientific studies have linked ground level O_3 exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses. O_3 and NO_x have been decreasing in California since 1975 and are projected to continue to decrease in the future. Although vehicle miles traveled across the state continue to increase, NO_x levels are decreasing due to the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_x emissions form electric utilities have also decreased due to the use of cleaner fuels and renewable energy.

SCAQMD's 2016 AQMP, previously described, identifies robust NO_X reductions from new regulations on Regional Clean Air Incentives Market (RECLAIM) facilities, non-refinery flares, commercial cooking, and residential and commercial appliances. Such combustion sources are already heavily regulated with the lowest NO_X emissions levels achievable, yet there are opportunities to require and accelerate replacement with cleaner zero-emission alternatives, such as residential and commercial furnaces, pool heaters, and

backup power equipment. The SCAQMD plans to achieve such replacements through a combination of regulations and incentives. Technology-forcing regulations can drive development and commercialization of clean technologies, with future year requirements for new or existing equipment. Incentives can then accelerate deployment and enhance public acceptability of new technologies. The 2016 AQMP also emphasizes that beginning in 2012, continued implementation of previously adopted regulations have been leading to NO_X emission reductions of 68 percent by 2023 and 80 percent by 2031. With the addition of 2016 AQMP regulatory measures, a 30 percent reduction of NO_X from stationary sources is expected in the 15-year period between 2008 and 2023. This is in addition to significant NO_X reductions from stationary sources achieved in the decades prior to 2008.

NO_x and ROG produced as a result of incomplete fossil fuel combustion. The majority of these emissions would be generated by mobile sources, which is an emission source that cannot be regulated by the County of Riverside. CARB is primarily responsible for controlling pollution from motor vehicles. The air district must adopt rules to achieve and maintain the CAAQS and NAAQS within their jurisdiction. A reduction of vehicle trips to and from the Proposed Project site would reduce the amount of mobile emissions. Methods of reducing vehicle trips include carpooling, transit, cycling, and pedestrian connections. However, this Project is proposing a large amount industrial warehousing, and the reduction of vehicle trips is only feasible for the employees working in the Specific Plan, though the majority of emissions would be a result heavy-duty trucks related to transporting freight.

As described in the Regulatory Framework discussion above, the State of California has implemented numerous strategies pertaining to trucks and the reduction of emissions that directly apply to the Project. Urban goods delivery is an essential component of the greater freight system and vital to the urban economy. While urban goods delivery represents a small share of urban traffic, it generates a disproportionate amount of pollution emissions. The State of California promulgates policies designed and implemented to improve the efficiency and environmental footprint of the urban freight system, including the introduction of zero and near-zero emission vehicles—a strategy embedded in the Governor's Sustainable Freight Action Plan as well as CARB's AB 32 Scoping Plan, SIP, and Mobile Source Strategy.

Project development under either the Primary Land Use Plan or the Alternative Land Use Plan would be required to be consistent with the applicable air quality-related policy provisions contained in the County General Plan Air Quality Element. For instance, development under either land use plan would occur in a manner that protects people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources (Policy AQ 2.2), and would implement pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution (Policy 2.3). Consistent with General Plan Policy AQ 4.9, construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities. All development in the County, including the Project, is required to adhere to all County-adopted policy provisions, including those contained in the adopted Air Quality Element. The County ensures all provisions of the General Plan are incorporated into projects and their permits through development review and applications of conditions of approval as applicable.

Nonetheless, operational emissions would exceed SCAQMD thresholds under both the Primary Land Use Plan and Alternative Land Use Plan. Thus, Mitigation Measure AQ-2 is recommended.

Recommended Mitigation Measure

AQ-2: Prior to the certificate of occupancy issuance for each future project in the Specific Plan, the Project Applicant shall demonstrate to the satisfaction of the County of Riverside Planning Department that the following measures would be implemented during Project operations.

- All future cold storage warehousing shall be equipped with electrical hookups to eliminate idling of main and auxiliary engines during the loading and unloading process and provide for transport refrigeration units, auxiliary power units and other trucks requiring electrical power.

- To facilitate the possible future installation of infrastructure that would charge the batteries that power the motors of electric-powered trucks, the following shall be installed. 1) At shell building permit, an electrical room(s) and/or exterior area(s) of the site shall be designated where future electrical panels would be located for the purpose of supplying power to on-site charging facilities for electric powered trucks. Conduit shall be installed from this designated area where the panel would be located to the on-site location where the charging facilities would be located and where electric-powered trucks would park and connect to charging facilities to charge the batteries that power the motors of the electric-powered trucks. 2) At issuance of a building permit for Tenant Improvements, if the tenant is served by electric trucks, the electrical panel and charging units shall be installed, and the electrical wiring connections shall be made from the electrical panel to the charging units. If the tenant is not served by electric trucks, this requirement shall not apply.

- Install passenger car EV charging stations and designated carpool parking stalls per the provisions of the California Green Building Standards Code and require that each building be constructed with an adequately sized electrical panel(s) and conduit to accommodate future EV charging stations at a minimum of 5 percent of the passenger car parking spaces.

- As a condition of certificates of occupancy, all on-site outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) shall be required to be powered by electricity, compressed natural gas, propane, or diesel-fueled engines that comply with the CARB/USEPA Tier 4 Engine standards for off-road vehicles or better (defined as emitting less than or equal to 0.015 grams per brake horsepower-hour [g/bhp-hr] for PM_{10}) and all indoor cargo handling equipment shall be required to be powered by electricity, compressed natural gas, or propane. Use of indoor diesel-fueled equipment shall be prohibited. Developer and all successors also shall include these obligations in all building leases. The building owner

and occupant shall allow periodic inspection of the site by the County of Riverside or its designee to confirm compliance. Electrical panels should be appropriately sized to allow for future expanded use.

- In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants with information related to SCAQMD's Carl Moyer Program, or other such programs that promote truck retrofits or "clean" vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. Tenants shall be notified about the availability of: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel-fueled vehicle engine retrofit and/or replacement; 3) designated truck parking locations in the project vicinity; 4) access to alternative fueling stations proximate to the site that supply compressed natural gas; and 5) the United States Environmental Protection Agency's SmartWay program.
- All future operations in the Specific Plan shall adhere to the germane policy provisions in the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses. In addition, buildings smaller than 250,000 square feet shall comply with applicable policy provisions of the Good Neighbor Policy except as indicated below. Applicable feasible provisions of the Good Neighbor Policy that would serve to measurably reduce Project-related operational emissions include, but are not limited to, the following:

    1. Warehouse/distribution facilities greater than 250,000 square feet shall be designed to provide adequate on-site parking for commercial trucks and passenger vehicles and on-site queuing for trucks that is away from sensitive receptors. The general queuing and spill-over of trucks onto surrounding public streets shall be prevented. Commercial trucks shall not be parked in the public road right-of-way or nearby residential areas.

    2. Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty Trucks ("HHD") accessing the site use year CARB 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the County.

    3. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five minutes; and 3) telephone numbers of the building facilities manager and CARB to report violations.

4. Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
5. Signs should be posted in the appropriate locations and/or handouts should be provided that show the locations of nearest food options, fueling, truck maintenance services, and other similar convenience services.
6. Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information shall be provided to the County and updated annually, and signs shall be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community.
7. The future applicants for any new facility larger than 250,000 square feet in the Specific Plan will be required to enter into agreement with the County of Riverside to provide a supplemental funding contribution, which would be applied to further off-set potential air quality impacts to the community and provide a community benefit. Said financial contribution will be determined by the Transportation and Land Management Agency based on the level of NO_x emissions estimated to generated. Said supplemental funding contribution will be collected on a one-time basis. Funds collected under said supplemental funding program will be subject to designation for use by the Board of Supervisors and will generally be used for projects that directly benefit the impacted community wherein the project is located. The types of projects that the Board of Supervisors may designate for use of these funds include, but are not limited to (1) projects that directly offset NO_x reductions above and beyond what is required by existing air quality regulations, (2) projects that generally improve air quality such as paving of dirt roads, installation of additional trees and landscaping, (3) projects that provide an enhanced buffer between the new facility and sensitive receptors, and (4) Projects that lead to reduced emissions by promoting alternate forms of transportation such as bicycle lanes, new sidewalks, bus turnouts, or other transit-related uses.

While these measures would reduce air pollutant emissions attributable to the Project, the exact reduction amount cannot be quantified for most. For some measures it would be overly speculative to quantify resulting emissions reductions. For instance, while the Project would install passenger car EV charging stations it cannot be determined how many zero emission vehicles would replace gasoline-fueled vehicles as a result. Additionally, in order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest at the Project must provide building occupants with information related to SCAQMD's Carl Moyer Program, or other such programs that promote truck retrofits or "clean" vehicles. Yet it cannot be reasonably predicted how many clean trucks would replace diesel-fueled trucks as a result. With other measures the reduction values cannot be quantified due to limitation in the modeling software, such as the requirement that all future cold storage warehousing be equipped with electrical hookups to eliminate idling of main and auxiliary engines during the loading and unloading process. The requirement that Facility operators must maintain records of their fleet equipment and

ensure that all diesel-fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty Trucks ("HHD") accessing the site use year CARB 2010 or newer engines can be quantified and has been accounted for in Table 2-9 and Table 2-10 since the requirement is also mandated by Provision 4.1 of the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses.

Despite these efforts set forth above, including the recommendations contained in Mitigation Measure AQ-2, Project-instigated heavy-duty truck travel would result in SCAQMD daily significance thresholds to be exceeded, which equates to a cumulatively considerable net increase of ROG and NO_x (O_3 precursors) for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. While California state strategies such as the Governor's Sustainable Freight Action Plan, CARB's AB 32 Scoping Plan, and the Mobile Source Strategy will improve the efficiency and environmental footprint of the urban freight system, including the introduction of zero and near-zero emission vehicles, it is not currently feasible to reduce projected Project emissions to levels below the regional significance thresholds. It is noted that Mitigation Measure AQ-2 requires that the future applicants for any new facility in the Specific Plan be required to enter into agreement with the County of Riverside to provide a supplemental funding contribution, which would be applied to further off-set potential air quality impacts to the community and provide a community benefit. These funds collected under said supplemental funding program will be subject to designation for use by the Board of Supervisors and will generally be used for projects that directly benefit the impacted community wherein the project is located. The types of projects that the Board of Supervisors may designate for use of these funds include, but are not limited to (1) projects that directly offset NO_x reductions above and beyond what is required by existing air quality regulations, (2) projects that generally improve air quality such as paving of dirt roads, installation of additional trees and landscaping, (3) projects that provide an enhanced buffer between the new facility and sensitive receptors, and (4) Projects that lead to reduced emissions by promoting alternate forms of transportation such as bicycle lanes, new sidewalks, bus turnouts, or other transit-related uses.

The SCAQMD has set its CEQA significance thresholds for ROG and NO_X at 10 tons per year (expressed as 55 pounds per day) based on the federal CAA, which defines a major stationary source (in extreme ozone nonattainment areas such as the SoCAB) as emitting 10 tons per year. The thresholds correlate with the trigger levels for the federal New Source Review (NSR) Program and SCAQMD Rule 1303 for new or modified sources. The NSR Program[2] was created by the federal CAA to ensure that stationary sources of air pollution are constructed or modified in a manner that is consistent with attainment of health-based NAAQS. The NAAQS establish the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Therefore, projects that do not exceed the SCAQMD's mass emissions thresholds would not violate any air quality standards or contribute substantially to an existing or projected air quality violation and no criteria pollutant health impacts.

As previously stated, ROG and NO_X are precursor-emissions that forms O_3 in the atmosphere in the presence of sunlight where the pollutants undergo complex chemical reactions. It takes time and the influence of meteorological conditions for these reactions to occur, so O_3 may be formed at a distance

[2] Code of Federal Regulation (CFR) *[i.e., PSD (40 CFR 52.21, 40* CFR *51.166, 40 CFR 51.165 (b)), Non-attainment NSR (40 CFR 52.24, 40 CFR 51.165, 40 CFR part 51, Appendix S)*

downwind from the sources. Breathing ground-level O_3 can result health effects that include reduced lung function, inflammation of airways, throat irritation, pain, burning, or discomfort in the chest when taking a deep breath, chest tightness, wheezing, or shortness of breath. In addition to these effects, evidence from observational studies strongly indicates that higher daily O_3 concentrations are associated with increased asthma attacks, increased hospital admissions, increased daily mortality, and other markers of morbidity. The consistency and coherence of the evidence for effects upon asthmatics suggests that O_3 can make asthma symptoms worse and can increase sensitivity to asthma triggers.

Table 2-9 and Table 2-10 show that a large proportion of ROG and NO_X emissions project to be generated by either the Primary Land Use Plan or Alternative Land Use Plan are from mobile sources. Under California law, the local and regional districts are primarily responsible for controlling air pollution from all sources except motor vehicles. CARB (a branch of the CalEPA) is primarily responsible for controlling pollution from motor vehicles. The air districts must adopt rules to achieve and maintain the CAAQS and NAAQS within their jurisdictions.

On December 24, 2018, the California Supreme Court issued an opinion identifying the need to provide sufficient information connecting a project's air emissions to health impacts or explain why such information could not be ascertained (Sierra Club v. County of Fresno [Friant Ranch, L.P.] [2018] 6 Cal.5th 502, Case No. S219783). As noted above and shown in Table 2-9 and Table 2-10, the Project's operational emissions, under either the Primary Land Use Plan or Alternative Land Use Plan, would exceed the SCAQMD's ROG and NO_X significance thresholds, resulting in an impact since the SoCAB is classified nonattainment of O_3. Pursuant to Rule 8.520(f) of the Rules of the California Court, the SCAQMD and the San Joaquin Valley Air Pollution Control District (SJVAPCD) filed amicus curiae briefs in regard to this case. In both briefs, SCAQMD and SJVAPCD provided technical explanations as to why it may not be feasible for a project to relate the expected adverse air quality impacts to likely health consequences. As summarized below, for the reasons set forth by the SCAQMD and SJVAPCD, the Proposed Project's significant air quality impacts currently cannot feasibly be related to likely health consequences. The technical demands for feasibly and accurately relating the adverse air quality impacts to likely health consequences are too high for this Proposed Project at this time. The technical challenges are listed below, with the SCAQMD and SJVAPCD amicus briefs providing support on the findings for the Proposed Project:

- O_3 is not formed at the location of sources/emissions, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

  "For the so-called criteria pollutants, such as O_3, it may be more difficult to quantify health impacts. O_3 is formed in the atmosphere from the chemical reaction of NOx and VOC in the presence of sunlight. It takes time and the influence of meteorological conditions for these reactions to occur, so O_3 may be formed at a distance downwind from the sources." [SCAQMD p.11]

- O_3 and secondary PM formation is complex, which necessitates the use of more sophisticated modeling that is not reasonably feasible for the Project at this time. The Proposed Project, while much smaller in scale to the Friant Ranch project, similarly includes area wide sources and mobile sources.

"Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of O_3 or PM. This is especially true for a project like Friant Ranch where most of the criteria pollutant emissions derive not from a single 'point source,' but from area wide sources (consumer products, paint, etc.) or mobile sources (cars and trucks) driving to, from and around the site." [SJVAPCD p.9]

- The quantity of precursor emissions is not proportional to local O_3 and secondary PM concentration, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

  "Ground level O_3 (smog) is not directly emitted into the air but is formed when precursor pollutants such as NO_x and VOCs [ROG] are emitted into the atmosphere and undergo complex chemical reactions in the process of sunlight. Once formed, O_3 can be transported long distances by wind. Because of the complexity of O_3 formation, a specific tonnage amount of NO_x or VOCs [ROG] emitted in a particular area does not equate to a particular concentration of O_3 in that area." [SJVAPCD p.4]

  "Secondary PM, like O_3, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as SO_x and NO_x. Because of the complexity of secondary PM formation, the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area." [SJVAPCD p.5]

- Emissions do not cause health effects – it is the resulting concentration of criteria pollutants, which is influenced by sunlight, complex reactions, and transport, which necessitates the use of complex and more sophisticated modeling that is not reasonably feasible for the Proposed Project at this time.

  "The disconnect between the tonnage of precursor pollutants (NOx, SOx and VOCs [ROG]) and the concentration of O_3 or PM formed is important because it is not necessarily the tonnage of precursor pollutants that causes human health effects, but the concentration of resulting O_3 or PM." [SJVAPCD p.5]

- Currently available modeling tools are appropriate for regional evaluations, but not individual projects like the Proposed Project.

  "For instance, the computer models used to simulate and predict an attainment date for the O_3 or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NOx, SOx and VOCs [ROG]) and the atmospheric chemistry and meteorology of the Valley… the models simulate future O_3 or PM levels based on predicted changes in precursor emissions Valley wide… The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment." [SJVAPCD p.6-7]

"Thus, the CEQA air quality analysis for criteria pollutants is not really a localized, project-level impact analysis but one of regional, "cumulative impacts."" [SJVAPCD p.8]

"...the currently available modeling tools are equipped to model the impact of all emission sources in the Valley on attainment... Running the photochemical grid model used for predicting O_3 attainment with the emissions solely from the Friant Ranch project (which equate to less than one-tenth of one percent of the total NOx and VOC [ROG] in the Valley) is not likely to yield valid information given the relative scale involved." [SJVAPCD p.9-10]

- The SJVAPCD indicates that it is currently impossible to accurately correlate project level emissions to specific health impacts.

  "Finally, even once a model is developed to accurately ascertain local increases in concentrations of photochemical pollutants like O_3 and some particulates, it remains impossible, using today's models, to correlate that increase in concentration to a specific health impact. The reason is the same: such models are designed to determine regional, population-wide health impacts, and simply are not accurate when applied at the local level." [SJVAPCD p.10]

- SCAQMD highlights that CARB indicated that a CARB methodology of analysis for $PM_{2.5}$ health impacts is not suited for small projects.

  Also, CARB has developed a methodology that can predict expected mortality (premature deaths) from large amounts of $PM_{2.5}$... SCAQMD used the CARB methodology to predict impacts from three very large power plants (e.g., 731-1,837 pounds/day) Again, this project involved large amounts of additional $PM_{2.5}$ in the District, up to 2.82 tons/day (5,650 pounds/day of $PM_{2.5}$, or 1,029 tons/year... However, the primary author of the CARB methodology has reported that this $PM_{2.5}$ health impact methodology is not suited for small projects and may yield unreliable results due to various uncertainties." "Among these uncertainties are the representativeness of the population used in the methodology, and the specific source of PM and the corresponding health impacts." [SCAQMD p.14]

- SCAQMD indicates that the CARB $PM_{2.5}$ methodology would provide unreliable findings for a small project with a small population and that a lead agency should be able to decide if and when it may be appropriate.

  "Therefore, when SCAQMD prepared a CEQA document for the expansion of an existing oil production facility, with very small $PM_{2.5}$ increases (3.8 pounds/day) and a very small affected population, staff elected not to use the CARB methodology for using estimated $PM_{2.5}$ emissions to derive a projected premature mortality number and explained why it would be inappropriate to do so... SCAQMD staff concluded that use of this methodology for such a small source could result in unreliable findings and would not provide meaningful information" [SCAQMD p.15]

  "This CEQA document was not challenged in court." [SCAQMD p.15]

- The development of new technical approaches in the future may change the feasibility determination.

> "Moreover, what is reasonably feasible may change over time as scientists and regulatory agencies continually seek to improve their ability to predict health impacts. For example, CARB staff has been directed by its Governing Board to reassess and improve the methodology for estimating premature deaths." [SCAQMD p.16]

For the reasons set forth above, it is not currently feasible to relate the Proposed Project's regional ROG and NO_x impacts to likely health consequences. The SCAQMD is responsible for assessing air pollutant impacts regionally, and the potential health consequences from those on a regional basis. The current evaluation on the limitations and uncertainties of existing tools is consistent with SCAQMD findings. Currently available regional modeling tools are not designed to capture changes in pollutant concentrations for this Proposed Project that would be meaningful. This is due in part to a relatively course spatial resolution (e.g., greater than 4 x 4 kilometers) which makes it speculative to discern regional Project impacts on air quality.

Conflict with the 2016 Air Quality Management Plan

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project site is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 AQMP. The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, SCAG, and the USEPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's 2016 RTP/SCS, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) The Project is subject to the SCAQMD's AQMP.

According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning two main criteria must be addressed.

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?

As previously described, adherence to Mitigation Measure AQ-1 would ensure that criteria pollutant emissions generated during construction of either the Primary Land Use Plan or Alternative Land Use Plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. However, as shown in Table 2-9 the Proposed Project would result in emissions exceeding the SCAQMD regional ROG, NO_X and CO thresholds during operations. As previously discussed, the predominate source of these pollutant emissions would be due to mobile sources, mainly that of heavy-duty trucks. Mobile emission cannot be regulated by the County. Therefore, the Proposed Project would have the potential to cause or affect a violation of the ambient air quality standards.

b) Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

Adherence to Mitigation Measure AQ-1 would ensure that criteria pollutant emissions generated during construction of either the Primary Land Use Plan or Alternative Land Use Plan would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard. However, the Project would result in ROG and NO_x emissions beyond the SCAQMD regional significance threshold during operations, it could potentially delay the timely attainment of the O_3 air quality standard and/or AQMP emission reduction.

The Project would not be consistent with Criterion 1.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining Project consistency focuses on whether or not the Proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in Riverside County. Specifically, SCAG's *Growth Management* Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's

2016 RTP/SCS provides socioeconomic forecast projections of regional population growth. The County of Riverside General Plan is referenced by SCAG in order to assist forecasting future growth in the unincorporated portions of the county.

The Proposed Project is not consistent with the land use designation and development density presented in the County General Plan. The Project is seeking a General Plan Amendment (GPA) to modify the land use designations for the Project site in order to reflect changes proposed under either Alternative of the Stoneridge Commerce Center Specific Plan. The land use designations proposed as part of the GPA are intended to reflect the land use designations proposed for both the Primary Land Use Plan and the Alternative Land Use Plan. Currently, the County General Plan and Lakeview/Nuevo Area Plan (LNAP) designate the Project site for "Medium Density Residential (MDR)," "Medium High Density Residential (MHDR)," "Very High Density Residential (VHDR)," "Commercial Retail (CR)," "Community Center (CC)," "Open Space – Conservation (OS-C)," "Open Space – Recreation (OS-R)," and "Open Space – Water (OS-W)." The proposed GPA would amend the General Plan and LNAP land use designations to reflect those proposed, which would include "Light Industrial (LI)," "Business Park (BP)," "Commercial Retail (CR)," "Open Space – Conservation (OS-C)," and "Open Space – Conservation Habitat" land uses. It is noted that the Project would result in the creation of a substantial number of jobs that would serve to assist Riverside County in improving its jobs-housing balance, thereby potentially shortening commute lengths of residents living in the unincorporated communities of the county yet traveling substantial distances to job centers outside of the county. Nonetheless, the Proposed Project is not consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the General Plan and RCPG. As a result, the Project could potentially conflict with the land use assumptions used by SCAQMD to develop the 2016 AQMP. The County's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the County; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project could be inconsistent with the projections. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) Therefore, the Proposed Project would be not be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

b) Would the project implement all feasible air quality mitigation measures?

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 201, 402, 403, 1113, and 1401. SCAQMD Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 1113 requires manufacturers, distributors, and

end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. Rule 201 requires a "Permit to Construct" prior to the installation of any equipment "the use of which may cause the issuance of air contaminants . . .". Rule 1401 requires new source review of any new, relocated, or modified permit units that emit TACs. Additionally, as previously described both the Primary Land Use Plan and Alternative Land Use Plan would implement Mitigation Measure AQ-1, which provides measures to ensure County Good Neighbor Policy provisions are required throughout all future construction of the Specific Plan, and Mitigation Measure AQ-2, which requires several measures to reduce emissions during operations, including ensuring that the County Good Neighbor Policy provisions are required throughout all future construction of the Specific Plan . As such, the Proposed Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. For the reasons discussed above, neither the Primary Land Use Plan or Alternative Land Use Plan are consistent with the land use designation and development density presented in the County of Riverside's General Plan and therefore could potential exceed or otherwise conflict with the population or job growth projections used by the SCAQMD to develop the AQMP.

The Project would not be consistent with Criterion 2.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. Under both the Primary Land Use Plan and Alternative Land Use Plan, resultant operational emissions would exceed regional significance thresholds potentially hindering the region's ability to meet state and federal air quality standards, thereby conflicting with Criterion 1. Further, either land use plan could be inconsistent with Criterion 2. Thus, the Project would conflict with the SCAQMD 2016 AQMP.

Exposure of Sensitive Receptors to Toxic Air Contaminants

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

Construction-Generated Air Contaminants

As previously described, in addition to regional significance thresholds, the SCAQMD developed localized significance thresholds (LSTs) for emissions of NO_x, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD

Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: *Further-Reduced Health Risk*. LST analysis for construction is applicable for all projects that disturb five acres or less on a single day. However, the Specific Plan area spans over 560 acres and therefore it is likely that construction onsite would disturb more than five acres in a single day (Mitigation Measure AQ-1 requires that the maximum daily disturbance area [actively graded area] shall not exceed 10 acres per day). Nonetheless, applying the one-acre, two-acre, and five-acre LST thresholds to projects disturbing greater acreage is conservative. For instance, the five-acre LST thresholds were developed in part based on the dispersion of pollutants over a five-acre construction area before exposing sensitive receptors. Thus, applying the five-acre LST thresholds to a project that could disturb 10 acres daily does not consider the pollutant-dispersing effect of the dispersion of pollutants over a 10-acre site before exposing receptors, and is therefore a lower threshold than one calculated specific to 10 acres. Therefore, while the proposed Project could potentially disturb 10 acres on a single day, the LST threshold value for a five-acre site was employed from the LST lookup tables. This is conservative since the analysis will only consider for the dispersion of air pollutants over five acres before reaching sensitive receptors, as opposed to accounting for the dispersion of air pollutants over a greater 10-acre area.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Notwithstanding, the SCAQMD Methodology explicitly states: *It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.* The nearest sensitive receptor to the site is Lakeside Middle School, located approximately 2,000 feet (610 meters) to the west. However, the installation of the proposed offsite water line would occur just south of the Middle School, largely within the Walnut Avenue right-of-way. It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary. LSTs for receptors located at 25 meters were utilized in this analysis. The SCAQMD's methodology clearly states that "offsite mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod "onsite" emissions outputs were considered.

Maximum daily onsite emissions would be the same under either the Primary Land Use Plan or Alternative Land Use Plan. As previously stated, the SCAQMD developed LSTs for emissions of NO_x, CO, PM_{10}, and $PM_{2.5}$. A construction HRA has been prepared to evaluate potential health risks associated with the emission of DPM, which includes PM_{10} and $PM_{2.5}$, resulting from the construction activities necessary to build the Project (see Attachment B). The results of this HRA are discussed below. Therefore, Table 2-11 presents the results of localized NO_x and CO emissions associated with the Primary Land Use Plan or Alternative Land Use Plan.

Table 2-11. Primary and Alternative Land Use Plan Construction-Related Emissions (Localized Significance Analysis)		
Construction Activity	**Pollutant (pounds per day)**	
	NO_X	**CO**
Site Preparation (offsite, onsite, & blasting)	67.40	57.29
Site Grading (offsite, onsite, & blasting)	89.22	84.81
Building Construction, Paving, Painting, & Blasting	83.02	85.36
SCAQMD Localized Significance Threshold	*270*	*1,577*
Exceed SCAQMD Localized Threshold?	**No**	**No**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment A for Model Data Outputs.
Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. All off-road construction equipment was modeled as CARB Tier 3 Certified engines, consistent with County requirements. Building construction, paving, and painting are assumed to occur simultaneously.

Table 2-11 shows that the estimated emissions on the peak day of construction for either the Primary Land Use Plan or Alternative Land Use Plan would not surpass NO_x or CO LST thresholds with adherence to Mitigation Measure AQ-1, which among other measures limits the amount of daily blasting. Therefore, significant impacts would not occur concerning NO_x or CO LSTs during construction activities.

A construction HRA has been prepared to evaluate potential health risks associated with the emission of DPM, which includes PM_{10} and $PM_{2.5}$, resulting from the construction activities necessary to build the Project (see Attachment B). The level of construction to construct either the Primary Land Use Plan or Alternative Land Use Plan is largely identical. While the Alternative Land Use Plan would result in less building square footage (9,539,858 square feet compared with 9,668,142 square feet under the Primary Land Use), the calculated *annual* emission outputs are identical for each scenario. Therefore, the HRA addresses construction DPM generated under both the Primary Land Use Plan and Alternative Land Use Plan collectively. The air dispersion modeling for the HRA was performed using the USEPA AERMOD dispersion model. The following discussion is sourced from the construction related HRA prepared for the Specific Plan (see Attachment B).

DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about five percent of total DPM. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program, and the Diesel Off-Road Reporting System.

Diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term

exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by OEHHA. CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in 2000 could cause 540 "excess" cancers in a population of one million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health, have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine-particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particulate pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen. For construction activity, DPM is the primary TAC of concern.

The air dispersion modeling for the HRA was performed using the USEPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data provided by the SCAQMD for the Perris (237 ½ North D Street, Perris) air quality monitoring station was selected as being the most representative meteorology based on proximity to the Project site (approximately 3.5 miles distant) and the fact that the Perris air quality monitoring station is located in the same SCAQMD Source Receptor Area (SRA). SCAQMD SRAs are categorized based on existing ambient pollutant concentrations and meteorological conditions. The SCAQMD divides the Basin into 38 SRAs to forecast and report air quality. Both the Project site and the Perris air quality monitoring station are located in SCAQMD SRA 24, known as the Perris Valley.

Emissions sources in the model include 245 line-volume sources on the Project site each day of construction, which is estimated to span a nine-year period, to represent construction equipment maneuvering around the construction site. Additionally, emissions sources in the model include four separate line sources (comprised of 155 line-volume sources collectively) representing the material haul truck routes from the Project site 5,000 feet in each direction at the minimum on the Ramona Expressway and 3,000 feet in each direction at the minimum on Nuevo Road. Finally, emissions sources in the model include two separate line sources representing offsite construction, one at the southwest corner of the site and extending westward parallel to Nuevo Road, and the other extending from the northwest corner of the site to Evans Road. These line sources representing offsite construction are comprised of 70 line-volume sources combined (see Attachment B). The maximum daily exhaust emissions for all diesel equipment was used to produce an emission rate in terms of grams per second per square meter. Emissions from construction equipment were assigned a release height of 2.5 meters and heavy trucks were assigned a release height of 3.65 meters in order to provide a conservative analysis (i.e., using higher release heights would result in a smaller impact by allowing pollutants to disperse before they affect a receptor).

Construction equipment emissions were estimated using emission factors for exhaust fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and exhaust coarse particulate matter spanning between 2.5 and 10 microns in diameter (PM_{10}) combined, as generated by the CARB-approved CalEEMod, version 2016.3.2. Haul truck DPM emissions (also conservatively represented by the combined total of PM_{10} and $PM_{2.5}$ emissions) were estimated using EMFAC 2017.

The model was run to obtain the peak one-hour and annual average concentration in micrograms per cubic meter ($\mu g/m^3$) at nearby sensitive receptors as well as locations where future sensitive receptors are planned for development with sensitive receptors (i.e., residential uses) with 100 meter (328 feet) spacing consistent with SCAQMD guidance (SCAQMD 2018). Note that the concentration estimates developed using this methodology is considered conservative and is not a specific prediction of the actual concentrations that would occur as a result of the Project any one point in time. Actual one-hour and annual average concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology.

A health risk computation was performed to determine the risk of developing an excess cancer risk as a result of the full span of construction. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual (2015).

Carcinogenic Risk

Based on the AERMOD outputs, the expected annual average DPM emission concentrations at the most exposed sensitive receptor resulting from Project construction under either the Primary Land Use Plan or Alternative Land Use Plan would be 0.042 $\mu g/m^3$ at the greatest and this would occur just to the west of the northwestern boundary of the site at the location of vacant land planned for residential land uses. The calculated carcinogenic risk at this location as well as several other locations in the Project vicinity as a result of the construction allowed under the Specific Plan is depicted in Table 2-12.

Table 2-12. Maximum Cancer Risk for Project Construction

Exposure Scenario	Location	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Construction – Highest Concentration	Just west of the northwestern boundary of the site, vacant land approved for residential land uses	5.12	*10*	**No**
Construction	Lakeside Middle School	1.06	*10*	**No**
Construction	Sierra Vista Elementary School	1.07	*10*	**No**
Construction	Neighborhoods to Southeast	0.58	*10*	**No**
Construction	Neighborhoods to South	0.56	*10*	**No**
Construction	Neighborhoods to West	0.38	*10*	**No**
Construction	Triple Crown Elementary	0.38	*10*	**No**
Construction	Avalon Elementary	0.48	*10*	**No**
Construction	Neighborhoods to East	0.54	*10*	**No**

Source: ECORP Consulting 2020. Refer to Attachment B for Model Data Outputs

As shown, potential cancer risk from Project construction would be below the 10 in one million threshold, which was developed based on the requirements of AB 2588 (Tanner Air Toxics Act & Air Toxics "Hot Spots" Information and Assessment Act) and serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact.

Non-Carcinogenic Hazards

The significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest

maximum chronic and acute hazard index would occur just to the west of the northwestern boundary of the site at the location of vacant land planned for residential land uses. Specifically, the highest maximum chronic and acute hazard index would be 0.008 and 0.22, respectively. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits.

Operational Air Contaminants

As previously described, in addition to regional significance thresholds, the SCAQMD developed LSTs for emissions of NO_x, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (offsite mobile source emissions are not included in the LST analysis protocol). According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a proposed project if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Primary Land Use Plan proposes 9,668,142 square feet of warehouse type uses and the Alternative Land Use Plan would include 9,539,858 square feet. Therefore, the operational phase LST protocol is applied.

The approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary. The SCAQMD Methodology states: *It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.* Therefore, LSTs for receptors located at 25 meters were utilized in this analysis.

As described, the SCAQMD has produced lookup tables for projects that disturb one, two and five acres. While the site is 582.6 acres, the LST threshold value for a five-acre site was employed from the LST lookup tables. This is conservative since the analysis will only account for the dispersion of air pollutants over five acres before reaching sensitive receptors, as opposed to accounting for the dispersion of air pollutants over a greater 582.6-acre area. For a worst-case scenario assessment, the emissions shown in Table 2-13 include all "onsite" project-related stationary (area) sources and 10 percent of the Project-related mobile sources. Considering that the longest weighted trip length used for calculating mobile emissions is approximately 53.9 miles for heavy duty trucks and 16.6 miles for passenger vehicles, 10 percent of this total would represent an onsite travel distance for each truck of approximately 5.4 miles and 1.7 miles for each passenger vehicle; thus, the 10 percent assumption is conservative and would tend to overstate the actual impact.

Operational LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. An operational HRA has been prepared to evaluate potential health risks associated with the emission of DPM, which includes PM_{10} and $PM_{2.5}$, resulting heavy-duty trucks (see Attachment C). The results of this HRA are discussed below. Therefore, Table 2-13 presents the results of localized NO_x and CO emissions associated with the Primary Land Use Plan and Alternative Land Use Plan.

Table 2-13. Primary and Alternative Land Use Plan Operational Emissions (Localized Significance Analysis)		
Operations	**Pollutant (pounds per day)**	
	NO_X	**CO**
Primary Land Use Plan		
Onsite Emissions	142.87	225.82
Alternative Land Use Plan		
Onsite Emissions	141.20	223.03
SCAQMD Localized Significance Threshold	*270*	*1,577*
Exceed SCAQMD Localized Threshold?	**No**	**No**

Source: EMFAC2017. Refer to Attachment A for Model Data Outputs.
Notes: Emissions projections account for a trip generation rate and fleet mix identified by Urban Crossroads (2020). Specifically, Urban Crossroads estimates the generation of 23,894 average vehicle trips daily, 3,916 of which would be heavy duty trucks, under the Primary Land Use Plan and 23,624 average vehicle trips daily, 3,850 of which would be heavy duty trucks, under the Alternative Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment.

As seen in Table 2-13, the emissions of these pollutants on the peak day of operations would not result in significant concentrations of NO_x or CO pollutants at nearby sensitive receptors.

Operation of the Proposed Project would result in the development of substantial sources of the air toxin, DPM. The Project includes a warehouse facility that would be utilized by heavy- and medium-duty trucks. DPM from trucks idling and accessing the site would be a major source of operational air contaminants. An operational HRA has been prepared for this Project (see Attachment C). The following discussion is based on this HRA.

As previously stated, CARB identified DPM as a TAC in 1998. Mobile sources (including trucks, buses, automobiles, trains, ships, and farm equipment) are by far the largest source of diesel emissions. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Diesel exhaust is composed of two phases, either gas or particulate – both contribute to the risk. The gas phase is composed of many of the urban hazardous air pollutants, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particulate phase has many different types that can be classified by size or composition. The sizes of diesel particulates of greatest health concern are fine and ultrafine particles. These particles may be composed of elemental carbon with adsorbed[3] compounds such as organics, sulfates, nitrates, metals, and other trace elements. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines. As the

[3]This term is specifically used for gases.

Project would accommodate daily visits from heavy-duty diesel trucks during operations, an analysis of DPM was performed using the USEPA-approved AERMOD model.

The air dispersion modeling for the operational HRA was performed using the USEPA AERMOD dispersion model. Surface and upper air meteorological data provided by the SCAQMD for the Perris (237 ½ North D Street, Perris) air quality monitoring station was selected as being the most representative meteorology based on proximity to the Project site (approximately 3.5 miles distant) and the fact that the Perris air quality monitoring station is located in the same SCAQMD SRA. Both the Project site and the Perris air quality monitoring station are located in SCAQMD SRA 24, known as the Perris Valley.

23 area sources spanning varying dimensions, as provided by the Project applicant, have been placed throughout the Primary Land Use Plan. Further, emissions sources in the model include a line source (comprised of 101 line-volume sources) representing the onsite truck circulation at the Project site, and a line source (comprised of 84 line-volume sources) representing the offsite truck circulation extending approximately two miles to the west along Ramona Expressway, where there are many sensitive receptors, and one mile to the east of the Project site along the Ramona Expressway. According to Urban Crossroads (2020), under the Primary Land Use Plan 98 percent of all truck traffic would travel west on Ramona Expressway and the remainder would travel east.

Under the Alternative Land Use Plan, 23 area sources spanning varying dimensions, as provided by the Project applicant, have been placed. Further, emissions sources in the model include a line source (comprised of 95 line-volume sources) representing the onsite truck circulation at the Project site, a line source (comprised of 61 line-volume sources) representing the offsite truck circulation extending approximately two miles to the west of the Project site along the future Mid County Parkway, a line source (comprised of 84 line-volume sources) representing the offsite truck circulation extending approximately three miles to the west on Ramon Expressway, and a line source (comprised of 39 line-volume sources) representing offsite truck traffic extending approximately one mile east of the Project site along the future Mid County Parkway. According to Urban Crossroads (2020), under the Alternative Land Use Plan 94 percent of all truck traffic would travel west on the future Mid County Parkway, four percent would travel west on the Ramona Expressway, and two percent would travel east on the future Mid County Parkway.

Vehicle DPM emissions were estimated using emission factors for PM_{10} generated with EMFAC 2017. The estimated number of daily heavy-duty trucks and predicted truck trip distribution patterns for each the Primary Land Use Plan and Alternative Land Use Plan were obtained from Urban Crossroads (2020).

The model was run to obtain the peak one-hour, 24-hour and annual average concentration in micrograms per cubic meter [$\mu g/m^3$] at nearby sensitive receptors as well as locations where sensitive receptors (i.e., residential uses) exist or are planned. Note that the concentration estimates developed using this methodology are considered conservative and are not a specific prediction of the actual concentrations that would occur as a result of the Project at any one point in time. Actual one-hour, 24-hour and annual average and concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology.

A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year lifetime basis, 30-year, and 9-year exposure scenarios. The chronic and

carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual (2015).

Annual average PM_{10} emission factors were generated by running EMFAC 2017 for vehicles in the Basin within Riverside County. EMFAC generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of vehicle speed, temperature, and relative humidity. The model was run for speeds traveled on and within the vicinity of the Project site. The vehicle travel speeds for each segment modeled are summarized below.

- Idling (15 minutes per truck) – onsite loading/unloading; and
- 15 miles per hour – onsite vehicle movement including driving and maneuvering; and
- 35 miles per hour – offsite vehicle movement including driving and maneuvering.

The average PM_{10} emission factors for heavy trucks were calculated based on the annual average emission factors for various exposure periods associated with assumptions for evaluating exposure over three different periods (i.e., 70-, 30-, and 9-year exposure scenarios).

Primary Land Use Plan

Carcinogenic Risk

Based on the AERMOD outputs, the highest concentration of annual average diesel PM_{10} emission would be 0.013 µg/m^3 occurring approximately 320 feet west the western boundary of the central portion of the Project site (Universal Transverse Mercator [UTM] coordinate 484206 South 3741860 East), which is vacant land and planned for residential and/or open space. The expected annual average diesel PM_{10} emission concentrations at the most exposed existing sensitive receptors (residences located on Rider Street and Whieldon Drive) resulting from operation of the Primary Land Use Plan (3,916 daily heavy-duty truck trips) would be 0.006 µg/m^3 at the greatest.

Cancer risk calculations for residences are based on 70-, 30-, and 9-year exposure periods while schools are based on a 9-year exposure period. The calculated carcinogenic risk at the sensitive receptor as a result of the Primary Land Use Plan is depicted in Table 2-14.

Table 2-14. Primary Land Use Plan Maximum Operational Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
70-Year Exposure	9.81	10	**No**
30-Year Exposure	8.86	10	**No**
9-Year Exposure	6.33	10	**No**
Planned Future Residences to the Northwest (McCanna Hills Development)			
70-Year Exposure	5.28	10	**No**
30-Year Exposure	4.77	10	**No**
9-Year Exposure	3.41	10	**No**
Lakeside Middle School			
9-Year Exposure	2.43	10	**No**
Sierra Vista Elementary School			
9-Year Exposure	0.97	10	**No**
Residences on Rider Street			
70-Year Exposure	4.53	10	**No**
30-Year Exposure	4.09	10	**No**
9-Year Exposure	2.92	10	**No**
Residences on Whieldon Drive			
70-Year Exposure	4.53	10	**No**
30-Year Exposure	4.09	10	**No**
9-Year Exposure	2.92	10	**No**
Residences on Reisling Drive			
70-Year Exposure	3.02	10	**No**
30-Year Exposure	2.73	10	**No**
9-Year Exposure	1.95	10	**No**
Avalon Elementary			
9-Year Exposure	0.49	10	**No**
Residences on Walnut Street			

Table 2-14. Primary Land Use Plan Maximum Operational Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Residences on Placentia Avenue			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Residences on Foothill Drive			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Residences on Reservoir Drive			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Residences on 12th Street			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Nuview Elementary School			
9-Year Exposure	0.49	10	**No**
Residences on Jack Circle			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Mountain Shadows Middle School			

Table 2-14. Primary Land Use Plan Maximum Operational Cancer Risk at the Project Vicinity

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
9-Year Exposure	0.00	10	**No**
Planned Residences to Northeast			
70-Year Exposure	1.51	10	**No**
30-Year Exposure	1.36	10	**No**
9-Year Exposure	0.97	10	**No**

Source: Refer to Attachment C for Model Data Outputs.
Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

As shown, impacts related to cancer risk from heavy-duty trucks operating under the Primary Land Use Plan would not exceed the cancer risk threshold at any of the nearest existing residences, planned residences or nearest schools.

Noncarcinogenic Risk

In addition to cancer risk, the significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index at a sensitive receptor associated with DPM emissions from the Primary Land Use Plan is shown in Table 2-15.

Table 2-15. Primary Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Non-Cancer Hazard**	**Index Significance Threshold**	**Exceeds SCAQMD Significance Threshold?**
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
Chronic Hazard Index	0.026	1	**No**
Acute Hazard Index	0.068	1	**No**
Planned Future Residences to the Northwest (McCanna Hills Development)			
Chronic Hazard Index	0.001	1	**No**
Acute Hazard Index	0.036	1	**No**
Lakeside Middle School			
Chronic Hazard Index	0.001	1	**No**
Acute Hazard Index	0.026	1	**No**
Sierra Vista Elementary School			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.010	1	**No**
Residences on Rider Street			
Chronic Hazard Index	0.001	1	**No**
Acute Hazard Index	0.031	1	**No**
Residences on Whieldon Drive			
Chronic Hazard Index	0.001	1	**No**
Acute Hazard Index	0.031	1	**No**
Residences on Reisling Drive			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.021	1	**No**
Avalon Elementary			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Residences on Walnut Street			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**

Table 2-15. Primary Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Non-Cancer Hazard**	**Index Significance Threshold**	**Exceeds SCAQMD Significance Threshold?**
Residences on Placentia Avenue			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Residences on Foothill Drive			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Residences on Reservoir Drive			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Residences on 12th Street			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Nuview Elementary School			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.000	1	**No**
Residences on Jack Circle			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Mountain Shadows Middle School			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.000	1	**No**
Planned Residences to Northeast			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.010	1	**No**

Source: Refer to Attachment C for Model Data Outputs.
Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

As shown, impacts related to non-cancer risk (chronic and acute hazard index) from the Primary Land Use Plan would not surpass significance thresholds at the nearest existing residences, planned residences or nearest schools.

Alternative Land Use Plan

Carcinogenic Risk

Based on the AERMOD outputs, the highest concentration of annual average diesel PM_{10} emission would be 0.013 µg/m^3 occurring within a few feet of the northeast boundary of the Project site (Universal Transverse Mercator [UTM] coordinate 485508 South 3743056 East), which is vacant land and not planned for any future sensitive receptors. The expected annual average diesel PM_{10} emission concentrations at the most exposed existing sensitive receptors (residences located on Rider Street and Whieldon Drive) resulting from operation of the Alternative Land Use Plan (3,850 daily heavy-duty truck trips) would be 0.002 µg/m^3 at the greatest.

Cancer risk calculations for residences are based on 70-, 30-, and 9-year exposure periods while schools are based on a 9-year exposure period. The calculated carcinogenic risk at the sensitive receptor as a result of the Alternative Land Use Plan is depicted in Table 2-16.

Table 2-16. Alternative Land Use Plan Maximum Operational Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
70-Year Exposure	9.81	10	**No**
30-Year Exposure	8.86	10	**No**
9-Year Exposure	6.33	10	**No**
Planned Future Residences to the Northwest (McCanna Hills Development)			
70-Year Exposure	5.28	10	**No**
30-Year Exposure	4.77	10	**No**
9-Year Exposure	3.41	10	**No**
Lakeside Middle School			
9-Year Exposure	0.97	10	**No**
Sierra Vista Elementary School			
9-Year Exposure	0.97	10	**No**
Residences on Rider Street			
70-Year Exposure	1.51	10	**No**
30-Year Exposure	1.36	10	**No**
9-Year Exposure	0.97	10	**No**
Residences on Whieldon Drive			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Residences on Reisling Drive			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Avalon Elementary			
9-Year Exposure	0.49	10	**No**
Residences on Walnut Street			

Table 2-16. Alternative Land Use Plan Maximum Operational Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Residences on Placentia Avenue			
70-Year Exposure	3.02	10	**No**
30-Year Exposure	2.73	10	**No**
9-Year Exposure	1.95	10	**No**
Residences on Foothill Drive			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Residences on Reservoir Drive			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Residences on 12th Street			
70-Year Exposure	0.75	10	**No**
30-Year Exposure	0.68	10	**No**
9-Year Exposure	0.49	10	**No**
Nuview Elementary School			
9-Year Exposure	0.00	10	**No**
Residences on Jack Circle			
70-Year Exposure	0.00	10	**No**
30-Year Exposure	0.00	10	**No**
9-Year Exposure	0.00	10	**No**
Mountain Shadows Middle School			

Table 2-16. Alternative Land Use Plan Maximum Operational Cancer Risk at the Project Vicinity

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
9-Year Exposure	0.00	10	**No**
Planned Residences to Northeast			
70-Year Exposure	1.51	10	**No**
30-Year Exposure	1.36	10	**No**
9-Year Exposure	0.97	10	**No**

Source: Refer to Attachment C for Model Data Outputs.
Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

As shown, impacts related to cancer risk from heavy-duty trucks operating under the Alternative Land Use Plan would not exceed cancer risk thresholds at the nearest existing residences, planned residences or nearest schools.

Noncarcinogenic Risk

In addition to cancer risk, the significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index at a sensitive receptor associated with DPM emissions from the Alternative Land Use Plan is shown in Table 2-17.

Table 2-17. Alternative Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Non-Cancer Hazard**	**Index Significance Threshold**	**Exceeds SCAQMD Significance Threshold?**
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
Chronic Hazard Index	0.026	1	**No**
Acute Hazard Index	0.068	1	**No**
Planned Future Residences to the Northwest (McCanna Hills Development)			
Chronic Hazard Index	0.001	1	**No**
Acute Hazard Index	0.036	1	**No**
Lakeside Middle School			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.010	1	**No**
Sierra Vista Elementary School			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.010	1	**No**
Residences on Rider Street			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.010	1	**No**
Residences on Whieldon Drive			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Residences on Reisling Drive			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Avalon Elementary			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Residences on Walnut Street			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**

Table 2-17. Alternative Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity

Exposure Scenario	Maximum Non-Cancer Hazard	Index Significance Threshold	Exceeds SCAQMD Significance Threshold?
Residences on Placentia Avenue			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.021	1	**No**
Residences on Foothill Drive			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Residences on Reservoir Drive			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Residences on 12th Street			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.005	1	**No**
Nuview Elementary School			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.000	1	**No**
Residences on Jack Circle			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.000	1	**No**
Mountain Shadows Middle School			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.000	1	**No**
Planned Residences to Northeast			
Chronic Hazard Index	0.000	1	**No**
Acute Hazard Index	0.010	1	**No**

Source: Refer to Attachment C for Model Data Outputs.
Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

As shown, impacts related to non-cancer risk (chronic and acute hazard index) from the Alternative Land Use Plan would not surpass significance thresholds at the nearest existing residences, planned residences or nearest schools.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. In 1993, the SoCAB was designated nonattainment under the CAAQS and NAAQS for CO. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is now designated as attainment, as previously noted in Table 2-3. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the SCAQMD's *1992 Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). To establish a more accurate record of baseline CO concentrations affecting the SoCAB, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

The greatest average daily trips on a segment of road under the Primary Land Use Plan would be 15,115 daily trips on the Ramona Expressway between Evans Avenue and Redlands Avenue during the Existing Plus Project condition in the year 2030 and 36,265 daily trips during the Cumulative Plus Project condition in the year 2040. This projected amount of traffic is lower than the highest daily traffic volumes at Wilshire Boulevard and Veteran Avenue of 100,000 vehicles per day. The greatest average daily trips on a segment of road under the Alternative Land Use Plan would be 16,037 daily trips on the Ramona Expressway between Evans Avenue and Redlands Avenue during the Existing Plus Project condition in the year 2030 and 20,456 daily trips on the Ramona Expressway, south of Rider Street, during the Cumulative Plus Project condition in the year 2040. Similar to the Primary Land Use Plan, this projected amount of traffic is lower than the highest daily traffic volumes at Wilshire Boulevard and Veteran Avenue of 100,000 vehicles per day.

As such, Project-related traffic volumes, under both the Primary Land Use Plan and Alternative Land Use Plan are less than the traffic volumes identified in the 2003 AQMP. The Project considered herein would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO "hot spots" are not an environmental impact of concern for the Project. Localized air quality impacts related to mobile source emissions would not be a concern.

Odors

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

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant

concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses identified by the SCAQMD as being associated with odors.

Cumulative Air Quality Impacts

The cumulative setting for air quality includes the County of Riverside and the SoCAB. The SoCAB is designated as a nonattainment area for state standards of O_3, PM_{10}, and $PM_{2.5}$. The region is also designated as a nonattainment area for federal standards of O_3 and $PM_{2.5}$ (CARB 2018). Cumulative growth in population, vehicle use, and industrial activity could inhibit efforts to improve regional air quality and attain the ambient air quality standards. Thus, the setting for this cumulative analysis consists of the SoCAB and associated growth and development anticipated in the air basin.

The SCAQMD's approach to assessing cumulative impacts is based on the AQMP forecasts of attainment of ambient air quality standards in accordance with the requirements of the CAA and CCAAs. As discussed earlier, the Proposed Project would potentially conflict with the 2016 AQMP, which is intended to bring the SoCAB into attainment for all criteria pollutants, since projected daily emissions of NO_x would exceed SCAQMD regional thresholds. On December 12, 2008 the CARB adopted Resolution 08-43, which limits NO_x, PM_{10} and $PM_{2.5}$ emissions from on-road diesel truck fleets that operate in California. On October 12, 2009 Executive Order (EO) R-09-010 was adopted that codified Resolution 08- 43 into Section 2025, title 13 of the California Code of Regulations (CCR). This regulation requires that by the year 2023 all commercial diesel trucks that operate in California shall meet model year 2010 (Tier 4) or latter emission standards. In the interim period, this regulation provides annual interim targets for fleet owners to meet. This regulation also provides a few exemptions including a onetime per year three-day pass for trucks registered outside of California.

In addition, the SCAQMD recommends that any given project's potential contribution to cumulative impacts be assessed using the same significance criteria as for project-specific impacts. Therefore, individual projects that do not generate operational or construction emissions that exceed the SCAQMD's daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the air basin is in nonattainment and therefore would not be considered to have a significant, adverse air quality impact. Alternatively, individual Project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the Project would exceed the applicable SCAQMD regional thresholds for operational-source NOx emissions. As such, the Project would be considered cumulatively considerable in terms of its effect on regional air quality.

3.0 GREENHOUSE GAS EMISSIONS

3.1 Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (Intergovernmental Panel on Climate Change [IPCC] 2014).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

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. CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2 (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents ($CO2_2e$), which weight each gas by its global warming potential. 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.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged

over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere (IPCC 2013).

Table 3-1. Greenhouse Gases

Greenhouse Gas	Description
CO_2	Carbon dioxide 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.[1]
CH_4	Methane is a colorless, odorless gas and 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 (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about12 years.[2]
N_2O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide 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, adipic 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 120 years.[3]

Sources: [1]US EPA 2016a, [2] USEPA 2016b, [3] USEPA 2016c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

3.1.1 Sources of Greenhouse Gas Emissions

In 2019, CARB released the 2019 edition of the California GHG inventory covering calendar year 2017 emissions. In 2017, California emitted 424.1 million gross metric tons of CO2e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2017, accounting for approximately 41 percent of total GHG emissions in the state. This sector was followed by the industrial sector (24 percent) and the electric power sector including both in- and out-of-state sources (15 percent) (CARB 2019). Emissions of CO2 are by-products of fossil fuel combustion. CH4, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. N2O is also largely attributable to agricultural practices and soil management. CO2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO2 through sequestration and dissolution (CO2 dissolving into the water), respectively, two of the most common processes for removing CO2 from the atmosphere.

3.2 Regulatory Framework

3.2.1 State

Executive Order S-3-05

EO S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

While dated, this EO remains relevant because a more recent California Appellate Court decision, *Cleveland National Forest Foundation v. San Diego Association of Governments* (November 24, 2014) 231 Cal.App.4th 1056, examined whether it should be viewed as having the equivalent force of a legislative mandate for specific emissions reductions. While the California Supreme Court ruled that the San Diego Association of Governments did not abuse its discretion by declining "to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal, the decision also recognized that the goal of a 40 percent reduction in 1990 GHG levels by 2030 is "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing greenhouse gas emissions 80 percent below 1990 levels by the year 2050.

Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed AB 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 requires CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. CARB has identified a GHG reduction target of 15 percent from current levels for local governments and notes that successful implementation relies on local governments' land use planning and urban growth decisions.

Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which was re-approved by CARB on August 24, 2011, that outlines measures to meet the 2020 GHG reduction goals. To meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan recommends measures for further study and possible state implementation, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO_2e (about 191 million U.S. tons) from the transportation, energy, agriculture, and forestry sectors and other sources could be achieved should the State implement all of the measures in the Scoping Plan.

The Scoping Plan is required by AB 32 to be updated at least every five years. The first update to the AB 32 Scoping Plan was approved on May 22, 2014 by CARB. The 2017 Scoping Plan Update was adopted on

December 14, 2017. The Scoping Plan Update addresses the 2030 target established by SB 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include: increasing the use of renewable energy in the state, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

Executive Order B-30-15

On April 20, 2015 Governor Brown signed EO B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2˚C, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the state's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently-owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California.

In October 2015, SB 350 was signed by Governor Edmund (Jerry) Brown, which requires retail sellers and publicly-owned utilities to procure 50 percent of their electricity from renewable resources by 2030. In 2018, SB 100 was signed by Governor Brown, codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

2019 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2019 Building Energy Efficiency Standards improve upon the 2016 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The 2019 update to the Building Energy Efficiency Standards focuses on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings. The 2019 standards are a major step toward meeting Zero Net Energy. According to the California Energy Commission, single-family homes built with the 2019 standards will use about 7 percent less energy due to energy efficiency measures versus those built under the 2016 standards and nonresidential buildings will use about 30 percent less energy (due mainly to lighting upgrades) (CEC 2018). The most significant efficiency improvement to the residential Standards include the introduction of photovoltaic into the perspective package, improvements for attics, walls, water heating and lighting. Buildings permitted on or after January 1, 2020, must comply with the 2019 Standards. These new standards apply only to certain nonresidential building types, as specified in the requirements.

Phase I and 2 Heavy-Duty Vehicle GHG Standards

CARB has adopted a new regulation for GHG emissions from heavy-duty trucks and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the USEPA rule for new trucks and engines nationally. Existing heavy-duty truck vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy-Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation. In September 2011, the USEPA adopted their new rule for heavy-duty trucks and engines. The USEPA rule has compliance requirements for new compression and spark ignition engines, as well as trucks from Class 2b through Class 8. Compliance requirements begin with model year 2014 with stringency levels increasing through model year 2018. The rule organizes truck compliance into three groupings, which include a) heavy-duty pickups and vans; b) vocational vehicles; and c) combination tractors. The USEPA rule does not regulate trailers. CARB staff has worked jointly with the USEPA and the National Highway Traffic Safety Administration (NHTSA) on the next phase of federal GHG emission standards for medium-duty trucks and heavy-duty truck vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year heavy-duty truck vehicles, including trailers. In February 2019, the Office of Administrative Law (OAL) approved the Phase 2 Heavy-Duty Vehicle GHG Standards and became effective April 1, 2019. The Phase 2 GHG standards are needed to offset projected vehicle miles traveled (VMT) growth and keep heavy-duty truck CO_2 emissions declining. The federal Phase 2 standards establish for the first time, federal emissions requirements for trailers hauled by heavy-duty tractors. The federal Phase 2 standards are more technology-forcing than the federal Phase 1 standards, requiring manufacturers to improve existing technologies or develop new technologies to meet the standards. The federal Phase 2 standards for tractors, vocational vehicles, and heavy-duty pick-

up trucks and vans (PUVs) will be phased-in from 2021-2027, additionally for trailers, the standards are phased-in from 2018 (2020 in California) through 2027.

3.2.2 Local

South Coast Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff is convening an ongoing GHG CEQA Significance Threshold Working Group. Members of the working group include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds. On October 8, 2008, the SCAQMD released the *Draft AQMD Staff CEQA GHG Significance Thresholds*. These thresholds have not been finalized and continue to be developed through the working group.

The *Draft AQMD Staff CEQA GHG Significance Thresholds* guidance document, which builds on the previous guidance prepared by the CAPCOA, explored various approaches for establishing a significance threshold for GHG emissions and was described as a "work in progress" of efforts to date. However, the draft interim CEQA thresholds guidance document was not adopted or approved by the Governing Board. In December 2008, the SCAQMD adopted an interim 10,000 metric tons of CO_2e per year screening level threshold for stationary source/industrial projects for which the SCAQMD is the lead agency. From December 2008 to September 2010, SCAQMD hosted working group meetings and revised the draft threshold proposal several times, although it did not officially provide these proposals in a subsequent document. SCAQMD has continued to consider adoption of significance thresholds for residential and general land use development projects. The most recent proposal, issued in September 2010, used the following tiered approach to evaluate potential GHG impacts from various uses:

- Tier 1 Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- Tier 2 Consider whether or not the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- Tier 3 Consider whether the project generates GHG emissions in excess of screening thresholds for individual land uses. The 10,000 metric tons of CO_2e per year threshold for industrial uses would be recommended for use by all lead agencies. Under option 1, separate screening thresholds are proposed for residential projects (3,500 metric tons of CO_2e per year), commercial projects (1,400 metric tons of CO_2e per year), and mixed-use projects (3,000 metric tons of CO_2e per year). Under option 2, a single numerical screening threshold of 3,000 metric tons of CO_2e per year would be used for all non-industrial projects. If the project generates emissions in excess of the applicable screening threshold, move to Tier 4.
- Tier 4 Consider whether the project generates GHG emissions in excess of applicable performance standards for the project service population (population plus employment). The efficiency targets were established based on the goal of AB 32 to reduce statewide GHG emissions to 1990 levels by

2020. The 2020 efficiency targets are 4.8 metric tons of CO_2e per service population for project level analyses and 6.6 metric tons of CO_2e per service population for plan level analyses. If the project generates emissions in excess of the applicable efficiency targets, move to Tier 5.

- Tier 5 Consider the implementation of CEQA mitigation (including the purchase of GHG offsets) to reduce the project efficiency target to Tier 4 levels.

The SCAQMD has not announced when staff is expecting to present a finalized version of its GHG thresholds to the governing board.

These thresholds were developed as part of the SCAQMD GHG CEQA Significance Threshold Working Group. This working group was formed to assist SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders including the State Office of Planning and Research (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the SoCAB, industry groups, and environmental and professional organizations. These thresholds were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provides guidance to CEQA practitioners with regard to determining whether GHG emissions from a proposed land use project are significant.

Southern California Association of Governments

On April 7, 2016, the SCAG Regional Council adopted the *2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy* (2016 RTP/SCS). The 2016 RTP/SCS charts a course for closely integrating land use and transportation – so that the region can grow smartly and sustainably. It was prepared through a collaborative, continuous, and comprehensive process with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses and local stakeholders within the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura. The 2016 RTP/SCS is a long-range visioning plan that balances future mobility and housing needs with economic, environmental and public health goals. The SCAG region strives toward sustainability through integrated land use and transportation planning. The SCAG region must achieve specific federal air quality standards and is required by state law to lower regional GHG emissions. Targets for the SCAG region in the 2016 RTP/SCS includes an eight percent per capita reduction in GHG emissions from automobiles and light trucks by 2020, an 18 percent reduction by 2035, and a 21 percent reduction by 2040 compared with 2005 levels. On June 28, 2016, CARB accepted SCAG's conclusion that the 2016-2040 RTP/SCS, if implemented, would achieve the 2020 and 2035 emission reduction targets set by CARB for the SCAG region.

County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses

The logistics industry is a well-established sector of the Riverside County economy that has contributed to local job growth, fueled by societal growth trends in e-commerce and coupled with our strategic location along a major trade corridor that connects to the Ports of Los Angeles and Long Beach. It is expected that Riverside County will continue to see strong demand for growth in the logistics industry. However, it is also recognized that the construction and operations of logistics and warehouse projects in close proximity to residences or other sensitive land uses may negatively affect the quality of life of those existing communities. The County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses provides a framework through which large-scale logistics and warehouse projects, such as that proposed by the Project, can be designed and operated in a way that lessens their impact on surrounding communities and the environment. It is meant to apply Best Management Practices to help minimize potential impacts to sensitive receptors and is intended to be used in conjunction with the County's Land Use Ordinance, which provides development requirements for said projects, and CEQA. This policy provides a series of development and operational criteria applicable to logistics and warehouse projects that include any building larger than 250,000 square feet in size that are implemented to supplement project-level mitigation measures in order to further reduce impacts related to logistics and warehousing development and operations. The specific policy provisions germane to Project GHG emissions include the following:

> 2.1 During construction of the warehouse/distribution facility, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards.
>
> 2.4 Construction contractors shall utilize construction equipment, with properly operating and maintained mufflers, consistent with manufacturers' standards.
>
> 2.9 Construction Contractors shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.
>
> 4.1 Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty Trucks ("HHD") accessing the site use year CARB 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the County.
>
> 4.2 Facility operators shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with the California Air Resources Board regulations.
>
> 4.3 Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
>
> 4.4 Facility operators shall coordinate with CARB and SCAQMD to obtain the latest information about regional air quality concentrations, health risks, and trucking regulations.

4.7 Facility operators for sites that exceed 250 employees shall establish a rideshare program, in accordance with AQMD rule 2202, with the intent of discouraging single-occupancy vehicle trips and promote alternate modes of transportation, such as carpooling and transit where feasible.

4.8 A minimum of 5 percent of employee parking spaces shall be designated for electric or other alternative fueled vehicles.

5.5 Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information should be provided to the County and updated annually, and signs should be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community.

County of Riverside Climate Action Plan

The County of Riverside Climate Action Plan (CAP) (December 8, 2015) was designed under the premise that the County of Riverside, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County's jurisdiction, and that Riverside County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner. The County of Riverside CAP Update, November 2019 (CAP Update) establishes GHG emission reduction programs and regulations that correlate with and support evolving state GHG emissions reduction goals and strategies. The CAP Update includes reduction targets for year 2030 and year 2050. These reduction targets require the County to reduce emissions by at least 525,511 metric tons of CO_2e below the Adjusted Business As Usual (ABAU) scenario by 2030 and at least 2,982,948 metric tons of CO_2e below the ABAU scenario by 2050 (CAP Update, p.7-1). To evaluate consistency with the CAP Update, the County has implemented CAP Update Screening Tables (Screening Tables) to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated in development projects. To this end, the Screening Tables establish categories of GHG Implementation Measures. Under each Implementation Measure category, mitigation or project design features (collectively "features") are assigned point values that correspond to the minimum GHG emissions reduction that would result from each feature. Projects that yield at least 100 points are considered to be consistent with the GHG emissions reduction quantities anticipated in the County's GHG Technical Report and support the GHG emissions reduction targets established under the CAP Update. The potential for such projects to generate direct or indirect GHG emissions that would result in a significant impact on the environment; or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG would be considered less than significant.

3.3 Greenhouse Gas Emissions Impact Assessment

3.3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or

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

The Appendix G thresholds for GHG's do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines § 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 California Code of Regulations [CCR] 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines § 15130(f)). As a note, the CEQA Guidelines were amended in response to SB 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines § 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified

in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, CEQA Guidelines § 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines § 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The County of Riverside CAP aims to reduce GHG emissions from development projects under County jurisdiction. The CAP builds on state and regional policies aimed at reducing GHG emissions consistent with the SB 32 2030 GHG reduction target and statewide post-2030 reduction goals. To evaluate consistency with the CAP Update, the County has implemented CAP Update Screening Tables (Screening Tables) to aid in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated in development projects. To this end, the Screening Tables establish categories of GHG Implementation Measures. Under each Implementation Measure category, mitigation or project design features (collectively "features") are assigned point values that correspond to the minimum GHG emissions reduction that would result from each feature. Projects that yield at least 100 points are considered to be consistent with the GHG emissions reduction quantities anticipated in the County's GHG Technical Report and support the GHG emissions reduction targets established under the CAP Update. The potential for such projects to generate direct or indirect GHG emissions that would result in a significant impact on the environment; or conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG emissions would be considered less than significant.

The CAP Update identifies a two-step approach in evaluating GHG emissions. First, a screening threshold of 3,000 metric tons of CO_2e per year is used to determine if additional analysis is required. Projects that exceed the 3,000 metric tons of CO_2e per year will be required to quantify and disclose the anticipated GHG emissions then either 1) demonstrate how the project would reduce GHG emissions to levels below 3,000 metric tons annually through project design features and/or mitigation measures, OR 2) garner 100 points through the Screening Tables. Projects that garner at least 100 points (equivalent to an approximate 49 percent reduction in GHG emissions) are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report, and consequently would be consistent with the CAP Update. As such, projects that achieve a total of 100 points or more are considered to have a less than significant individual and cumulative impact on GHG emissions.

Consistent with CEQA Guidelines § 15064.4(b)(2) and SCAQMD Tier 2 thresholds, the Proposed Project is analyzed for consistency with the CAP Update in order to determine its significance.

3.3.2 Methodology

GHG-related impacts were assessed in accordance with methodologies recommended by the County of Riverside. Onsite construction-related (including worker commutes and vendors), area source, energy source, water/wastewater pumping, and solid waste hauling and decomposition emissions were modeled using CalEEMod, version 2016.3.2 for both the Primary Land Use Plan and Alternative Land Use Plan. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Construction haul truck GHG emissions and operational mobile source GHG emissions under both the Primary Land Use Plan and Alternative Land Use Plan are calculated with EMFAC2017, developed by CARB. EMFAC 2017 is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to estimate changes in future emissions from on-road mobile sources. The most recent version of this model, EMFAC 2017, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled by speed, and number of starts per day. The most important improvement in EMFAC 2017 is the integration of the new data and methods to estimate emissions from diesel trucks and buses. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment.

Construction-generated GHG emissions under both the Primary Land Use Plan and Alternative Land Use Plan, including proposed offsite improvements spanning 31.4 acres, were primarily calculated using CalEEMod model defaults for Riverside County. All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with the requirements of the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses (also see Mitigation Measure AQ-1 above).

GHG emissions for both land use scenarios during operations were based on the Project site plans and the estimated traffic trip generation rates and Project fleet mix from Urban Crossroads (2020).

3.3.3 Impact Analysis

Contribution of Greenhouse Gas Emissions at a Level that would Conflict with an Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Construction-generated GHG emissions associated with each the Primary Land Use Plan and Alternative Land Use Plan were calculated using the CARB-approved CalEEMod computer program, which is designed to model GHG emissions for land use development projects, based on typical construction requirements. The duration of construction has been adjusted to reflect a start date in the summer of 2021 and an anticipated opening year in the year 2030. The CalEEMod model defaults for the number of construction equipment employed was doubled for all construction phases

with accelerated timelines. Construction–generated emissions were calculated to account for the construction of the entire Specific Plan simultaneously in order to identify the worst-case construction emissions potential. However, the actual construction of the Project site would be dependent on several factors, including timing of Project approvals, market conditions, and/or Project funding. As such, this analysis accounts for minor modifications as Project plans evolve from conceptual planning to final mapping. If construction starts at a later date, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover. Construction haul truck emissions are calculated separately with EMFAC2017. Emissions from haul trucks contributes to air pollution for the first three years of construction. See Attachment D for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis.

Primary Land Use Plan

Table 3-2 illustrates the specific construction generated GHG emissions that would result from construction of the Project under the Primary Land Use Plan.

Table 3-2. Primary Land Use Plan Construction-Related Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Construction in 2021 (including material export)	629
Construction in 2022 (including material export)	1,709
Construction in 2023 (including material export)	1,769
Construction in 2024	1,620
Construction in 2025	2,066
Construction in 2026	2,051
Construction in 2027	2,039
Construction in 2028	2,020
Construction in 2029	1,755
Total	**15,658**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment D for Model Data Outputs.
Notes: All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with County requirements and Mitigation Measure AQ-1.

As shown in Table 3-2, Project construction under the Primary Land Use Plan would result in the generation of approximately 15,658 metric tons of CO_2e over the course of nine years of construction. Once construction is complete, the generation of these GHG emissions would cease. Consistent with SCAQMD guidance, total construction GHG emissions have been amortized over the estimated life of a project, 30 years. The amortized construction emissions are added to the annual average operational emissions of the Primary Land Use Plan.

Alternative Land Use Plan

Table 3-3 illustrates the specific construction generated GHG emissions that would result from construction of the Project under the Alternative Land Use Plan.

Table 3-3. Alternative Land Use Plan Construction-Related Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Construction in 2021 (including material export)	619
Construction in 2022 (including material export)	1,687
Construction in 2023 (including material export)	1,748
Construction in 2024	1,588
Construction in 2025	2,026
Construction in 2026	2,013
Construction in 2027	2,001
Construction in 2028	1,983
Construction in 2029	1,724
Total	**15,389**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment D for Model Data Outputs.
Notes: All on-road haul trucks were modeled as CARB-approved 2010 engines or newer, consistent with County requirements and Mitigation Measure AQ-1.

As shown in Table 3-3, Project construction under the Alternative Land Use Plan would result in the generation of approximately 15,389 metric tons of CO_2e over the course of nine years of construction. Once construction is complete, the generation of these GHG emissions would cease. Consistent with SCAQMD guidance, total construction GHG emissions have been amortized over the estimated life of a project, 30 years. The amortized construction emissions are added to the annual average operational emissions of the Alternative Land Use Plan.

Operations

Operation of the Project would result in GHG emissions predominantly associated with motor vehicle use. As previously described, the County of Riverside Board of Supervisors Good Neighbor Policy for Logistics and Warehouse/Distribution Uses contains several policy provisions that address GHG generated during construction of warehouse/distribution projects proposing building space larger than 250,000 square feet in size. These provisions would apply to the operations of the Project under either the Primary Land Use Plan or Alternative Land Use Plan per Mitigation Measure AQ-2 above. Additionally, Mitigation Measure AQ-2 requires that all future cold storage warehousing be equipped with electrical hookups to eliminate idling of main and auxiliary engines during the loading and unloading process and provide for transport refrigeration units, auxiliary power units and other trucks requiring electrical power. This requirement eliminates the need for transport refrigeration units to supply the energy for refrigeration from diesel fuel, and thus substantial reduces emissions. Mitigation Measure AQ-2 also requires an electrical room(s)

and/or exterior area(s) of the site to be designated where future electrical panels would be located for the purpose of supplying power to on-site charging facilities for electric powered trucks at shell building permit. Conduit must be installed from this designated area where the panel would be located to the on-site location where the charging facilities would be located and where electric-powered trucks would park and connect to charging facilities to charge the batteries that power the motors of the electric-powered trucks. If the tenant is served by electric trucks, the electrical panel and charging units must be installed, and the electrical wiring connections must be made from the electrical panel to the charging units at issuance of a building permit for Tenant Improvements. Mitigation Measure AQ-2 also requires that at least five percent of all passenger vehicle parking spaces include EV charging stations. Mitigation Measure AQ-2 requires facility operators to maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy Duty Trucks and Heavy-Heavy Duty Trucks accessing the site use year CARB 2010 or newer engines. Thus, older model year trucks, which are less efficient and produce greater GHG emissions, would be prohibited from visiting the site. The requirement that all future cold storage warehousing be equipped with electrical hookups has been accounted for in Table 3-4 and 3-5 below, in addition to the requirement that all diesel-fueled Medium-Heavy Duty Trucks and Heavy-Heavy Duty Trucks accessing the site use year CARB 2010 or newer engines.

As previously described, operational GHG emissions were based on the Project site plans and the estimated traffic trip generation rates and Project fleet mix from Urban Crossroads (2020). Consistent with SCAQMD recommendations, in order to more accurately account for the trip distribution patterns of freight trucks, the average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

Primary Land Use Plan

Long-term operational GHG emissions attributable to the Primary Land Use Plan are identified in Table 3-4.

Table 3-4. Primary Land Use Plan Operational-Related GHG Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Construction Emissions (amortized over the 30-year life of the Project)	522
Area Source Emissions	0
Energy Source Emissions	28,570
Mobile Source Emissions	
Passenger Vehicles	*36,709*
Heavy-Duty Trucks	*107,057*
Mobile Source Total	143,766
Solid Waste Emissions	4,965
Water Emissions	1,559
Total Emissions	**179,382**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment D for Model Data Outputs.
Notes: Emissions projections account for a trip generation rate and fleet mix identified by Urban Crossroads (2020). Specifically, Urban Crossroads estimates the generation of 23,894 average vehicle trips daily, 3,916 of which would be heavy-duty trucks, under the Primary Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment. The average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

As shown in Table 3-4, operational-generated emissions under the Primary Land Use Plan would generate 179,382 metric tons of CO_2e emissions annually.

Alternative Land Use Plan

Long-term operational GHG emissions attributable to the Alternative Land Use Plan are identified in Table 3-5.

Table 3-5. Alternative Land Use Plan Operational-Related GHG Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Construction Emissions (amortized over the 30-year life of the Project)	513
Area Source Emissions	0
Energy Source Emissions	28,382
Mobile Source Emissions	
Passenger Vehicles	*36,527*
Heavy-Duty Trucks	*105,253*
Mobile Source Total	141,780
Solid Waste Emissions	4,893
Water Emissions	1,539
Total Emissions	**177,107**

Source: CalEEMod version 2016.3.2; EMFAC2017. Refer to Attachment D for Model Data Outputs.
Notes: Emissions projections account for a trip generation rate and fleet mix identified by Urban Crossroads (2020). Specifically, Urban Crossroads estimates the generation of 23,624 average vehicle trips daily, 3,850 of which would be heavy-duty trucks, under the Alternative Land Use Plan. Heavy-duty trucks are a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment. The average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

As shown in Table 3-5, operational-generated emissions under the Alternative Land Use Plan would generate 177,107 metric tons of CO_2e emissions annually.

As previously described, the purpose of the County of Riverside CAP Update is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the County, including the proposed Specific Plan under both the Primary Land Use Plan and Alternative Land Use Plan. To address the state's requirement to reduce GHG emissions, the County prepared its CAP Update with the goal of reducing GHG emissions within the County by 49 percent below "existing" 2008 levels by the year 2030. The County's target is consistent with the state Scoping Plan target and ensures that the County will be providing GHG reductions locally that will complement state efforts to reduce GHG emissions. The County's target is also consistent with the SB 32 target that expands on AB 32 to reduce GHG emissions to 40 percent below the 1990 levels by 2030. Because the County's CAP Update addresses GHG emissions reductions and is consistent with the requirements of the state Scoping Plan, SB 32, and international efforts to reduce GHG emissions, compliance with the CAP Update fulfills the description of mitigation found in the State CEQA Guidelines. The CAP Update identifies a two-step approach in evaluating GHG emissions. First, a screening threshold of 3,000 metric tons of CO_2e per year is used to determine if additional analysis is required. Projects that exceed the 3,000 metric tons of CO_2e per year will be required to quantify and disclose the anticipated GHG then either 1) demonstrate how the project would reduce GHG emissions to levels below 3,000 metric tons annually through project design features and/or mitigation measures, OR 2) garner 100 points through the CAP Screening Tables. As shown on Tables 3-4 and 3-5, both the Primary Land Use Plan and Alternative Land Use Plan would result in substantially more GHG emissions than the County's screening

threshold of 3,000 metric tons of CO_2e per year. Thus, future projects in the Specific Plan under either the Primary Land Use Plan or Alternative Land Use Plan must garner at least 100 points (equivalent to an approximate 49 percent reduction in GHG emissions) in order to be determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report, and consequently the CAP Update. Due to the conceptual natures of the Primary Land Use Plan and Alternative Land Use Plan, the following mitigation is recommended.

Recommended Mitigation Measure

GHG-1: All future projects proposed within the Specific Plan shall implement Screening Table Measures providing for a minimum 100 points per the County Screening Tables. All projects must be consistent with the CAP's requirement to achieve at least 100 points. The County shall verify incorporation of the identified Screening Table Measures within the Project building plans and site designs prior to the issuance of building permit(s) and/or site plans (as applicable). The County shall verify implementation of the identified Screening Table Measures prior to the issuance of Certificate(s) of Occupancy.

GHG-2: All future projects proposed within the Specific Plan shall comply with CAP Update Measure R2-CE1, which requires that all future plot plans proposed within the Specific Plan that include more than 100,000 gross square feet of commercial, office, industrial, or manufacturing development shall provide onsite renewable energy production generation comprising at least 20 percent of the Project energy demand. The County shall verify implementation of CAP Update Measure R2-CE1 within the Project building plans and site designs prior to the issuance of building permit(s) and/or site plans (as applicable). The County shall verify implementation of CAP Update Measure R2-CE1 prior to the issuance of Certificate(s) of Occupancy.

The implemented Screening Table Measures and compliance with CAP Update Measure R2-CE1 would achieve a minimum of 100 Screening Table Points and would thereby ensure that all future projects proposed within the Specific Plan would achieve GHG emissions levels and GHG emissions reductions targets consistent with those identified in the County CAP Update. The actual measures to be implemented would be identified in conjunction with future plot plan applications and may vary from the list of measures identified in Table 3-6. Project GHG emissions that are consistent with the performance standards contained in the CAP would not comprise a significant impact on the environment.

For informational purposes, a representative example of how future individual projects could achieve a minimum of 100 Screening Table Points through implementation of CAP Update Screening Table Measures is provided at Table 3-6. (Neither Table 3-4 nor Table 3-4 accounts for implementation of Mitigation Measures GHG-1, GHG-2, or the majority of measures identified in Mitigation Measure AQ-2.)

Table 3-6. County of Riverside CAP Consistency – Industrial and Commercial Land Use

Feature	Description	Points
EE10.A.1 Insulation	Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)	11
EE10.A.2 Windows	Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less Solar Heat Gain Coefficient [SHGC])	7
EE10.A.3 Cool Roofs	Modest Cool Roof (Cool Roof Rating Council [CRRC] Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	7
EE10.A.4 Air Infiltration	Blower Door Home Energy Rating System (HERS) Verified Envelope Leakage of equivalent	6
EE10.B.1 Heating/Cooling Distribution System	Model Duct Insulation (R-6)	5
EE10.B.2 Space Heating/Cooling Equipment	Improved Efficiency Heating, Ventilation, and Air Conditioning (HVAC) (Energy Efficiency Ratio [EER] 14/78% Annual Fuel Utilization Efficiency [AFUE] or 8 Heating Seasonal Performance Factor [HSPF])	4
EE10.B.4 Water Heaters	High Efficiency Water Heater (0.72 Energy Factor)	10
EE10.B.5 Daylighting	All rooms daylighted	1
EE10.B.6 Artificial Lighting	High Efficiency Lights (50% of in-unit fixtures are high efficiency)	7
W2.E.2 Toilets	Water Efficient Toilets/Urinals (1.5 gallons per minute [gpm]) Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	6
W2.E.3 Faucets	Water Efficient faucets (1.28 gpm)	2
T4.B.1 Electric Vehicle (EV) Recharging	Install EV charging stations in garages/parking areas	+34[1]
	Total Points	**100+**

[1] Per the Screening Tables, each station is 8 points. Mitigation Measure AQ-2 requires that at least five percent of all passenger vehicle parking spaces shall include EV charging stations. While the exact amount of passenger vehicle parking spaces is not known at the time of this Assessment, 13 EV charging stations would achieve 104 points.

As such, projects that achieve a total of 100 points or more are considered to have a less than significant individual and cumulative impact on GHG emissions.

In addition to compliance with the County CAP Screening Tables, which would result in an approximate 49 percent reduction in GHG emissions under either the Primary Land Use Plan or Alternative Land Use Plan, the State of California, along with the SCAQMD, has implemented numerous strategies pertaining to trucks and the reduction of emissions that directly apply to the Project. Urban goods delivery is an essential component of the greater freight system and vital to the urban economy. While urban goods delivery represents a small share of urban traffic, it generates a disproportionate amount of GHG emissions. The State of California promulgates policies designed and implemented to improve the efficiency and environmental footprint of the urban freight system, including the introduction of zero and

near-zero emission vehicles—a strategy embedded in the Governor's Sustainable Freight Action Plan as well as CARB's AB 32 Scoping Plan, Statewide Implementation Plan, and Mobile Source Strategy.

Additionally, the objective of the proposed Specific Plan also aligns with various aspects of the SCAG's RTP/SCS to accommodate goods movement industries and balancing job and housing opportunities in local areas to reduce long commutes from home to work. SCAG identifies the Inland Empire as a housing rich area and coastal communities as job rich areas and is striving in their policies to achieve more equal balances locally. The Project would efficiently develop an underutilized property with a complementary mix of employment-generating land uses, including light industrial, business park, and commercial retail land uses, assist the SCAG region in achieving jobs/housing balance region-wide and the local area by providing additional job opportunities in a housing rich area of the Inland Empire, diversify the economy of western unincorporated Riverside County by developing a large property with a mix of employment-generating land uses with long-term economic viability, and attract new businesses to Riverside County and thereby provide a more equal jobs-housing balance in the Inland Empire region that would reduce the need for members of the local workforce to commute outside the area for employment. All of these factors are consistent with the goals of the RTP/SCS, which as previously described was developed with the target of an eight percent per capita reduction in GHG emissions from automobiles and light trucks by 2020, an 18 percent reduction in GHG emissions in the SCAG region by 2035, and a 21 percent reduction by 2040 compared with 2005 levels. On June 28, 2016, CARB accepted SCAG's conclusion that the 2016-2040 RTP/SCS, if implemented, would achieve the 2020 and 2035 emission reduction targets set by CARB for the SCAG region. Implementing SCAG's RTP/SCS will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emission reduction targets and the proposed Specific Plan would support the goals of the RTP/SCS.

4.0 REFERENCES

CAPCOA. 2017. California Emissions Estimator Model (CalEEMod), version 2016.3.2.

_____. 2013. *Health Effects*. http://www.capcoa.org/health-effects/.

_____. 2009. *Health Risk Assessments for Proposed Land Use Projects*.

CARB. 2020. Air Quality Data Statistics. http://www.arb.ca.gov/adam/index.html.

_____. 2019. *California Greenhouse Gas Emission Inventory 2019 Edition*. https://ww3.arb.ca.gov/cc/inventory/data/data.htm

_____. 2018. State and Federal Area Designation Maps. http://www.arb.ca.gov/desig/adm/adm.htm.

_____. 2008. *Climate Change Scoping Plan Appendices* (Appendix F).

_____. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*.

DOC. 2000. *A General Location Guide for Ultramafic Rocks in California-Areas More Likely to Contain Naturally Occurring Asbestos.*

IPCC. 2014. *Climate Change 2014 Synthesis Report: Approved Summary for Policymakers*. http://www.ipcc.ch/.

_____. 2013. *Carbon and Other Biogeochemical Cycles. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. http://www.climatechange2013.org/ images/report/WG1AR5_ALL_FINAL.pdf.

OEHHA. 2015. *Guidance Manual for Preparation of Health Risk Assessments*.

SCAQMD. 2018. *Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act.*

_____. 2017. *Multiple Air Toxics Exposure Study V (MATES V).*

_____. 2015. *Multiple Air Toxics Exposure Study IV (MATES IV).*

_____. 2009. *Localized Significance Threshold Appendix C – Mass Rate LST Look-Up Tables*. Revised October 21, 2009. http://www.aqmd.gov/ceqa/handbook/LST/LST.html.

_____. 2008a. *Multiple Air Toxics Exposure Study III (MATES III).*

_____. 2008b. *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]).

_____. 2003. *Air Quality Management Plan*.

_____. 1993. *CEQA Air Quality Handbook*.

_____. 1992. 1992 Federal Attainment Plan for Carbon Monoxide.

Riverside, County of. 2019. *County of Riverside Climate Action Plan Update*.

State of California. 2007. Goods Movement Action Plan.

Urban Crossroads. 2020. *Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Traffic Impact Analysis*.

USEPA. 2018a. *Status of SIP Required Elements for California Designated Areas*.

_____. 2018b. *Nonattainment Areas for Criteria Pollutants*.

_____. 2016a. *Climate Change – Greenhouse Gas Emissions: Carbon Dioxide*. http://www.epa.gov/climatechange/emissions/co2.html.

_____. 2016b. *Methane*. https://www3.epa.gov/climatechange/ghgemissions/gases/ch4.html.

_____. 2016c. *Nitrous Oxide*. https://www3.epa.gov/climatechange/ghgemissions/gases/n2o.html.

_____. 2002. Health Assessment Document for Diesel Engine Exhaust. https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=300055PV.TXT.

_____. 1998. *AP-42: Compilation of Air Emissions Factors Chapter 11, Section 11.9*.

_____. 1980. *AP-42: Compilation of Air Emissions Factors Chapter 13, Section 13.3*.

LIST OF ATTACHMENTS

Attachment A – CalEEMod Output File for Air Quality Emissions

Attachment B – Construction Health Risk Assessment - Diesel Particulate Matter

Attachment C – Operational Health Risk Assessment - Diesel Particulate Matter

Attachment D – CalEEMod Output File for Greenhouse Gas Emissions

ATTACHMENT A

CalEEMod Output Files – Criteria Air Pollutants

Stoneridge Commerce Center Operational Mobile Source Emissions

Primary Land Use Plan

Vehicle Class	Daily VMT[1]	Pollutant	Run Emission Rate[2] (Gram/Mile)	Idle Emission Rate (Gram/Vehicle/Day)	Start Emission Rate[3] (Grams/Start/Day)	Total Grams Daily	Total Pounds Daily
		NOx	0.369926	0.567577	0.211158	79373.95	**175.1063**
		ROG[4]	0.166710	0.460424	0.126278	39858.93	**87.9325**
		PM10	0.078757	0.002429	0.000428	14532.93	**32.0610**
Passenger Automobiles	183913	**PM2.5**	0.035786	0.002324	0.000395	6627.93	**14.6218**
		CO	2.642018	1.116136	1.193015	508203.34	**1121.1439**
		SOx	0.004293	0.001186	0.000169	813.23	**1.7941**

[1] Daily VMT calculated per CaLLEMod v 2016.3.2, which provides average distance traveled per trip type.

[2]Particulate matter Run emissions account for tire wear and brake wear.

[3]Start emissions account for 4 automobile starts daily.

[4]ROG emissions account for Hotsoak emissions per trip and Restloss and Diurnalsoak emissions daily.

All emission factors sourced from EMFAC2017.

Stoneridge Commerce Center Operational Mobile Source Emissions

Vehicle Class	Daily VMT[1]	Pollutant	Run Emission Rate[2] (Gram/Mile)	Idle Emission Rate (Gram/Vehicle/Day)	Start Emission Rate[3] (Grams/Start/Day)	Total Grams Daily	Total Pounds Daily
Heavy Duty Trucks Represents a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment.	211072	**NOx**	1.466522	28.571192	0.965882	421430.97	**929.7160**
		ROG[4]	0.002219	0.123703	0.082017	953.12	**2.1027**
		PM10	0.113168	0.0101195	0.000121	23926.27	**52.7836**
		PM2.5	0.049362	0.0096815	0.000111	10456.87	**23.0688**
		CO	0.166419	89.9178	1.447193	387250.35	**854.3104**
		SOx	0.008865	0.039683	0.000109	2026.56	**4.4708**

[1] In order to more accurately account for the trip distribution patterns of freight trucks, the average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

[2]Particulate matter Run emissions account for tire wear and brake wear.

[3]Start emissions account for 4 automobile starts daily.

[4]ROG emissions account for Hotsoak emissions per trip and Restloss and Diurnalsoak emissions daily.

All emission factors sourced from EMFAC2017.

Stoneridge Commerce Center - Primary Land Use Plan

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	1,695.36	1000sqft	77.84	1,695,355.20	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,871.60	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,871.60	0
Manufacturing	847.68	1000sqft	38.92	847,677.60	0
Unrefrigerated Warehouse-No Rail	427.76	1000sqft	19.64	427,759.20	0
Industrial Park	641.64	1000sqft	29.46	641,638.80	0
Free-Standing Discount Superstore	100.00	1000sqft	6.56	100,000.00	0
Strip Mall	21.97	1000sqft	1.44	21,968.00	0
Other Asphalt Surfaces	37.30	Acre	37.30	1,624,788.00	0
Other Non-Asphalt Surfaces	31.40	Acre	31.40	1,367,784.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Summer

Project Characteristics - 2017 SCE CO2 Intensity Factor per Edison International Sustainability Template - Section 2 Quantative Information (2018)

Land Use - Land use types are consistent with the Traffic Impact Analysis prepared for the Project (Urban Crossoroads 2020). Land uses also include 37.3 acres of internal circulation and 31.4 acres of offsite infrastructure.

Construction Phase - Construction timing adjusted to reflect a 2021 start date and 2030 Opening Year. Building construction, paving, and painting assumed to occur simultaneously.

Off-road Equipment - Equipment doubled to account for accelerated timeline compared with CalEEMod defaults

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Grading - Haul truck emissions calculated separately

Trips and VMT - Building Construction worker & vendor trips reflect total building s.f. divided by the number of days of construction, coupled with the rates for commercial buildings in the CalEEMod User's Guide, Appendix E. Painting worker trips equate to paving.

Vehicle Trips - Mobile emissions modeled separately

Water And Wastewater - Water consumption per EMWD Water Supply Assessment Report - Stoneridge Commerce Center SP 239 (2020)

Construction Off-road Equipment Mitigation - "Mitigation" accounts for County requirements to employ Tier 3 engines or better and adhere to SCAQMD Rule 403

Energy Mitigation - Energy use reflects 2019 Title 24 Standards. Increase of efficiency per CEC 2019 Building Energy Efficiency Standards Frequently Asked Questions (2018)

Consumer Products - Consumer product emission factor adjusted to omit dry industrial warehouse square footage. Cold storage, manufacturing, industrial park, and all commercial retail is included.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	9,300.00	1,473.00
tblConstructionPhase	NumDays	930.00	465.00
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	360.00	180.00
tblConstructionPhase	PhaseEndDate	6/19/2068	11/13/2029
tblConstructionPhase	PhaseEndDate	5/29/2063	11/13/2029

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Summer

tblConstructionPhase	PhaseEndDate	10/5/2027	12/20/2023
tblConstructionPhase	PhaseEndDate	12/8/2065	11/13/2029
tblConstructionPhase	PhaseEndDate	3/12/2024	3/9/2022
tblConstructionPhase	PhaseStartDate	12/9/2065	3/22/2024
tblConstructionPhase	PhaseStartDate	10/6/2027	3/22/2024
tblConstructionPhase	PhaseStartDate	3/13/2024	3/10/2022
tblConstructionPhase	PhaseStartDate	5/30/2063	3/22/2024
tblConstructionPhase	PhaseStartDate	10/26/2022	7/1/2021
tblConsumerProducts	ROG_EF	1.98E-05	4.1E-06
tblLandUse	LandUseSquareFeet	1,695,360.00	1,695,355.20
tblLandUse	LandUseSquareFeet	2,966,870.00	2,966,871.60
tblLandUse	LandUseSquareFeet	2,966,870.00	2,966,871.60
tblLandUse	LandUseSquareFeet	847,678.00	847,677.60
tblLandUse	LandUseSquareFeet	427,759.00	427,759.20
tblLandUse	LandUseSquareFeet	641,639.00	641,638.80
tblLandUse	LotAcreage	38.92	77.84
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	19.46	38.92
tblLandUse	LotAcreage	9.82	19.64
tblLandUse	LotAcreage	14.73	29.46
tblLandUse	LotAcreage	2.30	6.56
tblLandUse	LotAcreage	0.50	1.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	2,075.00	180.00
tblTripsAndVMT	WorkerTripNumber	5,305.00	257.00
tblTripsAndVMT	WorkerTripNumber	1,061.00	30.00
tblVehicleTrips	ST_TR	64.07	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	56.12	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	20.43	0.00

tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	50.75	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	5,330,000.00
tblWater	IndoorWaterUseRate	148,379,250.00	15,864,849.00
tblWater	IndoorWaterUseRate	196,026,000.00	31,024,945.00
tblWater	IndoorWaterUseRate	392,052,000.00	62,754,292.00
tblWater	IndoorWaterUseRate	1,627,373.30	1,170,000.00
tblWater	IndoorWaterUseRate	1,471,096,875.00	242,555,914.00
tblWater	OutdoorWaterUseRate	4,539,928.74	246,000.00
tblWater	OutdoorWaterUseRate	997,422.34	54,000.00

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					
2021	7.9423	81.0887	43.6025	0.0798	36.5237	4.0912	40.6150	19.9651	3.7639	23.7291	0.0000	7,743.9766	7,743.9766	2.3929	0.0000	7,803.7995
2022	7.4270	77.7842	59.4471	0.1283	36.5237	3.2723	39.7511	19.9651	3.0106	22.9343	0.0000	12,433.1595	12,433.1595	3.8975	0.0000	12,530.5981
2023	6.8098	69.1189	57.3612	0.1281	17.7938	2.8515	20.6453	7.3116	2.6234	9.9349	0.0000	12,417.6999	12,417.6999	3.8967	0.0000	12,515.1163
2024	68.2935	60.7576	76.9132	0.1805	4.6958	2.3170	7.0128	1.2715	2.1671	3.4386	0.0000	17,834.4411	17,834.4411	2.9777	0.0000	17,908.8826
2025	67.8433	56.5938	75.8966	0.1790	4.6957	2.0262	6.7219	1.2715	1.8945	3.1660	0.0000	17,682.7264	17,682.7264	2.9575	0.0000	17,756.6626
2026	67.7768	56.4206	75.2495	0.1776	4.6957	2.0254	6.7211	1.2715	1.8938	3.1653	0.0000	17,548.2479	17,548.2479	2.9462	0.0000	17,621.9026
2027	67.7129	56.2593	74.6802	0.1765	4.6957	2.0243	6.7199	1.2715	1.8928	3.1642	0.0000	17,430.9431	17,430.9431	2.9355	0.0000	17,504.3301
2028	67.6509	56.1234	74.1924	0.1754	4.6957	2.0229	6.7185	1.2715	1.8915	3.1629	0.0000	17,330.1256	17,330.1256	2.9254	0.0000	17,403.2607
2029	67.5867	55.9992	73.7370	0.1746	4.6956	2.0215	6.7172	1.2715	1.8903	3.1617	0.0000	17,241.6323	17,241.6323	2.9161	0.0000	17,314.5337
Maximum	**68.2935**	**81.0887**	**76.9132**	**0.1805**	**36.5237**	**4.0912**	**40.6150**	**19.9651**	**3.7639**	**23.7291**	**0.0000**	**17,834.4411**	**17,834.4411**	**3.8975**	**0.0000**	**17,908.8826**

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					
2021	2.0282	38.2258	47.2141	0.0798	14.3469	1.8946	16.2415	7.8163	1.8945	9.7107	0.0000	7,743.9766	7,743.9766	2.3929	0.0000	7,803.7995
2022	3.2236	60.0536	74.8092	0.1283	14.3469	2.6014	16.2414	7.8163	2.6012	9.7107	0.0000	12,433.1595	12,433.1595	3.8975	0.0000	12,530.5981
2023	3.2125	60.0441	74.7040	0.1281	7.0568	2.6014	9.6582	2.8857	2.6012	5.4868	0.0000	12,417.6999	12,417.6999	3.8967	0.0000	12,515.1163
2024	65.6011	66.1398	85.7116	0.1805	3.1352	3.2474	6.3826	0.8885	3.2453	4.1338	0.0000	17,834.4411	17,834.4411	2.9777	0.0000	17,908.8825
2025	65.5251	65.9567	84.9568	0.1790	3.1352	3.2469	6.3821	0.8884	3.2449	4.1333	0.0000	17,682.7264	17,682.7264	2.9575	0.0000	17,756.6625
2026	65.4585	65.7834	84.3097	0.1776	3.1351	3.2462	6.3813	0.8884	3.2442	4.1326	0.0000	17,548.2479	17,548.2479	2.9462	0.0000	17,621.9026
2027	65.3947	65.6222	83.7403	0.1765	3.1351	3.2450	6.3801	0.8884	3.2431	4.1315	0.0000	17,430.9430	17,430.9430	2.9355	0.0000	17,504.3300
2028	65.3326	65.4862	83.2526	0.1754	3.1351	3.2436	6.3787	0.8884	3.2418	4.1302	0.0000	17,330.1256	17,330.1256	2.9254	0.0000	17,403.2607
2029	65.2685	65.3620	82.7971	0.1746	3.1350	3.2423	6.3773	0.8884	3.2406	4.1290	0.0000	17,241.6323	17,241.6323	2.9161	0.0000	17,314.5337
Maximum	**65.6011**	**66.1398**	**85.7116**	**0.1805**	**14.3469**	**3.2474**	**16.2415**	**7.8163**	**3.2453**	**9.7107**	**0.0000**	**17,834.4411**	**17,834.4411**	**3.8975**	**0.0000**	**17,908.8825**

	ROG	NOx	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	**6.53**	**3.06**	**-14.80**	**0.00**	**54.16**	**-17.29**	**43.21**	**56.54**	**-26.29**	**34.48**	**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	65.5723	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Energy	3.8618	35.1071	29.4900	0.2106		2.6681	2.6681		2.6681	2.6681		42,128.5208	42,128.5208	0.8075	0.7724	42,378.8696
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**69.4341**	**35.1160**	**30.4791**	**0.2107**	**0.0000**	**2.6717**	**2.6717**	**0.0000**	**2.6717**	**2.6717**		**42,130.6518**	**42,130.6518**	**0.8130**	**0.7724**	**42,381.1379**

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	65.5723	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Energy	3.5630	32.3904	27.2080	0.1943		2.4617	2.4617		2.4617	2.4617		38,868.5142	38,868.5142	0.7450	0.7126	39,099.4903
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**69.1353**	**32.3993**	**28.1971**	**0.1944**	**0.0000**	**2.4652**	**2.4652**	**0.0000**	**2.4652**	**2.4652**		**38,870.6451**	**38,870.6451**	**0.7505**	**0.7126**	**39,101.7586**

	ROG	NOx	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**	**7.74**	**7.49**	**7.74**	**0.00**	**7.73**	**7.73**	**0.00**	**7.73**	**7.73**	**0.00**	**7.74**	**7.74**	**7.69**	**7.74**	**7.74**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2021	3/9/2022	5	180	
2	Grading	Grading	3/10/2022	12/20/2023	5	465	
3	Building Construction	Building Construction	3/22/2024	11/13/2029	5	1473	
4	Paving	Paving	3/22/2024	11/13/2029	5	1473	
5	Architectural Coating	Architectural Coating	3/22/2024	11/13/2029	5	1473	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2325

Acres of Paving: 68.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,502,213; Non-Residential Outdoor: 4,834,071; Striped Parking Area: 179,554 (Architectural Coating – sqft)

OffRoad Equipment

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	2	6.00	78	0.48
Grading	Excavators	4	8.00	158	0.38
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Paving	Pavers	4	8.00	130	0.42
Paving	Rollers	4	8.00	80	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Grading	Graders	2	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Paving Equipment	4	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	2	8.00	46	0.45

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
Site Preparation	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	257.00	180.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	30.00	0.00	0.00	14.70	6.90	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

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	7.7764	80.9942	42.3085	0.0760		4.0889	4.0889		3.7618	3.7618		7,371.3138	7,371.3138	2.3840		7,430.9146
Total	**7.7764**	**80.9942**	**42.3085**	**0.0760**	**36.1325**	**4.0889**	**40.2214**	**19.8614**	**3.7618**	**23.6232**		**7,371.3138**	**7,371.3138**	**2.3840**		**7,430.9146**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1659	0.0945	1.2940	3.7400e-003	0.3912	2.3100e-003	0.3935	0.1038	2.1200e-003	0.1059		372.6628	372.6628	8.8900e-003		372.8850
Total	**0.1659**	**0.0945**	**1.2940**	**3.7400e-003**	**0.3912**	**2.3100e-003**	**0.3935**	**0.1038**	**2.1200e-003**	**0.1059**		**372.6628**	**372.6628**	**8.8900e-003**		**372.8850**

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					14.0917	0.0000	14.0917	7.7459	0.0000	7.7459			0.0000			0.0000
Off-Road	1.8623	38.1312	45.9201	0.0760		1.8923	1.8923		1.8923	1.8923	0.0000	7,371.3138	7,371.3138	2.3840		7,430.9146
Total	**1.8623**	**38.1312**	**45.9201**	**0.0760**	**14.0917**	**1.8923**	**15.9840**	**7.7459**	**1.8923**	**9.6383**	**0.0000**	**7,371.3138**	**7,371.3138**	**2.3840**		**7,430.9146**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1659	0.0945	1.2940	3.7400e-003	0.2552	2.3100e-003	0.2575	0.0704	2.1200e-003	0.0725		372.6628	372.6628	8.8900e-003		372.8850
Total	**0.1659**	**0.0945**	**1.2940**	**3.7400e-003**	**0.2552**	**2.3100e-003**	**0.2575**	**0.0704**	**2.1200e-003**	**0.0725**		**372.6628**	**372.6628**	**8.8900e-003**		**372.8850**

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	6.3403	66.1670	39.3955	0.0761		3.2252	3.2252		2.9671	2.9671		7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**6.3403**	**66.1670**	**39.3955**	**0.0761**	**36.1325**	**3.2252**	**39.3577**	**19.8614**	**2.9671**	**22.8285**		**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1552	0.0851	1.1935	3.6000e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		359.0461	359.0461	7.9800e-003		359.2457
Total	**0.1552**	**0.0851**	**1.1935**	**3.6000e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**359.0461**	**359.0461**	**7.9800e-003**		**359.2457**

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					14.0917	0.0000	14.0917	7.7459	0.0000	7.7459			0.0000			0.0000
Off-Road	1.8623	38.1312	45.9201	0.0761		1.8923	1.8923		1.8923	1.8923	0.0000	7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**1.8623**	**38.1312**	**45.9201**	**0.0761**	**14.0917**	**1.8923**	**15.9840**	**7.7459**	**1.8923**	**9.6383**	**0.0000**	**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1552	0.0851	1.1935	3.6000e-003	0.2552	2.2400e-003	0.2574	0.0704	2.0700e-003	0.0724		359.0461	359.0461	7.9800e-003		359.2457
Total	**0.1552**	**0.0851**	**1.1935**	**3.6000e-003**	**0.2552**	**2.2400e-003**	**0.2574**	**0.0704**	**2.0700e-003**	**0.0724**		**359.0461**	**359.0461**	**7.9800e-003**		**359.2457**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	7.2497	77.6870	58.0830	0.1242		3.2698	3.2698		3.0082	3.0082		12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**7.2497**	**77.6870**	**58.0830**	**0.1242**	**17.3467**	**3.2698**	**20.6165**	**7.1930**	**3.0082**	**10.2012**		**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1774	0.0972	1.3640	4.1200e-003	0.4471	2.5700e-003	0.4497	0.1186	2.3600e-003	0.1209		410.3384	410.3384	9.1200e-003		410.5665
Total	**0.1774**	**0.0972**	**1.3640**	**4.1200e-003**	**0.4471**	**2.5700e-003**	**0.4497**	**0.1186**	**2.3600e-003**	**0.1209**		**410.3384**	**410.3384**	**9.1200e-003**		**410.5665**

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					6.7652	0.0000	6.7652	2.8053	0.0000	2.8053			0.0000			0.0000
Off-Road	3.0462	59.9564	73.4452	0.1242		2.5989	2.5989		2.5989	2.5989	0.0000	12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**3.0462**	**59.9564**	**73.4452**	**0.1242**	**6.7652**	**2.5989**	**9.3641**	**2.8053**	**2.5989**	**5.4041**	**0.0000**	**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1774	0.0972	1.3640	4.1200e-003	0.2916	2.5700e-003	0.2942	0.0804	2.3600e-003	0.0828		410.3384	410.3384	9.1200e-003		410.5665
Total	**0.1774**	**0.0972**	**1.3640**	**4.1200e-003**	**0.2916**	**2.5700e-003**	**0.2942**	**0.0804**	**2.3600e-003**	**0.0828**		**410.3384**	**410.3384**	**9.1200e-003**		**410.5665**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	6.6435	69.0312	56.1023	0.1242		2.8490	2.8490		2.6211	2.6211		12,022.9555	12,022.9555	3.8885		12,120.1671
Total	**6.6435**	**69.0312**	**56.1023**	**0.1242**	**17.3467**	**2.8490**	**20.1957**	**7.1930**	**2.6211**	**9.8141**		**12,022.9555**	**12,022.9555**	**3.8885**		**12,120.1671**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1663	0.0877	1.2589	3.9600e-003	0.4471	2.5000e-003	0.4496	0.1186	2.3100e-003	0.1209		394.7445	394.7445	8.1900e-003		394.9492
Total	**0.1663**	**0.0877**	**1.2589**	**3.9600e-003**	**0.4471**	**2.5000e-003**	**0.4496**	**0.1186**	**2.3100e-003**	**0.1209**		**394.7445**	**394.7445**	**8.1900e-003**		**394.9492**

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					6.7652	0.0000	6.7652	2.8053	0.0000	2.8053			0.0000			0.0000
Off-Road	3.0462	59.9564	73.4452	0.1242		2.5989	2.5989		2.5989	2.5989	0.0000	12,022.9554	12,022.9554	3.8885		12,120.1671
Total	**3.0462**	**59.9564**	**73.4452**	**0.1242**	**6.7652**	**2.5989**	**9.3641**	**2.8053**	**2.5989**	**5.4041**	**0.0000**	**12,022.9554**	**12,022.9554**	**3.8885**		**12,120.1671**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1663	0.0877	1.2589	3.9600e-003	0.2916	2.5000e-003	0.2941	0.0804	2.3100e-003	0.0827		394.7445	394.7445	8.1900e-003		394.9492
Total	**0.1663**	**0.0877**	**1.2589**	**3.9600e-003**	**0.2916**	**2.5000e-003**	**0.2941**	**0.0804**	**2.3100e-003**	**0.0827**		**394.7445**	**394.7445**	**8.1900e-003**		**394.9492**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9431	26.8876	32.3336	0.0539		1.2266	1.2266		1.1538	1.1538		5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**2.9431**	**26.8876**	**32.3336**	**0.0539**		**1.2266**	**1.2266**		**1.1538**	**1.1538**		**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2947	11.7532	2.3536	0.0448	1.1525	0.0118	1.1643	0.3318	0.0113	0.3431		4,728.3811	4,728.3811	0.2502		4,734.6351
Worker	1.0071	0.5108	7.5838	0.0245	2.8727	0.0159	2.8886	0.7618	0.0147	0.7765		2,445.6929	2,445.6929	0.0480		2,446.8921
Total	**1.3018**	**12.2640**	**9.9373**	**0.0693**	**4.0251**	**0.0278**	**4.0529**	**1.0937**	**0.0260**	**1.1196**		**7,174.0739**	**7,174.0739**	**0.2981**		**7,181.5272**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2947	11.7532	2.3536	0.0448	0.8241	0.0118	0.8359	0.2512	0.0113	0.2625		4,728.3811	4,728.3811	0.2502		4,734.6351
Worker	1.0071	0.5108	7.5838	0.0245	1.8737	0.0159	1.8896	0.5166	0.0147	0.5313		2,445.6929	2,445.6929	0.0480		2,446.8921
Total	**1.3018**	**12.2640**	**9.9373**	**0.0693**	**2.6978**	**0.0278**	**2.7255**	**0.7678**	**0.0260**	**0.7938**		**7,174.0739**	**7,174.0739**	**0.2981**		**7,181.5272**

3.4 Building Construction - 2025

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2871	11.6264	2.2731	0.0445	1.1524	0.0117	1.1641	0.3318	0.0112	0.3430		4,697.6150	4,697.6150	0.2438		4,703.7100
Worker	0.9516	0.4652	7.0370	0.0235	2.8727	0.0156	2.8883	0.7618	0.0144	0.7762		2,347.6798	2,347.6798	0.0435		2,348.7668
Total	**1.2387**	**12.0916**	**9.3102**	**0.0680**	**4.0251**	**0.0273**	**4.0524**	**1.0936**	**0.0256**	**1.1192**		**7,045.2948**	**7,045.2948**	**0.2873**		**7,052.4768**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2871	11.6264	2.2731	0.0445	0.8240	0.0117	0.8357	0.2512	0.0112	0.2624		4,697.6150	4,697.6150	0.2438		4,703.7100
Worker	0.9516	0.4652	7.0370	0.0235	1.8737	0.0156	1.8893	0.5166	0.0144	0.5310		2,347.6798	2,347.6798	0.0435		2,348.7668
Total	**1.2387**	**12.0916**	**9.3102**	**0.0680**	**2.6977**	**0.0273**	**2.7251**	**0.7678**	**0.0256**	**0.7934**		**7,045.2948**	**7,045.2948**	**0.2873**		**7,052.4768**

3.4 Building Construction - 2026

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2805	11.5011	2.2078	0.0442	1.1524	0.0115	1.1640	0.3318	0.0110	0.3428		4,668.6589	4,668.6589	0.2373		4,674.5911
Worker	0.9030	0.4263	6.5654	0.0227	2.8727	0.0152	2.8878	0.7618	0.0139	0.7758		2,262.1301	2,262.1301	0.0396		2,263.1210
Total	**1.1835**	**11.9274**	**8.7732**	**0.0669**	**4.0251**	**0.0267**	**4.0518**	**1.0936**	**0.0250**	**1.1186**		**6,930.7890**	**6,930.7890**	**0.2769**		**6,937.7121**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2805	11.5011	2.2078	0.0442	0.8240	0.0115	0.8355	0.2512	0.0110	0.2622		4,668.6589	4,668.6589	0.2373		4,674.5911
Worker	0.9030	0.4263	6.5654	0.0227	1.8737	0.0152	1.8888	0.5166	0.0139	0.5306		2,262.1301	2,262.1301	0.0396		2,263.1210
Total	**1.1835**	**11.9274**	**8.7732**	**0.0669**	**2.6977**	**0.0267**	**2.7244**	**0.7678**	**0.0250**	**0.7928**		**6,930.7890**	**6,930.7890**	**0.2769**		**6,937.7121**

3.4 Building Construction - 2027

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2750	11.3825	2.1543	0.0440	1.1524	0.0114	1.1638	0.3318	0.0109	0.3427		4,643.7552	4,643.7552	0.2308		4,649.5252
Worker	0.8557	0.3917	6.1472	0.0219	2.8727	0.0144	2.8870	0.7618	0.0132	0.7750		2,187.2181	2,187.2181	0.0362		2,188.1234
Total	**1.1307**	**11.7742**	**8.3015**	**0.0659**	**4.0250**	**0.0257**	**4.0508**	**1.0936**	**0.0241**	**1.1177**		**6,830.9734**	**6,830.9734**	**0.2670**		**6,837.6486**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2750	11.3825	2.1543	0.0440	0.8240	0.0114	0.8354	0.2512	0.0109	0.2621		4,643.7552	4,643.7552	0.2308		4,649.5252
Worker	0.8557	0.3917	6.1472	0.0219	1.8737	0.0144	1.8880	0.5166	0.0132	0.5298		2,187.2181	2,187.2181	0.0362		2,188.1234
Total	**1.1307**	**11.7742**	**8.3015**	**0.0659**	**2.6977**	**0.0257**	**2.7234**	**0.7678**	**0.0241**	**0.7919**		**6,830.9734**	**6,830.9734**	**0.2670**		**6,837.6486**

3.4 Building Construction - 2028

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2706	11.2843	2.1157	0.0438	1.1524	0.0113	1.1636	0.3318	0.0108	0.3425		4,623.5036	4,623.5036	0.2243		4,629.1119
Worker	0.8090	0.3611	5.7830	0.0213	2.8727	0.0133	2.8860	0.7618	0.0122	0.7741		2,121.9014	2,121.9014	0.0333		2,122.7336
Total	**1.0796**	**11.6454**	**7.8987**	**0.0650**	**4.0250**	**0.0246**	**4.0496**	**1.0936**	**0.0230**	**1.1166**		**6,745.4049**	**6,745.4049**	**0.2576**		**6,751.8455**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2706	11.2843	2.1157	0.0438	0.8239	0.0113	0.8352	0.2512	0.0108	0.2619		4,623.5036	4,623.5036	0.2243		4,629.1119
Worker	0.8090	0.3611	5.7830	0.0213	1.8737	0.0133	1.8870	0.5166	0.0122	0.5289		2,121.9014	2,121.9014	0.0333		2,122.7336
Total	**1.0796**	**11.6454**	**7.8987**	**0.0650**	**2.6976**	**0.0246**	**2.7222**	**0.7678**	**0.0230**	**0.7908**		**6,745.4049**	**6,745.4049**	**0.2576**		**6,751.8455**

3.4 Building Construction - 2029

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2668	11.1950	2.0817	0.0436	1.1523	0.0112	1.1635	0.3318	0.0107	0.3424		4,605.4403	4,605.4403	0.2184		4,610.8994
Worker	0.7601	0.3328	5.4414	0.0207	2.8727	0.0123	2.8850	0.7618	0.0113	0.7732		2,064.8019	2,064.8019	0.0306		2,065.5656
Total	**1.0268**	**11.5278**	**7.5231**	**0.0643**	**4.0250**	**0.0235**	**4.0485**	**1.0936**	**0.0220**	**1.1156**		**6,670.2422**	**6,670.2422**	**0.2489**		**6,676.4650**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2668	11.1950	2.0817	0.0436	0.8239	0.0112	0.8351	0.2511	0.0107	0.2618		4,605.4403	4,605.4403	0.2184		4,610.8994
Worker	0.7601	0.3328	5.4414	0.0207	1.8737	0.0123	1.8860	0.5166	0.0113	0.5280		2,064.8019	2,064.8019	0.0306		2,065.5656
Total	**1.0268**	**11.5278**	**7.5231**	**0.0643**	**2.6976**	**0.0235**	**2.7211**	**0.7678**	**0.0220**	**0.7898**		**6,670.2422**	**6,670.2422**	**0.2489**		**6,676.4650**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9763	19.0492	29.2515	0.0456		0.9370	0.9370		0.8621	0.8621		4,415.0944	4,415.0944	1.4279		4,450.7927
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0427**	**19.0492**	**29.2515**	**0.0456**		**0.9370**	**0.9370**		**0.8621**	**0.8621**		**4,415.0944**	**4,415.0944**	**1.4279**		**4,450.7927**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1176	0.0596	0.8853	2.8600e-003	0.3353	1.8600e-003	0.3372	0.0889	1.7100e-003	0.0906		285.4894	285.4894	5.6000e-003		285.6294
Total	**0.1176**	**0.0596**	**0.8853**	**2.8600e-003**	**0.3353**	**1.8600e-003**	**0.3372**	**0.0889**	**1.7100e-003**	**0.0906**		**285.4894**	**285.4894**	**5.6000e-003**		**285.6294**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,415.0944	4,415.0944	1.4279		4,450.7927
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,415.0944**	**4,415.0944**	**1.4279**		**4,450.7927**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1176	0.0596	0.8853	2.8600e-003	0.2187	1.8600e-003	0.2206	0.0603	1.7100e-003	0.0620		285.4894	285.4894	5.6000e-003		285.6294
Total	**0.1176**	**0.0596**	**0.8853**	**2.8600e-003**	**0.2187**	**1.8600e-003**	**0.2206**	**0.0603**	**1.7100e-003**	**0.0620**		**285.4894**	**285.4894**	**5.6000e-003**		**285.6294**

3.5 Paving - 2025

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1111	0.0543	0.8214	2.7500e-003	0.3353	1.8300e-003	0.3372	0.0889	1.6800e-003	0.0906		274.0482	274.0482	5.0800e-003		274.1751
Total	**0.1111**	**0.0543**	**0.8214**	**2.7500e-003**	**0.3353**	**1.8300e-003**	**0.3372**	**0.0889**	**1.6800e-003**	**0.0906**		**274.0482**	**274.0482**	**5.0800e-003**		**274.1751**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1111	0.0543	0.8214	2.7500e-003	0.2187	1.8300e-003	0.2205	0.0603	1.6800e-003	0.0620		274.0482	274.0482	5.0800e-003		274.1751
Total	**0.1111**	**0.0543**	**0.8214**	**2.7500e-003**	**0.2187**	**1.8300e-003**	**0.2205**	**0.0603**	**1.6800e-003**	**0.0620**		**274.0482**	**274.0482**	**5.0800e-003**		**274.1751**

3.5 Paving - 2026

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1054	0.0498	0.7664	2.6500e-003	0.3353	1.7700e-003	0.3371	0.0889	1.6300e-003	0.0906		264.0619	264.0619	4.6300e-003		264.1776
Total	**0.1054**	**0.0498**	**0.7664**	**2.6500e-003**	**0.3353**	**1.7700e-003**	**0.3371**	**0.0889**	**1.6300e-003**	**0.0906**		**264.0619**	**264.0619**	**4.6300e-003**		**264.1776**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1054	0.0498	0.7664	2.6500e-003	0.2187	1.7700e-003	0.2205	0.0603	1.6300e-003	0.0619		264.0619	264.0619	4.6300e-003		264.1776
Total	**0.1054**	**0.0498**	**0.7664**	**2.6500e-003**	**0.2187**	**1.7700e-003**	**0.2205**	**0.0603**	**1.6300e-003**	**0.0619**		**264.0619**	**264.0619**	**4.6300e-003**		**264.1776**

3.5 Paving - 2027

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0999	0.0457	0.7176	2.5600e-003	0.3353	1.6700e-003	0.3370	0.0889	1.5400e-003	0.0905		255.3173	255.3173	4.2300e-003		255.4230
Total	**0.0999**	**0.0457**	**0.7176**	**2.5600e-003**	**0.3353**	**1.6700e-003**	**0.3370**	**0.0889**	**1.5400e-003**	**0.0905**		**255.3173**	**255.3173**	**4.2300e-003**		**255.4230**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0999	0.0457	0.7176	2.5600e-003	0.2187	1.6700e-003	0.2204	0.0603	1.5400e-003	0.0619		255.3173	255.3173	4.2300e-003		255.4230
Total	**0.0999**	**0.0457**	**0.7176**	**2.5600e-003**	**0.2187**	**1.6700e-003**	**0.2204**	**0.0603**	**1.5400e-003**	**0.0619**		**255.3173**	**255.3173**	**4.2300e-003**		**255.4230**

3.5 Paving - 2028

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0422	0.6751	2.4800e-003	0.3353	1.5500e-003	0.3369	0.0889	1.4300e-003	0.0904		247.6928	247.6928	3.8900e-003		247.7899
Total	**0.0944**	**0.0422**	**0.6751**	**2.4800e-003**	**0.3353**	**1.5500e-003**	**0.3369**	**0.0889**	**1.4300e-003**	**0.0904**		**247.6928**	**247.6928**	**3.8900e-003**		**247.7899**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0422	0.6751	2.4800e-003	0.2187	1.5500e-003	0.2203	0.0603	1.4300e-003	0.0617		247.6928	247.6928	3.8900e-003		247.7899
Total	**0.0944**	**0.0422**	**0.6751**	**2.4800e-003**	**0.2187**	**1.5500e-003**	**0.2203**	**0.0603**	**1.4300e-003**	**0.0617**		**247.6928**	**247.6928**	**3.8900e-003**		**247.7899**

3.5 Paving - 2029

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0887	0.0389	0.6352	2.4200e-003	0.3353	1.4400e-003	0.3368	0.0889	1.3200e-003	0.0903		241.0275	241.0275	3.5700e-003		241.1166
Total	**0.0887**	**0.0389**	**0.6352**	**2.4200e-003**	**0.3353**	**1.4400e-003**	**0.3368**	**0.0889**	**1.3200e-003**	**0.0903**		**241.0275**	**241.0275**	**3.5700e-003**		**241.1166**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0887	0.0389	0.6352	2.4200e-003	0.2187	1.4400e-003	0.2202	0.0603	1.3200e-003	0.0616		241.0275	241.0275	3.5700e-003		241.1166
Total	**0.0887**	**0.0389**	**0.6352**	**2.4200e-003**	**0.2187**	**1.4400e-003**	**0.2202**	**0.0603**	**1.3200e-003**	**0.0616**		**241.0275**	**241.0275**	**3.5700e-003**		**241.1166**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885
Total	**61.7708**	**2.4376**	**3.6203**	**5.9400e-003**		**0.1218**	**0.1218**		**0.1218**	**0.1218**		**562.8961**	**562.8961**	**0.0317**		**563.6885**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1176	0.0596	0.8853	2.8600e-003	0.3353	1.8600e-003	0.3372	0.0889	1.7100e-003	0.0906		285.4894	285.4894	5.6000e-003		285.6294
Total	**0.1176**	**0.0596**	**0.8853**	**2.8600e-003**	**0.3353**	**1.8600e-003**	**0.3372**	**0.0889**	**1.7100e-003**	**0.0906**		**285.4894**	**285.4894**	**5.6000e-003**		**285.6294**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0317		563.6885
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0317**		**563.6885**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1176	0.0596	0.8853	2.8600e-003	0.2187	1.8600e-003	0.2206	0.0603	1.7100e-003	0.0620		285.4894	285.4894	5.6000e-003		285.6294
Total	**0.1176**	**0.0596**	**0.8853**	**2.8600e-003**	**0.2187**	**1.8600e-003**	**0.2206**	**0.0603**	**1.7100e-003**	**0.0620**		**285.4894**	**285.4894**	**5.6000e-003**		**285.6294**

3.6 Architectural Coating - 2025

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1111	0.0543	0.8214	2.7500e-003	0.3353	1.8300e-003	0.3372	0.0889	1.6800e-003	0.0906		274.0482	274.0482	5.0800e-003		274.1751
Total	**0.1111**	**0.0543**	**0.8214**	**2.7500e-003**	**0.3353**	**1.8300e-003**	**0.3372**	**0.0889**	**1.6800e-003**	**0.0906**		**274.0482**	**274.0482**	**5.0800e-003**		**274.1751**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1111	0.0543	0.8214	2.7500e-003	0.2187	1.8300e-003	0.2205	0.0603	1.6800e-003	0.0620		274.0482	274.0482	5.0800e-003		274.1751
Total	**0.1111**	**0.0543**	**0.8214**	**2.7500e-003**	**0.2187**	**1.8300e-003**	**0.2205**	**0.0603**	**1.6800e-003**	**0.0620**		**274.0482**	**274.0482**	**5.0800e-003**		**274.1751**

3.6 Architectural Coating - 2026

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1054	0.0498	0.7664	2.6500e-003	0.3353	1.7700e-003	0.3371	0.0889	1.6300e-003	0.0906		264.0619	264.0619	4.6300e-003		264.1776
Total	**0.1054**	**0.0498**	**0.7664**	**2.6500e-003**	**0.3353**	**1.7700e-003**	**0.3371**	**0.0889**	**1.6300e-003**	**0.0906**		**264.0619**	**264.0619**	**4.6300e-003**		**264.1776**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1054	0.0498	0.7664	2.6500e-003	0.2187	1.7700e-003	0.2205	0.0603	1.6300e-003	0.0619		264.0619	264.0619	4.6300e-003		264.1776
Total	**0.1054**	**0.0498**	**0.7664**	**2.6500e-003**	**0.2187**	**1.7700e-003**	**0.2205**	**0.0603**	**1.6300e-003**	**0.0619**		**264.0619**	**264.0619**	**4.6300e-003**		**264.1776**

3.6 Architectural Coating - 2027

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0999	0.0457	0.7176	2.5600e-003	0.3353	1.6700e-003	0.3370	0.0889	1.5400e-003	0.0905		255.3173	255.3173	4.2300e-003		255.4230
Total	**0.0999**	**0.0457**	**0.7176**	**2.5600e-003**	**0.3353**	**1.6700e-003**	**0.3370**	**0.0889**	**1.5400e-003**	**0.0905**		**255.3173**	**255.3173**	**4.2300e-003**		**255.4230**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0999	0.0457	0.7176	2.5600e-003	0.2187	1.6700e-003	0.2204	0.0603	1.5400e-003	0.0619		255.3173	255.3173	4.2300e-003		255.4230
Total	**0.0999**	**0.0457**	**0.7176**	**2.5600e-003**	**0.2187**	**1.6700e-003**	**0.2204**	**0.0603**	**1.5400e-003**	**0.0619**		**255.3173**	**255.3173**	**4.2300e-003**		**255.4230**

3.6 Architectural Coating - 2028

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0422	0.6751	2.4800e-003	0.3353	1.5500e-003	0.3369	0.0889	1.4300e-003	0.0904		247.6928	247.6928	3.8900e-003		247.7899
Total	**0.0944**	**0.0422**	**0.6751**	**2.4800e-003**	**0.3353**	**1.5500e-003**	**0.3369**	**0.0889**	**1.4300e-003**	**0.0904**		**247.6928**	**247.6928**	**3.8900e-003**		**247.7899**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0944	0.0422	0.6751	2.4800e-003	0.2187	1.5500e-003	0.2203	0.0603	1.4300e-003	0.0617		247.6928	247.6928	3.8900e-003		247.7899
Total	**0.0944**	**0.0422**	**0.6751**	**2.4800e-003**	**0.2187**	**1.5500e-003**	**0.2203**	**0.0603**	**1.4300e-003**	**0.0617**		**247.6928**	**247.6928**	**3.8900e-003**		**247.7899**

3.6 Architectural Coating - 2029

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0887	0.0389	0.6352	2.4200e-003	0.3353	1.4400e-003	0.3368	0.0889	1.3200e-003	0.0903		241.0275	241.0275	3.5700e-003		241.1166
Total	**0.0887**	**0.0389**	**0.6352**	**2.4200e-003**	**0.3353**	**1.4400e-003**	**0.3368**	**0.0889**	**1.3200e-003**	**0.0903**		**241.0275**	**241.0275**	**3.5700e-003**		**241.1166**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0887	0.0389	0.6352	2.4200e-003	0.2187	1.4400e-003	0.2202	0.0603	1.3200e-003	0.0616		241.0275	241.0275	3.5700e-003		241.1166
Total	**0.0887**	**0.0389**	**0.6352**	**2.4200e-003**	**0.2187**	**1.4400e-003**	**0.2202**	**0.0603**	**1.3200e-003**	**0.0616**		**241.0275**	**241.0275**	**3.5700e-003**		**241.1166**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Free-Standing Discount Superstore	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Free-Standing Discount	16.60	8.40	6.90	13.20	67.80	19.00	47.5	35.5	17
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Free-Standing Discount Superstore	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Industrial Park	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Manufacturing	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Non-Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Refrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Strip Mall	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Unrefrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.5630	32.3904	27.2080	0.1943		2.4617	2.4617		2.4617	2.4617		38,868.5142	38,868.5142	0.7450	0.7126	39,099.4903
NaturalGas Unmitigated	3.8618	35.1071	29.4900	0.2106		2.6681	2.6681		2.6681	2.6681		42,128.5208	42,128.5208	0.8075	0.7724	42,378.8696

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					
Free-Standing Discount Superstore	608.219	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
Industrial Park	6099.96	0.0658	0.5980	0.5024	3.5900e-003		0.0455	0.0455		0.0455	0.0455		717.6428	717.6428	0.0138	0.0132	721.9073
Manufacturing	75454.9	0.8137	7.3975	6.2139	0.0444		0.5622	0.5622		0.5622	0.5622		8,877.0492	8,877.0492	0.1701	0.1628	8,929.8011
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	240415	2.5927	23.5701	19.7989	0.1414		1.7913	1.7913		1.7913	1.7913		28,284.1532	28,284.1532	0.5421	0.5185	28,452.2317
Strip Mall	133.614	1.4400e-003	0.0131	0.0110	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003		15.7193	15.7193	3.0000e-004	2.9000e-004	15.8127
Unrefrigerated Warehouse-No Rail	16500.7	0.3559	3.2354	2.7178	0.0194		0.2459	0.2459		0.2459	0.2459		3,882.5137	3,882.5137	0.0744	0.0712	3,905.5855
Unrefrigerated Warehouse-No Rail	2379.04	0.0257	0.2332	0.1959	1.4000e-003		0.0177	0.0177		0.0177	0.0177		279.8876	279.8876	5.3600e-003	5.1300e-003	281.5508
Total		**3.8618**	**35.1071**	**29.4900**	**0.2107**		**2.6681**	**2.6681**		**2.6681**	**2.6681**		**42,128.5208**	**42,128.5208**	**0.8074**	**0.7724**	**42,378.8696**

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					
Free-Standing Discount Superstore	0.450411	4.8600e-003	0.0442	0.0371	2.6000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003		52.9895	52.9895	1.0200e-003	9.7000e-004	53.3044
Industrial Park	4.26997	0.0461	0.4186	0.3516	2.5100e-003		0.0318	0.0318		0.0318	0.0318		502.3499	502.3499	9.6300e-003	9.2100e-003	505.3351
Manufacturing	64.7533	0.6983	6.3484	5.3326	0.0381		0.4825	0.4825		0.4825	0.4825		7,618.0328	7,618.0328	0.1460	0.1397	7,663.3030
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	235.887	2.5439	23.1261	19.4260	0.1388		1.7576	1.7576		1.7576	1.7576		27,751.3663	27,751.3663	0.5319	0.5088	27,916.2788
Strip Mall	0.0989463	1.0700e-003	9.7000e-003	8.1500e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6407	11.6407	2.2000e-004	2.1000e-004	11.7099
Unrefrigerated Warehouse-No Rail	1.67588	0.0181	0.1643	0.1380	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.1622	197.1622	3.7800e-003	3.6100e-003	198.3338
Unrefrigerated Warehouse-No Rail	11.6236	0.2507	2.2791	1.9145	0.0137		0.1732	0.1732		0.1732	0.1732		2,734.9727	2,734.9727	0.0524	0.0501	2,751.2253
Total		**3.5630**	**32.3904**	**27.2080**	**0.1943**		**2.4617**	**2.4617**		**2.4617**	**2.4617**		**38,868.5142**	**38,868.5142**	**0.7450**	**0.7126**	**39,099.4903**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	65.5723	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Unmitigated	65.5723	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683

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	24.7825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.6994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0905	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Total	**65.5723**	**8.9100e-003**	**0.9891**	**7.0000e-005**		**3.5100e-003**	**3.5100e-003**		**3.5100e-003**	**3.5100e-003**		**2.1309**	**2.1309**	**5.5000e-003**		**2.2683**

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	24.7825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.6994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0905	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Total	**65.5723**	**8.9100e-003**	**0.9891**	**7.0000e-005**		**3.5100e-003**	**3.5100e-003**		**3.5100e-003**	**3.5100e-003**		**2.1309**	**2.1309**	**5.5000e-003**		**2.2683**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stoneridge Commerce Center - Primary Land Use Plan

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	1,695.36	1000sqft	77.84	1,695,355.20	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,871.60	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,871.60	0
Manufacturing	847.68	1000sqft	38.92	847,677.60	0
Unrefrigerated Warehouse-No Rail	427.76	1000sqft	19.64	427,759.20	0
Industrial Park	641.64	1000sqft	29.46	641,638.80	0
Free-Standing Discount Superstore	100.00	1000sqft	6.56	100,000.00	0
Strip Mall	21.97	1000sqft	1.44	21,968.00	0
Other Asphalt Surfaces	37.30	Acre	37.30	1,624,788.00	0
Other Non-Asphalt Surfaces	31.40	Acre	31.40	1,367,784.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Winter

Project Characteristics - 2017 SCE CO2 Intensity Factor per Edison International Sustainability Template - Section 2 Quantative Information (2018)

Land Use - Land use types are consistent with the Traffic Impact Analysis prepared for the Project (Urban Crossoroads 2020). Land uses also include 37.3 acres of internal circulation and 31.4 acres of offsite infrastructure.

Construction Phase - Construction timing adjusted to reflect a 2021 start date and 2030 Opening Year. Building construction, paving, and painting assumed to occur simultaneously.

Off-road Equipment - Equipment doubled to account for accelerated timeline compared with CalEEMod defaults

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Grading - Haul truck emissions calculated separately

Trips and VMT - Building Construction worker & vendor trips reflect total building s.f. divided by the number of days of construction, coupled with the rates for commercial buildings in the CalEEMod User's Guide, Appendix E. Painting worker trips equate to paving.

Vehicle Trips - Mobile emissions modeled separately

Water And Wastewater - Water consumption per EMWD Water Supply Assessment Report - Stoneridge Commerce Center SP 239 (2020)

Construction Off-road Equipment Mitigation - "Mitigation" accounts for County requirements to employ Tier 3 engines or better and adhere to SCAQMD Rule 403

Energy Mitigation - Energy use reflects 2019 Title 24 Standards. Increase of efficiency per CEC 2019 Building Energy Efficiency Standards Frequently Asked Questions (2018)

Consumer Products - Consumer product emission factor adjusted to omit dry industrial warehouse square footage. Cold storage, manufacturing, industrial park, and all commercial retail is included.

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	9,300.00	1,473.00
tblConstructionPhase	NumDays	930.00	465.00
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	360.00	180.00
tblConstructionPhase	PhaseEndDate	6/19/2068	11/13/2029
tblConstructionPhase	PhaseEndDate	5/29/2063	11/13/2029

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Winter

tblConstructionPhase	PhaseEndDate	10/5/2027	12/20/2023
tblConstructionPhase	PhaseEndDate	12/8/2065	11/13/2029
tblConstructionPhase	PhaseEndDate	3/12/2024	3/9/2022
tblConstructionPhase	PhaseStartDate	12/9/2065	3/22/2024
tblConstructionPhase	PhaseStartDate	10/6/2027	3/22/2024
tblConstructionPhase	PhaseStartDate	3/13/2024	3/10/2022
tblConstructionPhase	PhaseStartDate	5/30/2063	3/22/2024
tblConstructionPhase	PhaseStartDate	10/26/2022	7/1/2021
tblConsumerProducts	ROG_EF	1.98E-05	4.1E-06
tblLandUse	LandUseSquareFeet	1,695,360.00	1,695,355.20
tblLandUse	LandUseSquareFeet	2,966,870.00	2,966,871.60
tblLandUse	LandUseSquareFeet	2,966,870.00	2,966,871.60
tblLandUse	LandUseSquareFeet	847,678.00	847,677.60
tblLandUse	LandUseSquareFeet	427,759.00	427,759.20
tblLandUse	LandUseSquareFeet	641,639.00	641,638.80
tblLandUse	LotAcreage	38.92	77.84
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	19.46	38.92
tblLandUse	LotAcreage	9.82	19.64
tblLandUse	LotAcreage	14.73	29.46
tblLandUse	LotAcreage	2.30	6.56
tblLandUse	LotAcreage	0.50	1.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	2,075.00	180.00
tblTripsAndVMT	WorkerTripNumber	5,305.00	257.00
tblTripsAndVMT	WorkerTripNumber	1,061.00	30.00
tblVehicleTrips	ST_TR	64.07	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	56.12	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	20.43	0.00

tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	50.75	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	5,330,000.00
tblWater	IndoorWaterUseRate	148,379,250.00	15,864,849.00
tblWater	IndoorWaterUseRate	196,026,000.00	31,024,945.00
tblWater	IndoorWaterUseRate	392,052,000.00	62,754,292.00
tblWater	IndoorWaterUseRate	1,627,373.30	1,170,000.00
tblWater	IndoorWaterUseRate	1,471,096,875.00	242,555,914.00
tblWater	OutdoorWaterUseRate	4,539,928.74	246,000.00
tblWater	OutdoorWaterUseRate	997,422.34	54,000.00

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					
2021	7.9392	81.0920	43.3530	0.0794	36.5237	4.0912	40.6150	19.9651	3.7639	23.7291	0.0000	7,705.6315	7,705.6315	2.3918	0.0000	7,765.4255
2022	7.4242	77.7875	59.1824	0.1279	36.5237	3.2723	39.7511	19.9651	3.0106	22.9343	0.0000	12,390.9566	12,390.9566	3.8964	0.0000	12,488.3657
2023	6.8077	69.1218	57.1155	0.1277	17.7938	2.8515	20.6453	7.3116	2.6234	9.9349	0.0000	12,377.1203	12,377.1203	3.8956	0.0000	12,474.5104
2024	68.2991	60.6197	75.4401	0.1757	4.6958	2.3173	7.0131	1.2715	2.1674	3.4390	0.0000	17,349.5563	17,349.5563	2.9972	0.0000	17,424.4854
2025	67.8525	56.4523	74.5438	0.1744	4.6957	2.0265	6.7222	1.2715	1.8949	3.1663	0.0000	17,212.7566	17,212.7566	2.9769	0.0000	17,287.1795
2026	67.7894	56.2759	73.9990	0.1731	4.6957	2.0257	6.7214	1.2715	1.8941	3.1656	0.0000	17,091.3713	17,091.3713	2.9655	0.0000	17,165.5075
2027	67.7283	56.1109	73.5206	0.1721	4.6957	2.0245	6.7202	1.2715	1.8930	3.1645	0.0000	16,985.1923	16,985.1923	2.9545	0.0000	17,059.0532
2028	67.6680	55.9727	73.1118	0.1712	4.6957	2.0231	6.7188	1.2715	1.8917	3.1632	0.0000	16,893.9879	16,893.9879	2.9440	0.0000	16,967.5867
2029	67.6053	55.8466	72.7299	0.1704	4.6956	2.0218	6.7174	1.2715	1.8905	3.1619	0.0000	16,813.8440	16,813.8440	2.9342	0.0000	16,887.1993
Maximum	**68.2991**	**81.0920**	**75.4401**	**0.1757**	**36.5237**	**4.0912**	**40.6150**	**19.9651**	**3.7639**	**23.7291**	**0.0000**	**17,349.5563**	**17,349.5563**	**3.8964**	**0.0000**	**17,424.4854**

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					
2021	2.0251	38.2290	46.9646	0.0794	14.3469	1.8946	16.2415	7.8163	1.8945	9.7107	0.0000	7,705.6315	7,705.6315	2.3918	0.0000	7,765.4254
2022	3.2208	60.0569	74.5446	0.1279	14.3469	2.6014	16.2414	7.8163	2.6012	9.7107	0.0000	12,390.9566	12,390.9566	3.8964	0.0000	12,488.3657
2023	3.2104	60.0470	74.4583	0.1277	7.0568	2.6014	9.6582	2.8857	2.6012	5.4868	0.0000	12,377.1203	12,377.1203	3.8956	0.0000	12,474.5103
2024	65.6067	66.0020	84.2385	0.1757	3.1352	3.2478	6.3830	0.8885	3.2457	4.1341	0.0000	17,349.5563	17,349.5563	2.9972	0.0000	17,424.4854
2025	65.5343	65.8152	83.6039	0.1744	3.1352	3.2473	6.3824	0.8884	3.2452	4.1336	0.0000	17,212.7566	17,212.7566	2.9769	0.0000	17,287.1795
2026	65.4711	65.6388	83.0592	0.1731	3.1351	3.2465	6.3816	0.8884	3.2445	4.1329	0.0000	17,091.3713	17,091.3713	2.9655	0.0000	17,165.5075
2027	65.4100	65.4738	82.5808	0.1721	3.1351	3.2453	6.3804	0.8884	3.2434	4.1318	0.0000	16,985.1923	16,985.1923	2.9545	0.0000	17,059.0532
2028	65.3498	65.3355	82.1720	0.1712	3.1351	3.2439	6.3789	0.8884	3.2421	4.1305	0.0000	16,893.9879	16,893.9879	2.9440	0.0000	16,967.5866
2029	65.2871	65.2094	81.7901	0.1704	3.1350	3.2425	6.3776	0.8884	3.2408	4.1292	0.0000	16,813.8440	16,813.8440	2.9342	0.0000	16,887.1993
Maximum	**65.6067**	**66.0020**	**84.2385**	**0.1757**	**14.3469**	**3.2478**	**16.2415**	**7.8163**	**3.2457**	**9.7107**	**0.0000**	**17,349.5563**	**17,349.5563**	**3.8964**	**0.0000**	**17,424.4854**

	ROG	NOx	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	**6.52**	**3.07**	**-14.99**	**0.00**	**54.16**	**-17.29**	**43.21**	**56.54**	**-26.29**	**34.48**	**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	65.5723	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Energy	3.8618	35.1071	29.4900	0.2106		2.6681	2.6681		2.6681	2.6681		42,128.5208	42,128.5208	0.8075	0.7724	42,378.8696
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**69.4341**	**35.1160**	**30.4791**	**0.2107**	**0.0000**	**2.6717**	**2.6717**	**0.0000**	**2.6717**	**2.6717**		**42,130.6518**	**42,130.6518**	**0.8130**	**0.7724**	**42,381.1379**

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	65.5723	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Energy	3.5630	32.3904	27.2080	0.1943		2.4617	2.4617		2.4617	2.4617		38,868.5142	38,868.5142	0.7450	0.7126	39,099.4903
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**69.1353**	**32.3993**	**28.1971**	**0.1944**	**0.0000**	**2.4652**	**2.4652**	**0.0000**	**2.4652**	**2.4652**		**38,870.6451**	**38,870.6451**	**0.7505**	**0.7126**	**39,101.7586**

	ROG	NOx	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**	**7.74**	**7.49**	**7.74**	**0.00**	**7.73**	**7.73**	**0.00**	**7.73**	**7.73**	**0.00**	**7.74**	**7.74**	**7.69**	**7.74**	**7.74**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2021	3/9/2022	5	180	
2	Grading	Grading	3/10/2022	12/20/2023	5	465	
3	Building Construction	Building Construction	3/22/2024	11/13/2029	5	1473	
4	Paving	Paving	3/22/2024	11/13/2029	5	1473	
5	Architectural Coating	Architectural Coating	3/22/2024	11/13/2029	5	1473	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2325

Acres of Paving: 68.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,502,213; Non-Residential Outdoor: 4,834,071; Striped Parking Area: 179,554 (Architectural Coating – sqft)

OffRoad Equipment

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	2	6.00	78	0.48
Grading	Excavators	4	8.00	158	0.38
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Paving	Pavers	4	8.00	130	0.42
Paving	Rollers	4	8.00	80	0.38
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Grading	Graders	2	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Paving	Paving Equipment	4	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Building Construction	Welders	2	8.00	46	0.45

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
Site Preparation	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	257.00	180.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	30.00	0.00	0.00	14.70	6.90	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

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	7.7764	80.9942	42.3085	0.0760		4.0889	4.0889		3.7618	3.7618		7,371.3138	7,371.3138	2.3840		7,430.9146
Total	**7.7764**	**80.9942**	**42.3085**	**0.0760**	**36.1325**	**4.0889**	**40.2214**	**19.8614**	**3.7618**	**23.6232**		**7,371.3138**	**7,371.3138**	**2.3840**		**7,430.9146**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1628	0.0978	1.0445	3.3500e-003	0.3912	2.3100e-003	0.3935	0.1038	2.1200e-003	0.1059		334.3177	334.3177	7.7300e-003		334.5109
Total	**0.1628**	**0.0978**	**1.0445**	**3.3500e-003**	**0.3912**	**2.3100e-003**	**0.3935**	**0.1038**	**2.1200e-003**	**0.1059**		**334.3177**	**334.3177**	**7.7300e-003**		**334.5109**

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					14.0917	0.0000	14.0917	7.7459	0.0000	7.7459			0.0000			0.0000
Off-Road	1.8623	38.1312	45.9201	0.0760		1.8923	1.8923		1.8923	1.8923	0.0000	7,371.3138	7,371.3138	2.3840		7,430.9146
Total	**1.8623**	**38.1312**	**45.9201**	**0.0760**	**14.0917**	**1.8923**	**15.9840**	**7.7459**	**1.8923**	**9.6383**	**0.0000**	**7,371.3138**	**7,371.3138**	**2.3840**		**7,430.9146**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1628	0.0978	1.0445	3.3500e-003	0.2552	2.3100e-003	0.2575	0.0704	2.1200e-003	0.0725		334.3177	334.3177	7.7300e-003		334.5109
Total	**0.1628**	**0.0978**	**1.0445**	**3.3500e-003**	**0.2552**	**2.3100e-003**	**0.2575**	**0.0704**	**2.1200e-003**	**0.0725**		**334.3177**	**334.3177**	**7.7300e-003**		**334.5109**

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	6.3403	66.1670	39.3955	0.0761		3.2252	3.2252		2.9671	2.9671		7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**6.3403**	**66.1670**	**39.3955**	**0.0761**	**36.1325**	**3.2252**	**39.3577**	**19.8614**	**2.9671**	**22.8285**		**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1528	0.0880	0.9620	3.2300e-003	0.3912	2.2400e-003	0.3935	0.1038	2.0700e-003	0.1058		322.1186	322.1186	6.9500e-003		322.2923
Total	**0.1528**	**0.0880**	**0.9620**	**3.2300e-003**	**0.3912**	**2.2400e-003**	**0.3935**	**0.1038**	**2.0700e-003**	**0.1058**		**322.1186**	**322.1186**	**6.9500e-003**		**322.2923**

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					14.0917	0.0000	14.0917	7.7459	0.0000	7.7459			0.0000			0.0000
Off-Road	1.8623	38.1312	45.9201	0.0761		1.8923	1.8923		1.8923	1.8923	0.0000	7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**1.8623**	**38.1312**	**45.9201**	**0.0761**	**14.0917**	**1.8923**	**15.9840**	**7.7459**	**1.8923**	**9.6383**	**0.0000**	**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1528	0.0880	0.9620	3.2300e-003	0.2552	2.2400e-003	0.2574	0.0704	2.0700e-003	0.0724		322.1186	322.1186	6.9500e-003		322.2923
Total	**0.1528**	**0.0880**	**0.9620**	**3.2300e-003**	**0.2552**	**2.2400e-003**	**0.2574**	**0.0704**	**2.0700e-003**	**0.0724**		**322.1186**	**322.1186**	**6.9500e-003**		**322.2923**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	7.2497	77.6870	58.0830	0.1242		3.2698	3.2698		3.0082	3.0082		12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**7.2497**	**77.6870**	**58.0830**	**0.1242**	**17.3467**	**3.2698**	**20.6165**	**7.1930**	**3.0082**	**10.2012**		**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1746	0.1005	1.0994	3.6900e-003	0.4471	2.5700e-003	0.4497	0.1186	2.3600e-003	0.1209		368.1356	368.1356	7.9400e-003		368.3340
Total	**0.1746**	**0.1005**	**1.0994**	**3.6900e-003**	**0.4471**	**2.5700e-003**	**0.4497**	**0.1186**	**2.3600e-003**	**0.1209**		**368.1356**	**368.1356**	**7.9400e-003**		**368.3340**

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					6.7652	0.0000	6.7652	2.8053	0.0000	2.8053			0.0000			0.0000
Off-Road	3.0462	59.9564	73.4452	0.1242		2.5989	2.5989		2.5989	2.5989	0.0000	12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**3.0462**	**59.9564**	**73.4452**	**0.1242**	**6.7652**	**2.5989**	**9.3641**	**2.8053**	**2.5989**	**5.4041**	**0.0000**	**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1746	0.1005	1.0994	3.6900e-003	0.2916	2.5700e-003	0.2942	0.0804	2.3600e-003	0.0828		368.1356	368.1356	7.9400e-003		368.3340
Total	**0.1746**	**0.1005**	**1.0994**	**3.6900e-003**	**0.2916**	**2.5700e-003**	**0.2942**	**0.0804**	**2.3600e-003**	**0.0828**		**368.1356**	**368.1356**	**7.9400e-003**		**368.3340**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	6.6435	69.0312	56.1023	0.1242		2.8490	2.8490		2.6211	2.6211		12,022.9555	12,022.9555	3.8885		12,120.1671
Total	**6.6435**	**69.0312**	**56.1023**	**0.1242**	**17.3467**	**2.8490**	**20.1957**	**7.1930**	**2.6211**	**9.8141**		**12,022.9555**	**12,022.9555**	**3.8885**		**12,120.1671**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1642	0.0906	1.0131	3.5500e-003	0.4471	2.5000e-003	0.4496	0.1186	2.3100e-003	0.1209		354.1648	354.1648	7.1400e-003		354.3432
Total	**0.1642**	**0.0906**	**1.0131**	**3.5500e-003**	**0.4471**	**2.5000e-003**	**0.4496**	**0.1186**	**2.3100e-003**	**0.1209**		**354.1648**	**354.1648**	**7.1400e-003**		**354.3432**

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					6.7652	0.0000	6.7652	2.8053	0.0000	2.8053			0.0000			0.0000
Off-Road	3.0462	59.9564	73.4452	0.1242		2.5989	2.5989		2.5989	2.5989	0.0000	12,022.9554	12,022.9554	3.8885		12,120.1671
Total	**3.0462**	**59.9564**	**73.4452**	**0.1242**	**6.7652**	**2.5989**	**9.3641**	**2.8053**	**2.5989**	**5.4041**	**0.0000**	**12,022.9554**	**12,022.9554**	**3.8885**		**12,120.1671**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1642	0.0906	1.0131	3.5500e-003	0.2916	2.5000e-003	0.2941	0.0804	2.3100e-003	0.0827		354.1648	354.1648	7.1400e-003		354.3432
Total	**0.1642**	**0.0906**	**1.0131**	**3.5500e-003**	**0.2916**	**2.5000e-003**	**0.2941**	**0.0804**	**2.3100e-003**	**0.0827**		**354.1648**	**354.1648**	**7.1400e-003**		**354.3432**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9431	26.8876	32.3336	0.0539		1.2266	1.2266		1.1538	1.1538		5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**2.9431**	**26.8876**	**32.3336**	**0.0539**		**1.2266**	**1.2266**		**1.1538**	**1.1538**		**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3123	11.5947	2.7234	0.0431	1.1525	0.0122	1.1647	0.3318	0.0117	0.3435		4,554.0235	4,554.0235	0.2773		4,560.9546
Worker	0.9974	0.5276	6.0897	0.0220	2.8727	0.0159	2.8886	0.7618	0.0147	0.7765		2,193.9405	2,193.9405	0.0418		2,194.9862
Total	**1.3097**	**12.1222**	**8.8130**	**0.0651**	**4.0251**	**0.0281**	**4.0532**	**1.0937**	**0.0263**	**1.1200**		**6,747.9640**	**6,747.9640**	**0.3191**		**6,755.9408**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3123	11.5947	2.7234	0.0431	0.8241	0.0122	0.8363	0.2512	0.0117	0.2629		4,554.0235	4,554.0235	0.2773		4,560.9546
Worker	0.9974	0.5276	6.0897	0.0220	1.8737	0.0159	1.8896	0.5166	0.0147	0.5313		2,193.9405	2,193.9405	0.0418		2,194.9862
Total	**1.3097**	**12.1222**	**8.8130**	**0.0651**	**2.6978**	**0.0281**	**2.7259**	**0.7678**	**0.0263**	**0.7942**		**6,747.9640**	**6,747.9640**	**0.3191**		**6,755.9408**

3.4 Building Construction - 2025

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3045	11.4663	2.6366	0.0429	1.1524	0.0120	1.1645	0.3318	0.0115	0.3433		4,525.5665	4,525.5665	0.2701		4,532.3190
Worker	0.9450	0.4802	5.6456	0.0211	2.8727	0.0156	2.8883	0.7618	0.0144	0.7762		2,106.1474	2,106.1474	0.0379		2,107.0960
Total	**1.2494**	**11.9466**	**8.2822**	**0.0640**	**4.0251**	**0.0277**	**4.0528**	**1.0936**	**0.0259**	**1.1195**		**6,631.7139**	**6,631.7139**	**0.3080**		**6,639.4150**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3045	11.4663	2.6366	0.0429	0.8240	0.0120	0.8361	0.2512	0.0115	0.2627		4,525.5665	4,525.5665	0.2701		4,532.3190
Worker	0.9450	0.4802	5.6456	0.0211	1.8737	0.0156	1.8893	0.5166	0.0144	0.5310		2,106.1474	2,106.1474	0.0379		2,107.0960
Total	**1.2494**	**11.9466**	**8.2822**	**0.0640**	**2.6977**	**0.0277**	**2.7254**	**0.7678**	**0.0259**	**0.7937**		**6,631.7139**	**6,631.7139**	**0.3080**		**6,639.4150**

3.4 Building Construction - 2026

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2976	11.3396	2.5658	0.0426	1.1524	0.0119	1.1643	0.3318	0.0113	0.3431		4,498.8112	4,498.8112	0.2628		4,505.3803
Worker	0.8994	0.4400	5.2613	0.0203	2.8727	0.0152	2.8878	0.7618	0.0139	0.7758		2,029.4285	2,029.4285	0.0346		2,030.2933
Total	**1.1970**	**11.7796**	**7.8271**	**0.0629**	**4.0251**	**0.0270**	**4.0521**	**1.0936**	**0.0253**	**1.1189**		**6,528.2397**	**6,528.2397**	**0.2974**		**6,535.6736**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2976	11.3396	2.5658	0.0426	0.8240	0.0119	0.8358	0.2512	0.0113	0.2625		4,498.8112	4,498.8112	0.2628		4,505.3803
Worker	0.8994	0.4400	5.2613	0.0203	1.8737	0.0152	1.8888	0.5166	0.0139	0.5306		2,029.4285	2,029.4285	0.0346		2,030.2933
Total	**1.1970**	**11.7796**	**7.8271**	**0.0629**	**2.6977**	**0.0270**	**2.7247**	**0.7678**	**0.0253**	**0.7931**		**6,528.2397**	**6,528.2397**	**0.2974**		**6,535.6736**

3.4 Building Construction - 2027

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2920	11.2188	2.5081	0.0424	1.1524	0.0117	1.1640	0.3318	0.0112	0.3429		4,475.6227	4,475.6227	0.2554		4,482.0086
Worker	0.8544	0.4041	4.9203	0.0197	2.8727	0.0144	2.8870	0.7618	0.0132	0.7750		1,962.1459	1,962.1459	0.0316		1,962.9361
Total	**1.1464**	**11.6229**	**7.4284**	**0.0620**	**4.0250**	**0.0260**	**4.0510**	**1.0936**	**0.0244**	**1.1180**		**6,437.7686**	**6,437.7686**	**0.2871**		**6,444.9447**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2920	11.2188	2.5081	0.0424	0.8240	0.0117	0.8356	0.2512	0.0112	0.2623		4,475.6227	4,475.6227	0.2554		4,482.0086
Worker	0.8544	0.4041	4.9203	0.0197	1.8737	0.0144	1.8880	0.5166	0.0132	0.5298		1,962.1459	1,962.1459	0.0316		1,962.9361
Total	**1.1464**	**11.6229**	**7.4284**	**0.0620**	**2.6977**	**0.0260**	**2.7237**	**0.7678**	**0.0244**	**0.7922**		**6,437.7686**	**6,437.7686**	**0.2871**		**6,444.9447**

3.4 Building Construction - 2028

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2874	11.1197	2.4664	0.0422	1.1524	0.0115	1.1639	0.3318	0.0110	0.3428		4,456.8608	4,456.8608	0.2481		4,463.0638
Worker	0.8092	0.3724	4.6227	0.0191	2.8727	0.0133	2.8860	0.7618	0.0122	0.7741		1,903.4150	1,903.4150	0.0290		1,904.1409
Total	**1.0967**	**11.4921**	**7.0891**	**0.0613**	**4.0250**	**0.0248**	**4.0498**	**1.0936**	**0.0233**	**1.1169**		**6,360.2758**	**6,360.2758**	**0.2772**		**6,367.2047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2874	11.1197	2.4664	0.0422	0.8239	0.0115	0.8355	0.2512	0.0110	0.2622		4,456.8608	4,456.8608	0.2481		4,463.0638
Worker	0.8092	0.3724	4.6227	0.0191	1.8737	0.0133	1.8870	0.5166	0.0122	0.5289		1,903.4150	1,903.4150	0.0290		1,904.1409
Total	**1.0967**	**11.4921**	**7.0891**	**0.0613**	**2.6976**	**0.0248**	**2.7225**	**0.7678**	**0.0233**	**0.7911**		**6,360.2758**	**6,360.2758**	**0.2772**		**6,367.2047**

3.4 Building Construction - 2029

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2835	11.0297	2.4294	0.0420	1.1523	0.0114	1.1637	0.3318	0.0109	0.3427		4,440.1281	4,440.1281	0.2414		4,446.1618
Worker	0.7616	0.3431	4.3431	0.0186	2.8727	0.0123	2.8850	0.7618	0.0113	0.7732		1,852.0059	1,852.0059	0.0266		1,852.6717
Total	**1.0451**	**11.3728**	**6.7724**	**0.0606**	**4.0250**	**0.0237**	**4.0487**	**1.0936**	**0.0222**	**1.1158**		**6,292.1340**	**6,292.1340**	**0.2680**		**6,298.8335**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2835	11.0297	2.4294	0.0420	0.8239	0.0114	0.8353	0.2511	0.0109	0.2620		4,440.1281	4,440.1281	0.2414		4,446.1618
Worker	0.7616	0.3431	4.3431	0.0186	1.8737	0.0123	1.8860	0.5166	0.0113	0.5280		1,852.0059	1,852.0059	0.0266		1,852.6717
Total	**1.0451**	**11.3728**	**6.7724**	**0.0606**	**2.6976**	**0.0237**	**2.7213**	**0.7678**	**0.0222**	**0.7900**		**6,292.1340**	**6,292.1340**	**0.2680**		**6,298.8335**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9763	19.0492	29.2515	0.0456		0.9370	0.9370		0.8621	0.8621		4,415.0944	4,415.0944	1.4279		4,450.7927
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0427**	**19.0492**	**29.2515**	**0.0456**		**0.9370**	**0.9370**		**0.8621**	**0.8621**		**4,415.0944**	**4,415.0944**	**1.4279**		**4,450.7927**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1164	0.0616	0.7109	2.5700e-003	0.3353	1.8600e-003	0.3372	0.0889	1.7100e-003	0.0906		256.1020	256.1020	4.8800e-003		256.2241
Total	**0.1164**	**0.0616**	**0.7109**	**2.5700e-003**	**0.3353**	**1.8600e-003**	**0.3372**	**0.0889**	**1.7100e-003**	**0.0906**		**256.1020**	**256.1020**	**4.8800e-003**		**256.2241**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,415.0944	4,415.0944	1.4279		4,450.7927
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,415.0944**	**4,415.0944**	**1.4279**		**4,450.7927**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1164	0.0616	0.7109	2.5700e-003	0.2187	1.8600e-003	0.2206	0.0603	1.7100e-003	0.0620		256.1020	256.1020	4.8800e-003		256.2241
Total	**0.1164**	**0.0616**	**0.7109**	**2.5700e-003**	**0.2187**	**1.8600e-003**	**0.2206**	**0.0603**	**1.7100e-003**	**0.0620**		**256.1020**	**256.1020**	**4.8800e-003**		**256.2241**

3.5 Paving - 2025

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1103	0.0561	0.6590	2.4600e-003	0.3353	1.8300e-003	0.3372	0.0889	1.6800e-003	0.0906		245.8538	245.8538	4.4300e-003		245.9645
Total	**0.1103**	**0.0561**	**0.6590**	**2.4600e-003**	**0.3353**	**1.8300e-003**	**0.3372**	**0.0889**	**1.6800e-003**	**0.0906**		**245.8538**	**245.8538**	**4.4300e-003**		**245.9645**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1103	0.0561	0.6590	2.4600e-003	0.2187	1.8300e-003	0.2205	0.0603	1.6800e-003	0.0620		245.8538	245.8538	4.4300e-003		245.9645
Total	**0.1103**	**0.0561**	**0.6590**	**2.4600e-003**	**0.2187**	**1.8300e-003**	**0.2205**	**0.0603**	**1.6800e-003**	**0.0620**		**245.8538**	**245.8538**	**4.4300e-003**		**245.9645**

3.5 Paving - 2026

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1050	0.0514	0.6142	2.3700e-003	0.3353	1.7700e-003	0.3371	0.0889	1.6300e-003	0.0906		236.8983	236.8983	4.0400e-003		236.9992
Total	**0.1050**	**0.0514**	**0.6142**	**2.3700e-003**	**0.3353**	**1.7700e-003**	**0.3371**	**0.0889**	**1.6300e-003**	**0.0906**		**236.8983**	**236.8983**	**4.0400e-003**		**236.9992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1050	0.0514	0.6142	2.3700e-003	0.2187	1.7700e-003	0.2205	0.0603	1.6300e-003	0.0619		236.8983	236.8983	4.0400e-003		236.9992
Total	**0.1050**	**0.0514**	**0.6142**	**2.3700e-003**	**0.2187**	**1.7700e-003**	**0.2205**	**0.0603**	**1.6300e-003**	**0.0619**		**236.8983**	**236.8983**	**4.0400e-003**		**236.9992**

3.5 Paving - 2027

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0472	0.5744	2.3000e-003	0.3353	1.6700e-003	0.3370	0.0889	1.5400e-003	0.0905		229.0443	229.0443	3.6900e-003		229.1365
Total	**0.0997**	**0.0472**	**0.5744**	**2.3000e-003**	**0.3353**	**1.6700e-003**	**0.3370**	**0.0889**	**1.5400e-003**	**0.0905**		**229.0443**	**229.0443**	**3.6900e-003**		**229.1365**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0472	0.5744	2.3000e-003	0.2187	1.6700e-003	0.2204	0.0603	1.5400e-003	0.0619		229.0443	229.0443	3.6900e-003		229.1365
Total	**0.0997**	**0.0472**	**0.5744**	**2.3000e-003**	**0.2187**	**1.6700e-003**	**0.2204**	**0.0603**	**1.5400e-003**	**0.0619**		**229.0443**	**229.0443**	**3.6900e-003**		**229.1365**

3.5 Paving - 2028

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0945	0.0435	0.5396	2.2300e-003	0.3353	1.5500e-003	0.3369	0.0889	1.4300e-003	0.0904		222.1885	222.1885	3.3900e-003		222.2733
Total	**0.0945**	**0.0435**	**0.5396**	**2.2300e-003**	**0.3353**	**1.5500e-003**	**0.3369**	**0.0889**	**1.4300e-003**	**0.0904**		**222.1885**	**222.1885**	**3.3900e-003**		**222.2733**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0945	0.0435	0.5396	2.2300e-003	0.2187	1.5500e-003	0.2203	0.0603	1.4300e-003	0.0617		222.1885	222.1885	3.3900e-003		222.2733
Total	**0.0945**	**0.0435**	**0.5396**	**2.2300e-003**	**0.2187**	**1.5500e-003**	**0.2203**	**0.0603**	**1.4300e-003**	**0.0617**		**222.1885**	**222.1885**	**3.3900e-003**		**222.2733**

3.5 Paving - 2029

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8966**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0889	0.0401	0.5070	2.1700e-003	0.3353	1.4400e-003	0.3368	0.0889	1.3200e-003	0.0903		216.1875	216.1875	3.1100e-003		216.2652
Total	**0.0889**	**0.0401**	**0.5070**	**2.1700e-003**	**0.3353**	**1.4400e-003**	**0.3368**	**0.0889**	**1.3200e-003**	**0.0903**		**216.1875**	**216.1875**	**3.1100e-003**		**216.2652**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0663					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1882**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0889	0.0401	0.5070	2.1700e-003	0.2187	1.4400e-003	0.2202	0.0603	1.3200e-003	0.0616		216.1875	216.1875	3.1100e-003		216.2652
Total	**0.0889**	**0.0401**	**0.5070**	**2.1700e-003**	**0.2187**	**1.4400e-003**	**0.2202**	**0.0603**	**1.3200e-003**	**0.0616**		**216.1875**	**216.1875**	**3.1100e-003**		**216.2652**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885
Total	**61.7708**	**2.4376**	**3.6203**	**5.9400e-003**		**0.1218**	**0.1218**		**0.1218**	**0.1218**		**562.8961**	**562.8961**	**0.0317**		**563.6885**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1164	0.0616	0.7109	2.5700e-003	0.3353	1.8600e-003	0.3372	0.0889	1.7100e-003	0.0906		256.1020	256.1020	4.8800e-003		256.2241
Total	**0.1164**	**0.0616**	**0.7109**	**2.5700e-003**	**0.3353**	**1.8600e-003**	**0.3372**	**0.0889**	**1.7100e-003**	**0.0906**		**256.1020**	**256.1020**	**4.8800e-003**		**256.2241**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0317		563.6885
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0317**		**563.6885**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1164	0.0616	0.7109	2.5700e-003	0.2187	1.8600e-003	0.2206	0.0603	1.7100e-003	0.0620		256.1020	256.1020	4.8800e-003		256.2241
Total	**0.1164**	**0.0616**	**0.7109**	**2.5700e-003**	**0.2187**	**1.8600e-003**	**0.2206**	**0.0603**	**1.7100e-003**	**0.0620**		**256.1020**	**256.1020**	**4.8800e-003**		**256.2241**

3.6 Architectural Coating - 2025

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1103	0.0561	0.6590	2.4600e-003	0.3353	1.8300e-003	0.3372	0.0889	1.6800e-003	0.0906		245.8538	245.8538	4.4300e-003		245.9645
Total	**0.1103**	**0.0561**	**0.6590**	**2.4600e-003**	**0.3353**	**1.8300e-003**	**0.3372**	**0.0889**	**1.6800e-003**	**0.0906**		**245.8538**	**245.8538**	**4.4300e-003**		**245.9645**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1103	0.0561	0.6590	2.4600e-003	0.2187	1.8300e-003	0.2205	0.0603	1.6800e-003	0.0620		245.8538	245.8538	4.4300e-003		245.9645
Total	**0.1103**	**0.0561**	**0.6590**	**2.4600e-003**	**0.2187**	**1.8300e-003**	**0.2205**	**0.0603**	**1.6800e-003**	**0.0620**		**245.8538**	**245.8538**	**4.4300e-003**		**245.9645**

3.6 Architectural Coating - 2026

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1050	0.0514	0.6142	2.3700e-003	0.3353	1.7700e-003	0.3371	0.0889	1.6300e-003	0.0906		236.8983	236.8983	4.0400e-003		236.9992
Total	**0.1050**	**0.0514**	**0.6142**	**2.3700e-003**	**0.3353**	**1.7700e-003**	**0.3371**	**0.0889**	**1.6300e-003**	**0.0906**		**236.8983**	**236.8983**	**4.0400e-003**		**236.9992**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1050	0.0514	0.6142	2.3700e-003	0.2187	1.7700e-003	0.2205	0.0603	1.6300e-003	0.0619		236.8983	236.8983	4.0400e-003		236.9992
Total	**0.1050**	**0.0514**	**0.6142**	**2.3700e-003**	**0.2187**	**1.7700e-003**	**0.2205**	**0.0603**	**1.6300e-003**	**0.0619**		**236.8983**	**236.8983**	**4.0400e-003**		**236.9992**

3.6 Architectural Coating - 2027

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0472	0.5744	2.3000e-003	0.3353	1.6700e-003	0.3370	0.0889	1.5400e-003	0.0905		229.0443	229.0443	3.6900e-003		229.1365
Total	**0.0997**	**0.0472**	**0.5744**	**2.3000e-003**	**0.3353**	**1.6700e-003**	**0.3370**	**0.0889**	**1.5400e-003**	**0.0905**		**229.0443**	**229.0443**	**3.6900e-003**		**229.1365**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0997	0.0472	0.5744	2.3000e-003	0.2187	1.6700e-003	0.2204	0.0603	1.5400e-003	0.0619		229.0443	229.0443	3.6900e-003		229.1365
Total	**0.0997**	**0.0472**	**0.5744**	**2.3000e-003**	**0.2187**	**1.6700e-003**	**0.2204**	**0.0603**	**1.5400e-003**	**0.0619**		**229.0443**	**229.0443**	**3.6900e-003**		**229.1365**

3.6 Architectural Coating - 2028

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0945	0.0435	0.5396	2.2300e-003	0.3353	1.5500e-003	0.3369	0.0889	1.4300e-003	0.0904		222.1885	222.1885	3.3900e-003		222.2733
Total	**0.0945**	**0.0435**	**0.5396**	**2.2300e-003**	**0.3353**	**1.5500e-003**	**0.3369**	**0.0889**	**1.4300e-003**	**0.0904**		**222.1885**	**222.1885**	**3.3900e-003**		**222.2733**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0945	0.0435	0.5396	2.2300e-003	0.2187	1.5500e-003	0.2203	0.0603	1.4300e-003	0.0617		222.1885	222.1885	3.3900e-003		222.2733
Total	**0.0945**	**0.0435**	**0.5396**	**2.2300e-003**	**0.2187**	**1.5500e-003**	**0.2203**	**0.0603**	**1.4300e-003**	**0.0617**		**222.1885**	**222.1885**	**3.3900e-003**		**222.2733**

3.6 Architectural Coating - 2029

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**61.7510**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0889	0.0401	0.5070	2.1700e-003	0.3353	1.4400e-003	0.3368	0.0889	1.3200e-003	0.0903		216.1875	216.1875	3.1100e-003		216.2652
Total	**0.0889**	**0.0401**	**0.5070**	**2.1700e-003**	**0.3353**	**1.4400e-003**	**0.3368**	**0.0889**	**1.3200e-003**	**0.0903**		**216.1875**	**216.1875**	**3.1100e-003**		**216.2652**

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	61.4093					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**61.5282**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0889	0.0401	0.5070	2.1700e-003	0.2187	1.4400e-003	0.2202	0.0603	1.3200e-003	0.0616		216.1875	216.1875	3.1100e-003		216.2652
Total	**0.0889**	**0.0401**	**0.5070**	**2.1700e-003**	**0.2187**	**1.4400e-003**	**0.2202**	**0.0603**	**1.3200e-003**	**0.0616**		**216.1875**	**216.1875**	**3.1100e-003**		**216.2652**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Free-Standing Discount Superstore	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Free-Standing Discount	16.60	8.40	6.90	13.20	67.80	19.00	47.5	35.5	17
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Free-Standing Discount Superstore	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Industrial Park	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Manufacturing	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Non-Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Refrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Strip Mall	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Unrefrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.5630	32.3904	27.2080	0.1943		2.4617	2.4617		2.4617	2.4617		38,868.5142	38,868.5142	0.7450	0.7126	39,099.4903
NaturalGas Unmitigated	3.8618	35.1071	29.4900	0.2106		2.6681	2.6681		2.6681	2.6681		42,128.5208	42,128.5208	0.8075	0.7724	42,378.8696

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					
Free-Standing Discount Superstore	608.219	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
Industrial Park	6099.96	0.0658	0.5980	0.5024	3.5900e-003		0.0455	0.0455		0.0455	0.0455		717.6428	717.6428	0.0138	0.0132	721.9073
Manufacturing	75454.9	0.8137	7.3975	6.2139	0.0444		0.5622	0.5622		0.5622	0.5622		8,877.0492	8,877.0492	0.1701	0.1628	8,929.8011
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	240415	2.5927	23.5701	19.7989	0.1414		1.7913	1.7913		1.7913	1.7913		28,284.1532	28,284.1532	0.5421	0.5185	28,452.2317
Strip Mall	133.614	1.4400e-003	0.0131	0.0110	8.0000e-005		1.0000e-003	1.0000e-003		1.0000e-003	1.0000e-003		15.7193	15.7193	3.0000e-004	2.9000e-004	15.8127
Unrefrigerated Warehouse-No Rail	16500.7	0.3559	3.2354	2.7178	0.0194		0.2459	0.2459		0.2459	0.2459		3,882.5137	3,882.5137	0.0744	0.0712	3,905.5855
Unrefrigerated Warehouse-No Rail	2379.04	0.0257	0.2332	0.1959	1.4000e-003		0.0177	0.0177		0.0177	0.0177		279.8876	279.8876	5.3600e-003	5.1300e-003	281.5508
Total		**3.8618**	**35.1071**	**29.4900**	**0.2107**		**2.6681**	**2.6681**		**2.6681**	**2.6681**		**42,128.5208**	**42,128.5208**	**0.8074**	**0.7724**	**42,378.8696**

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					
Free-Standing Discount Superstore	0.450411	4.8600e-003	0.0442	0.0371	2.6000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003		52.9895	52.9895	1.0200e-003	9.7000e-004	53.3044
Industrial Park	4.26997	0.0461	0.4186	0.3516	2.5100e-003		0.0318	0.0318		0.0318	0.0318		502.3499	502.3499	9.6300e-003	9.2100e-003	505.3351
Manufacturing	64.7533	0.6983	6.3484	5.3326	0.0381		0.4825	0.4825		0.4825	0.4825		7,618.0328	7,618.0328	0.1460	0.1397	7,663.3030
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	235.887	2.5439	23.1261	19.4260	0.1388		1.7576	1.7576		1.7576	1.7576		27,751.3663	27,751.3663	0.5319	0.5088	27,916.2788
Strip Mall	0.0989463	1.0700e-003	9.7000e-003	8.1500e-003	6.0000e-005		7.4000e-004	7.4000e-004		7.4000e-004	7.4000e-004		11.6407	11.6407	2.2000e-004	2.1000e-004	11.7099
Unrefrigerated Warehouse-No Rail	1.67588	0.0181	0.1643	0.1380	9.9000e-004		0.0125	0.0125		0.0125	0.0125		197.1622	197.1622	3.7800e-003	3.6100e-003	198.3338
Unrefrigerated Warehouse-No Rail	11.6236	0.2507	2.2791	1.9145	0.0137		0.1732	0.1732		0.1732	0.1732		2,734.9727	2,734.9727	0.0524	0.0501	2,751.2253
Total		**3.5630**	**32.3904**	**27.2080**	**0.1943**		**2.4617**	**2.4617**		**2.4617**	**2.4617**		**38,868.5142**	**38,868.5142**	**0.7450**	**0.7126**	**39,099.4903**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	65.5723	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Unmitigated	65.5723	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683

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	24.7825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.6994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0905	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Total	**65.5723**	**8.9100e-003**	**0.9891**	**7.0000e-005**		**3.5100e-003**	**3.5100e-003**		**3.5100e-003**	**3.5100e-003**		**2.1309**	**2.1309**	**5.5000e-003**		**2.2683**

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	24.7825					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.6994					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0905	8.9100e-003	0.9891	7.0000e-005		3.5100e-003	3.5100e-003		3.5100e-003	3.5100e-003		2.1309	2.1309	5.5000e-003		2.2683
Total	**65.5723**	**8.9100e-003**	**0.9891**	**7.0000e-005**		**3.5100e-003**	**3.5100e-003**		**3.5100e-003**	**3.5100e-003**		**2.1309**	**2.1309**	**5.5000e-003**		**2.2683**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stoneridge Commerce Center Construction Haul Truck Emissions

Primary & Alternative Land Use Plan

Vehicle Class	Daily VMT[1]	Daily Idling[2] (minutes)	Pollutant	Emission Rate (Gram/Mile)	Emission Rate (Gram/Minute)	Total Grams Daily	Total Pounds Daily
			NOx	2.684759	0.206544	795.11	**1.7541**
			ROG	0.041684	0.0165582	15.15	**0.0334**
			PM10	0.132069	0.00007	36.99	**0.0816**
T7 Single Construction Haul Trucks (Model Year 2010 & Newer)	280	210	**PM2.5**	0.068304	0.000067	19.14	**0.0422**
			CO	0.187106	0.229792	100.65	**0.2220**
			SO2	0.012937	0.000401	3.71	**0.0082**

[1] Daily VMT: 68,877 cubic yards of cut material to be hauled offsite over the course of Site Preparation and Grading activities.
Per CalEEMod 2016.3.2, the combined activities of Site Preparation & Grading would span 645 days, the average haul truck trip length = 20 miles, and the capacity of a single haul truck is 16 cubic yards.
68,877 cubic yards of cut material ÷ 645 days = 107 cubic yards hauled daily. 107 ÷ 16 cubic yard capacity = approximate 14 truck trips daily, as a return trip would be required [107 ÷ 16 = ±7 x 2 = 14].

[2]Daily Idling: Calculations assume 15 minutes of idling per daily haul truck trip. 14 trips x 15 = 210 minutes daily (105 minutes of idling onsite).

Particulate matter emissions account for tire wear and brake wear. All emission factors sourced from EMFAC2017.

Vehicle Class	Daily VMT[1]	Daily Idling[2] (minutes)	Pollutant	Emission Rate (Gram/Mile)	Emission Rate (Gram/Minute)	Total Grams Daily	Total Pounds Daily	2021 Annual Tons	2022 Annual Tons	2023 Annual Tons
			PM10 Exhaust	0.132069	0.00007	36.99	0.0816	**0.005**	**0.011**	**0.011**
T7 Single Construction Haul Trucks	280	210	**PM2.5 Exhaust**	0.068304	0.000067	19.14	0.0422	**0.003**	**0.005**	**0.005**

Blasting Emissions

EPA AP-42, Section 11.9
ammonium nitrate/fuel oil (ANFO)

	CY Graded	Duration (months)	Total Days	CY Blasted*	1 /3 yd	sq ft
Rock Excavation	68,877	1.0	20	68,877	40.99	27.33

$E = k \times 0.000014 \times A^{1.5}$

Where:

E =	1.16E-05	pounds of PM_{10} per blast
	6.71E-07	pounds of $PM_{2.5}$ per blast
k =	0.52	particle size multiplier (0.52 for PM_{10})
	0.03	particle size multiplier (0.03 for $PM_{2.5}$)
A =	1.37	horizontal area shifted by blast in square feet

Blasting Days	20
Blasted Rock (CY)	68,877
Blasted Rock (CY/day)	3,444
Explosive Used (tons/day)	1.72
Area Blasted (square feet)	27.33
Area Blasted (square feet/day)	1.37

Emissions Factors

PM_{10}	*see above	lbs/blast
$PM_{2.5}$	*see above	lbs/blast
NO_X	17	lbs/ton ANFO
CO	67	lbs/ton ANFO
SO_2	2	lbs/ton ANFO

Source: AP-42, Section 11.9 for PM and Section 13.3 for NO_X, CO, SO_2

Rock blasted (CY/day) x ((1 pound explosive per CY) / (2,000 lbs/ton)) x Emissions Factor (lb/ton of explosive) = Pounds/day

	lbs/day				
	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Rock Excavation	29.27	115.37	3.44	0.07	0.00

EPA AP-42, Section 11.9

ammonium nitrate/fuel oil (ANFO)

	CY Graded	Duration (months)	Total Days	CY Blasted*	1 /3 yd	sq ft
Rock Excavation	68,877	0.75	15	68,877	40.99	27.33

$E = k \times 0.000014 \times A^{1.5}$

Where:

E =	1.79E-05	pounds of PM_{10} per blast
	1.03E-06	pounds of $PM_{2.5}$ per blast
k =	0.52	particle size multiplier (0.52 for PM_{10})
	0.03	particle size multiplier (0.03 for $PM_{2.5}$)
A =	1.82	horizontal area shifted by blast in square feet

Blasting Days	15
Blasted Rock (CY)	68,877
Blasted Rock (CY/day)	4,592
Explosive Used (tons/day)	2.30
Area Blasted (square feet)	27.33
Area Blasted (square feet/day)	1.82

Emissions Factors

PM_{10}	*see above	lbs/blast
$PM_{2.5}$	*see above	lbs/blast
NO_X	17	lbs/ton ANFO
CO	67	lbs/ton ANFO
SO_2	2	lbs/ton ANFO

Source: AP-42, Section 11.9 for PM and Section 13.3 for NO_X, CO, SO_2

Rock blasted (CY/day) x ((1 pound explosive per CY) / (2,000 lbs/ton)) x Emissions Factor (lb/ton of explosive) = Pounds/day

	lbs/day				
	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Rock Excavation	39.03	153.83	4.59	0.19	0.01

EPA AP-42, Section 11.9

ammonium nitrate/fuel oil (ANFO)

	CY Graded	Duration (months)	Total Days	CY Blasted*	1 /3 yd	sq ft
Rock Excavation	68,877	0.5	10	68,877	40.99	27.33

$E = k \times 0.000014 \times A^{1.5}$

Where:

E =	3.29E-05	pounds of PM_{10} per blast
	1.90E-06	pounds of $PM_{2.5}$ per blast
k =	0.52	particle size multiplier (0.52 for PM_{10})
	0.03	particle size multiplier (0.03 for $PM_{2.5}$)
A =	2.73	horizontal area shifted by blast in square feet

Blasting Days	10
Blasted Rock (CY)	68,877
Blasted Rock (CY/day)	6,888
Explosive Used (tons/day)	3.44
Area Blasted (square feet)	27.33
Area Blasted (square feet/day)	2.73

Emissions Factors

PM_{10}	*see above	lbs/blast
$PM_{2.5}$	*see above	lbs/blast
NO_X	17	lbs/ton ANFO
CO	67	lbs/ton ANFO
SO_2	2	lbs/ton ANFO

Source: AP-42, Section 11.9 for PM and Section 13.3 for NO_X, CO, SO_2

Rock blasted (CY/day) x ((1 pound explosive per CY) / (2,000 lbs/ton)) x Emissions Factor (lb/ton of explosive) = Pounds/day

	lbs/day				
	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Rock Excavation	58.55	230.74	6.89	0.78	0.05

EPA AP-42, Section 11.9

ammonium nitrate/fuel oil (ANFO)

	CY Graded	Duration (months)	Total Days	CY Blasted*	1 /3 yd	sq ft
Rock Excavation	68,877	0.25	5	68,877	40.99	27.33

$E = k \times 0.000014 \times A^{1.5}$

Where:

E =	9.30E-05	pounds of PM_{10} per blast
	5.37E-06	pounds of $PM_{2.5}$ per blast
k =	0.52	particle size multiplier (0.52 for PM_{10})
	0.03	particle size multiplier (0.03 for $PM_{2.5}$)
A =	5.47	horizontal area shifted by blast in square feet

Blasting Days	5
Blasted Rock (CY)	68,877
Blasted Rock (CY/day)	13,775
Explosive Used (tons/day)	6.89
Area Blasted (square feet)	27.33
Area Blasted (square feet/day)	5.47

Emissions Factors

PM_{10}	*see above	lbs/blast
$PM_{2.5}$	*see above	lbs/blast
NO_X	17	lbs/ton ANFO
CO	67	lbs/ton ANFO
SO_2	2	lbs/ton ANFO

Source: AP-42, Section 11.9 for PM and Section 13.3 for NO_X, CO, SO_2

Rock blasted (CY/day) x ((1 pound explosive per CY) / (2,000 lbs/ton)) x Emissions Factor (lb/ton of explosive) = Pounds/day

	lbs/day				
	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Rock Excavation	117.09	461.48	13.78	8.83	0.51

EPA AP-42, Section 11.9

ammonium nitrate/fuel oil (ANFO)

	CY Graded	Duration (months)	Total Days	CY Blasted*	1 /3 yd	sq ft
Rock Excavation	68,877	0.17	**3.5**	68,877	40.99	27.33

$E = k \times 0.000014 \times A^{1.5}$

Where:

E =	1.59E-04	pounds of PM_{10} per blast
	9.16E-06	pounds of $PM_{2.5}$ per blast
k =	0.52	particle size multiplier (0.52 for PM_{10})
	0.03	particle size multiplier (0.03 for $PM_{2.5}$)
A =	7.81	horizontal area shifted by blast in square feet

Blasting Days	3.5
Blasted Rock (CY)	68,877
Blasted Rock (CY/day)	19,679
Explosive Used (tons/day)	9.84
Area Blasted (square feet)	27.33
Area Blasted (square feet/day)	7.81

Emissions Factors

PM_{10}	*see above	lbs/blast
$PM_{2.5}$	*see above	lbs/blast
NO_X	17	lbs/ton ANFO
CO	67	lbs/ton ANFO
SO_2	2	lbs/ton ANFO

Source: AP-42, Section 11.9 for PM and Section 13.3 for NO_X, CO, SO_2

Rock blasted (CY/day) x ((1 pound explosive per CY) / (2,000 lbs/ton)) x Emissions Factor (lb/ton of explosive) = Pounds/day

	lbs/day				
	NO_X	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Rock Excavation	167.27	659.25	19.68	30.75	1.77

Stoneridge Commerce Center Operational Mobile Source Emissions

Alternative Land Use Plan

Vehicle Class	Daily VMT[1]	Pollutant	Run Emission Rate[2] (Gram/Mile)	Idle Emission Rate (Gram/Vehicle/Day)	Start Emission Rate[3] (Grams/Start/Day)	Total Grams Daily	Total Pounds Daily
		NOx	0.369926	0.567577	0.211158	78930.56	**174.1282**
		ROG[4]	0.166710	0.460424	0.126278	39617.36	**87.3996**
		PM10	0.078757	0.002429	0.000428	14462.69	**31.9060**
Passenger Automobiles	183027	**PM2.5**	0.035786	0.002324	0.000395	6595.76	**14.5509**
		CO	2.642018	1.116136	1.193015	505635.87	**1115.4799**
		SOx	0.004293	0.001186	0.000169	809.19	**1.7851**

[1] Daily VMT calculated per CaLLEMod v 2016.3.2, which provides average distance traveled per trip type.

[2]Particulate matter Run emissions account for tire wear and brake wear.

[3]Start emissions account for 4 automobile starts daily.

[4]ROG emissions account for Hotsoak emissions per trip and Restloss and Diurnalsoak emissions daily.

All emission factors sourced from EMFAC2017.

Stoneridge Commerce Center Operational Mobile Source Emissions

Vehicle Class	Daily VMT[1]	Pollutant	Run Emission Rate[2] (Gram/Mile)	Idle Emission Rate (Gram/Vehicle/Day)	Start Emission Rate[3] (Grams/Start/Day)	Total Grams Daily	Total Pounds Daily[2,3]
Heavy Duty Trucks Represents a weighted average of Medium-heavy duty trucks and Heavy-heavy duty trucks as identified by the Project Traffic Assessment.	207515	**NOx**	1.466522	28.571192	0.965882	414328.27	**914.0468**
		ROG[4]	0.002219	0.123703	0.082017	937.06	**2.0672**
		PM10	0.113168	0.0101195	0.000121	23523.02	**51.8940**
		PM2.5	0.049362	0.0096815	0.000111	10280.63	**22.6800**
		CO	0.166419	89.9178	1.447193	380723.76	**839.9121**
		SOx	0.008865	0.039683	0.000109	1992.40	**4.3954**

[1] In order to more accurately account for the trip distribution patterns of freight trucks, the average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

[2]Particulate matter Run emissions account for tire wear and brake wear.

[3]Start emissions account for 4 automobile starts daily.

[4]ROG emissions account for Hotsoak emissions per trip and Restloss and Diurnalsoak emissions daily.

All emission factors sourced from EMFAC2017.

Stoneridge Commerce Center - Alternative Land Use Plan

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	561.92	1000sqft	30.90	561,920.00	0
Manufacturing	847.68	1000sqft	38.92	847,680.00	0
Refrigerated Warehouse-No Rail	1,695.36	1000sqft	77.84	1,695,360.00	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,870.00	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,870.00	0
Unrefrigerated Warehouse-No Rail	374.62	1000sqft	20.60	374,620.00	0
Other Asphalt Surfaces	34.40	Acre	34.40	1,498,464.00	0
Other Non-Asphalt Surfaces	31.40	Acre	31.40	1,367,784.00	0
Free-Standing Discount Superstore	100.00	1000sqft	6.72	100,000.00	0
Strip Mall	26.54	1000sqft	1.78	26,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2017 SCE CO2 Intensity Factor per Edison International Sustainability Template - Section 2 Quantative Information (2018)

Land Use - Land use types are consistent with the Traffic Impact Analysis prepared for the Project (Urban Crossroads 2020). Land uses also include 34.4 acres of internal circulation and 31.4 acres of offsite infrastructure.

Construction Phase - Construction timing adjusted to reflect a 2021 start date and 2030 Opening Year. Building construction, paving, and painting assumed to occur simultaneously

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Equipment doubled to account for accelerated timeline compared with CalEEMod defaults

Trips and VMT - Building construction worker & vendor trips reflect total building s.f. divided by the number of days of construction, coupled with the rates for commercial buildings in the CalEEMod User's Guide Appendix E. Painting worker trips equate to Paving.

Grading - Haul truck emissions calculated separately

Vehicle Trips - Mobile emissions modeled separately

Consumer Products - Consumer product emission factor adusted to omit dry warehouse square footage. Cold storage, manufacturing, industrial park, and all commercial retail are included

Water And Wastewater - Water supply derived from EMWD Water Supply Assessment Repot Stoneridge Commerce Center SP 239 (2020)

Construction Off-road Equipment Mitigation - "Mitigation" accounts for County requirements to employ Tier 3 engines or better and adhere to SCAQMD Rule 403

Energy Mitigation - Energy use reflects 2019 Title 24 standards. Increase in efficiency per CEC Building Energy Efficiency Standards Frequently Asked Questions (2018)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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
tblConstructionPhase	NumDays	360.00	180.00
tblConstructionPhase	NumDays	930.00	465.00
tblConstructionPhase	NumDays	9,300.00	1,473.00
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	660.00	1,473.00
tblConsumerProducts	ROG_EF	1.98E-05	4.1E-06
tblLandUse	LotAcreage	12.90	30.90

tblLandUse	LotAcreage	19.46	38.92
tblLandUse	LotAcreage	38.92	77.84
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	8.60	20.60
tblLandUse	LotAcreage	2.30	6.72
tblLandUse	LotAcreage	0.61	1.78
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	2,033.00	178.00
tblTripsAndVMT	WorkerTripNumber	35.00	18.00
tblTripsAndVMT	WorkerTripNumber	40.00	20.00

tblTripsAndVMT	WorkerTripNumber	5,198.00	253.00
tblTripsAndVMT	WorkerTripNumber	30.00	15.00
tblTripsAndVMT	WorkerTripNumber	1,040.00	15.00
tblVehicleTrips	ST_TR	64.07	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	56.12	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	50.75	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	5,330,000.00
tblWater	IndoorWaterUseRate	129,944,000.00	12,907,430.00
tblWater	IndoorWaterUseRate	196,026,000.00	31,024,945.00
tblWater	IndoorWaterUseRate	392,052,000.00	62,754,292.00
tblWater	IndoorWaterUseRate	1,965,884.72	1,339,695.00
tblWater	IndoorWaterUseRate	1,458,808,250.00	240,584,301.00

tblWater	OutdoorWaterUseRate	4,539,928.74	246,000.00
tblWater	OutdoorWaterUseRate	1,204,897.09	54,000.00

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					
2021	7.8617	81.0428	42.9740	0.0780	36.3337	4.0901	40.4238	19.9147	3.7629	23.6776	0.0000	7,562.9689	7,562.9689	2.3886	0.0000	7,622.6840
2022	7.3383	77.7356	58.7650	0.1262	36.3337	3.2711	39.5600	19.9147	3.0094	22.8829	0.0000	12,227.9903	12,227.9903	3.8930	0.0000	12,325.3149
2023	6.7266	69.0750	56.7318	0.1262	17.5702	2.8502	20.4205	7.2523	2.6222	9.8745	0.0000	12,220.3277	12,220.3277	3.8926	0.0000	12,317.6417
2024	67.3207	60.5595	75.8838	0.1768	4.3029	2.3147	6.6177	1.1670	2.1650	3.3321	0.0000	17,458.3488	17,458.3488	2.9685	0.0000	17,532.5621
2025	66.8779	56.4031	74.9404	0.1754	4.3029	2.0240	6.3269	1.1670	1.8925	3.0595	0.0000	17,319.9427	17,319.9427	2.9490	0.0000	17,393.6673
2026	66.8179	56.2364	74.3564	0.1741	4.3029	2.0233	6.3261	1.1670	1.8919	3.0589	0.0000	17,197.1038	17,197.1038	2.9383	0.0000	17,270.5615
2027	66.7603	56.0810	73.8430	0.1731	4.3028	2.0222	6.3251	1.1670	1.8909	3.0579	0.0000	17,089.9862	17,089.9862	2.9281	0.0000	17,163.1893
2028	66.7045	55.9502	73.4038	0.1722	4.3028	2.0210	6.3238	1.1670	1.8897	3.0567	0.0000	16,998.0349	16,998.0349	2.9185	0.0000	17,070.9976
2029	66.6469	55.8307	72.9940	0.1713	4.3028	2.0198	6.3226	1.1670	1.8886	3.0556	0.0000	16,917.2963	16,917.2963	2.9096	0.0000	16,990.0360
Maximum	**67.3207**	**81.0428**	**75.8838**	**0.1768**	**36.3337**	**4.0901**	**40.4238**	**19.9147**	**3.7629**	**23.6776**	**0.0000**	**17,458.3488**	**17,458.3488**	**3.8930**	**0.0000**	**17,532.5621**

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					
2021	1.9476	38.1799	46.5856	0.0780	14.2229	1.8935	16.1164	7.7821	1.8934	9.6755	0.0000	7,562.9689	7,562.9689	2.3886	0.0000	7,622.6840
2022	3.1349	60.0050	74.1272	0.1262	14.2229	2.6001	16.1164	7.7821	2.6000	9.6755	0.0000	12,227.9903	12,227.9903	3.8930	0.0000	12,325.3149
2023	3.1294	60.0003	74.0746	0.1262	6.9110	2.6001	9.5111	2.8455	2.6000	5.4455	0.0000	12,220.3277	12,220.3277	3.8926	0.0000	12,317.6417
2024	64.6283	65.9417	84.6821	0.1768	2.8782	3.2452	6.1233	0.8173	3.2433	4.0606	0.0000	17,458.3488	17,458.3488	2.9685	0.0000	17,532.5621
2025	64.5597	65.7660	84.0005	0.1754	2.8781	3.2447	6.1228	0.8173	3.2428	4.0601	0.0000	17,319.9427	17,319.9427	2.9490	0.0000	17,393.6673
2026	64.4997	65.5993	83.4166	0.1741	2.8781	3.2440	6.1221	0.8173	3.2422	4.0595	0.0000	17,197.1038	17,197.1038	2.9383	0.0000	17,270.5615
2027	64.4421	65.4439	82.9032	0.1731	2.8781	3.2430	6.1211	0.8173	3.2412	4.0585	0.0000	17,089.9862	17,089.9862	2.9281	0.0000	17,163.1893
2028	64.3863	65.3131	82.4640	0.1722	2.8780	3.2417	6.1198	0.8173	3.2401	4.0573	0.0000	16,998.0348	16,998.0348	2.9185	0.0000	17,070.9976
2029	64.3286	65.1936	82.0541	0.1713	2.8780	3.2405	6.1185	0.8173	3.2390	4.0562	0.0000	16,917.2963	16,917.2963	2.9096	0.0000	16,990.0360
Maximum	**64.6283**	**65.9417**	**84.6821**	**0.1768**	**14.2229**	**3.2452**	**16.1164**	**7.7821**	**3.2433**	**9.6755**	**0.0000**	**17,458.3488**	**17,458.3488**	**3.8930**	**0.0000**	**17,532.5621**

	ROG	NOx	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	**6.62**	**3.07**	**-14.97**	**0.00**	**54.65**	**-17.30**	**43.40**	**56.89**	**-26.31**	**34.52**	**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	64.6650	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Energy	3.8507	35.0066	29.4056	0.2100		2.6605	2.6605		2.6605	2.6605		42,007.9642	42,007.9642	0.8052	0.7702	42,257.5965
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**68.5157**	**35.0154**	**30.3814**	**0.2101**	**0.0000**	**2.6640**	**2.6640**	**0.0000**	**2.6640**	**2.6640**		**42,010.0664**	**42,010.0664**	**0.8106**	**0.7702**	**42,259.8342**

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	64.6650	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Energy	3.5552	32.3201	27.1489	0.1939		2.4563	2.4563		2.4563	2.4563		38,784.1294	38,784.1294	0.7434	0.7110	39,014.6041
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**68.2202**	**32.3289**	**28.1247**	**0.1940**	**0.0000**	**2.4598**	**2.4598**	**0.0000**	**2.4598**	**2.4598**		**38,786.2317**	**38,786.2317**	**0.7488**	**0.7110**	**39,016.8419**

	ROG	NOx	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**	**7.67**	**7.43**	**7.67**	**0.00**	**7.66**	**7.66**	**0.00**	**7.66**	**7.66**	**0.00**	**7.67**	**7.67**	**7.62**	**7.68**	**7.67**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2021	3/9/2022	5	180	
2	Grading	Grading	3/10/2022	12/20/2023	5	465	
3	Building Construction	Building Construction	3/22/2024	11/13/2029	5	1473	
4	Paving	Paving	3/22/2024	11/13/2029	5	1473	
5	Architectural Coating	Architectural Coating	3/22/2024	11/13/2029	5	1473	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2325

Acres of Paving: 65.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,309,790; Non-Residential Outdoor: 4,769,930; Striped Parking Area: 171,975 (Architectural Coating – sqft)

OffRoad Equipment

Stoneridge Commerce Center - Alternative Land Use Plan - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	14	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	253.00	178.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	14.70	6.90	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

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	7.7764	80.9942	42.3085	0.0760		4.0889	4.0889		3.7618	3.7618		7,371.3138	7,371.3138	2.3840		7,430.9146
Total	**7.7764**	**80.9942**	**42.3085**	**0.0760**	**36.1325**	**4.0889**	**40.2214**	**19.8614**	**3.7618**	**23.6232**		**7,371.3138**	**7,371.3138**	**2.3840**		**7,430.9146**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.0486	0.6655	1.9200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		191.6552	191.6552	4.5700e-003		191.7694
Total	**0.0853**	**0.0486**	**0.6655**	**1.9200e-003**	**0.2012**	**1.1900e-003**	**0.2024**	**0.0534**	**1.0900e-003**	**0.0545**		**191.6552**	**191.6552**	**4.5700e-003**		**191.7694**

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					14.0917	0.0000	14.0917	7.7459	0.0000	7.7459			0.0000			0.0000
Off-Road	1.8623	38.1312	45.9201	0.0760		1.8923	1.8923		1.8923	1.8923	0.0000	7,371.3138	7,371.3138	2.3840		7,430.9146
Total	**1.8623**	**38.1312**	**45.9201**	**0.0760**	**14.0917**	**1.8923**	**15.9840**	**7.7459**	**1.8923**	**9.6383**	**0.0000**	**7,371.3138**	**7,371.3138**	**2.3840**		**7,430.9146**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0853	0.0486	0.6655	1.9200e-003	0.1312	1.1900e-003	0.1324	0.0362	1.0900e-003	0.0373		191.6552	191.6552	4.5700e-003		191.7694
Total	**0.0853**	**0.0486**	**0.6655**	**1.9200e-003**	**0.1312**	**1.1900e-003**	**0.1324**	**0.0362**	**1.0900e-003**	**0.0373**		**191.6552**	**191.6552**	**4.5700e-003**		**191.7694**

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	6.3403	66.1670	39.3955	0.0761		3.2252	3.2252		2.9671	2.9671		7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**6.3403**	**66.1670**	**39.3955**	**0.0761**	**36.1325**	**3.2252**	**39.3577**	**19.8614**	**2.9671**	**22.8285**		**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0798	0.0438	0.6138	1.8500e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		184.6523	184.6523	4.1000e-003		184.7549
Total	**0.0798**	**0.0438**	**0.6138**	**1.8500e-003**	**0.2012**	**1.1500e-003**	**0.2024**	**0.0534**	**1.0600e-003**	**0.0544**		**184.6523**	**184.6523**	**4.1000e-003**		**184.7549**

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					14.0917	0.0000	14.0917	7.7459	0.0000	7.7459			0.0000			0.0000
Off-Road	1.8623	38.1312	45.9201	0.0761		1.8923	1.8923		1.8923	1.8923	0.0000	7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**1.8623**	**38.1312**	**45.9201**	**0.0761**	**14.0917**	**1.8923**	**15.9840**	**7.7459**	**1.8923**	**9.6383**	**0.0000**	**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0798	0.0438	0.6138	1.8500e-003	0.1312	1.1500e-003	0.1324	0.0362	1.0600e-003	0.0373		184.6523	184.6523	4.1000e-003		184.7549
Total	**0.0798**	**0.0438**	**0.6138**	**1.8500e-003**	**0.1312**	**1.1500e-003**	**0.1324**	**0.0362**	**1.0600e-003**	**0.0373**		**184.6523**	**184.6523**	**4.1000e-003**		**184.7549**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	7.2497	77.6870	58.0830	0.1242		3.2698	3.2698		3.0082	3.0082		12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**7.2497**	**77.6870**	**58.0830**	**0.1242**	**17.3467**	**3.2698**	**20.6165**	**7.1930**	**3.0082**	**10.2012**		**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0887	0.0486	0.6820	2.0600e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		205.1692	205.1692	4.5600e-003		205.2832
Total	**0.0887**	**0.0486**	**0.6820**	**2.0600e-003**	**0.2236**	**1.2800e-003**	**0.2248**	**0.0593**	**1.1800e-003**	**0.0605**		**205.1692**	**205.1692**	**4.5600e-003**		**205.2832**

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					6.7652	0.0000	6.7652	2.8053	0.0000	2.8053			0.0000			0.0000
Off-Road	3.0462	59.9564	73.4452	0.1242		2.5989	2.5989		2.5989	2.5989	0.0000	12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**3.0462**	**59.9564**	**73.4452**	**0.1242**	**6.7652**	**2.5989**	**9.3641**	**2.8053**	**2.5989**	**5.4041**	**0.0000**	**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0887	0.0486	0.6820	2.0600e-003	0.1458	1.2800e-003	0.1471	0.0402	1.1800e-003	0.0414		205.1692	205.1692	4.5600e-003		205.2832
Total	**0.0887**	**0.0486**	**0.6820**	**2.0600e-003**	**0.1458**	**1.2800e-003**	**0.1471**	**0.0402**	**1.1800e-003**	**0.0414**		**205.1692**	**205.1692**	**4.5600e-003**		**205.2832**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	6.6435	69.0312	56.1023	0.1242		2.8490	2.8490		2.6211	2.6211		12,022.9555	12,022.9555	3.8885		12,120.1671
Total	**6.6435**	**69.0312**	**56.1023**	**0.1242**	**17.3467**	**2.8490**	**20.1957**	**7.1930**	**2.6211**	**9.8141**		**12,022.9555**	**12,022.9555**	**3.8885**		**12,120.1671**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0832	0.0438	0.6294	1.9800e-003	0.2236	1.2500e-003	0.2248	0.0593	1.1500e-003	0.0604		197.3722	197.3722	4.0900e-003		197.4746
Total	**0.0832**	**0.0438**	**0.6294**	**1.9800e-003**	**0.2236**	**1.2500e-003**	**0.2248**	**0.0593**	**1.1500e-003**	**0.0604**		**197.3722**	**197.3722**	**4.0900e-003**		**197.4746**

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					6.7652	0.0000	6.7652	2.8053	0.0000	2.8053			0.0000			0.0000
Off-Road	3.0462	59.9564	73.4452	0.1242		2.5989	2.5989		2.5989	2.5989	0.0000	12,022.9554	12,022.9554	3.8885		12,120.1671
Total	**3.0462**	**59.9564**	**73.4452**	**0.1242**	**6.7652**	**2.5989**	**9.3641**	**2.8053**	**2.5989**	**5.4041**	**0.0000**	**12,022.9554**	**12,022.9554**	**3.8885**		**12,120.1671**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0832	0.0438	0.6294	1.9800e-003	0.1458	1.2500e-003	0.1471	0.0402	1.1500e-003	0.0414		197.3722	197.3722	4.0900e-003		197.4746
Total	**0.0832**	**0.0438**	**0.6294**	**1.9800e-003**	**0.1458**	**1.2500e-003**	**0.1471**	**0.0402**	**1.1500e-003**	**0.0414**		**197.3722**	**197.3722**	**4.0900e-003**		**197.4746**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9431	26.8876	32.3336	0.0539		1.2266	1.2266		1.1538	1.1538		5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**2.9431**	**26.8876**	**32.3336**	**0.0539**		**1.2266**	**1.2266**		**1.1538**	**1.1538**		**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2915	11.6226	2.3274	0.0443	1.1397	0.0117	1.1514	0.3281	0.0112	0.3393		4,675.8435	4,675.8435	0.2474		4,682.0280
Worker	0.9914	0.5029	7.4657	0.0242	2.8279	0.0157	2.8436	0.7500	0.0144	0.7644		2,407.6276	2,407.6276	0.0472		2,408.8082
Total	**1.2828**	**12.1255**	**9.7931**	**0.0684**	**3.9676**	**0.0274**	**3.9950**	**1.0781**	**0.0256**	**1.1037**		**7,083.4711**	**7,083.4711**	**0.2946**		**7,090.8362**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2915	11.6226	2.3274	0.0443	0.8149	0.0117	0.8266	0.2484	0.0112	0.2596		4,675.8435	4,675.8435	0.2474		4,682.0280
Worker	0.9914	0.5029	7.4657	0.0242	1.8445	0.0157	1.8602	0.5086	0.0144	0.5230		2,407.6276	2,407.6276	0.0472		2,408.8082
Total	**1.2828**	**12.1255**	**9.7931**	**0.0684**	**2.6594**	**0.0274**	**2.6868**	**0.7570**	**0.0256**	**0.7826**		**7,083.4711**	**7,083.4711**	**0.2946**		**7,090.8362**

3.4 Building Construction - 2025

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2839	11.4972	2.2479	0.0440	1.1396	0.0116	1.1512	0.3281	0.0111	0.3392		4,645.4193	4,645.4193	0.2411		4,651.4466
Worker	0.9368	0.4579	6.9275	0.0232	2.8279	0.0154	2.8433	0.7500	0.0142	0.7642		2,311.1400	2,311.1400	0.0428		2,312.2102
Total	**1.2207**	**11.9552**	**9.1754**	**0.0672**	**3.9676**	**0.0270**	**3.9945**	**1.0781**	**0.0252**	**1.1033**		**6,956.5593**	**6,956.5593**	**0.2839**		**6,963.6567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2839	11.4972	2.2479	0.0440	0.8149	0.0116	0.8264	0.2484	0.0111	0.2595		4,645.4193	4,645.4193	0.2411		4,651.4466
Worker	0.9368	0.4579	6.9275	0.0232	1.8445	0.0154	1.8599	0.5086	0.0142	0.5228		2,311.1400	2,311.1400	0.0428		2,312.2102
Total	**1.2207**	**11.9552**	**9.1754**	**0.0672**	**2.6594**	**0.0270**	**2.6864**	**0.7570**	**0.0252**	**0.7822**		**6,956.5593**	**6,956.5593**	**0.2839**		**6,963.6567**

3.4 Building Construction - 2026

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2774	11.3733	2.1833	0.0437	1.1396	0.0114	1.1510	0.3281	0.0109	0.3390		4,616.7849	4,616.7849	0.2347		4,622.6512
Worker	0.8890	0.4197	6.4632	0.0223	2.8279	0.0149	2.8429	0.7500	0.0137	0.7637		2,226.9219	2,226.9219	0.0390		2,227.8973
Total	**1.1664**	**11.7930**	**8.6465**	**0.0660**	**3.9675**	**0.0263**	**3.9939**	**1.0781**	**0.0246**	**1.1027**		**6,843.7068**	**6,843.7068**	**0.2737**		**6,850.5485**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2774	11.3733	2.1833	0.0437	0.8148	0.0114	0.8263	0.2484	0.0109	0.2593		4,616.7849	4,616.7849	0.2347		4,622.6512
Worker	0.8890	0.4197	6.4632	0.0223	1.8445	0.0149	1.8594	0.5086	0.0137	0.5223		2,226.9219	2,226.9219	0.0390		2,227.8973
Total	**1.1664**	**11.7930**	**8.6465**	**0.0660**	**2.6594**	**0.0263**	**2.6857**	**0.7570**	**0.0246**	**0.7816**		**6,843.7068**	**6,843.7068**	**0.2737**		**6,850.5485**

3.4 Building Construction - 2027

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2719	11.2560	2.1304	0.0435	1.1396	0.0113	1.1508	0.3281	0.0108	0.3389		4,592.1580	4,592.1580	0.2282		4,597.8638
Worker	0.8424	0.3856	6.0515	0.0216	2.8279	0.0141	2.8421	0.7500	0.0130	0.7630		2,153.1758	2,153.1758	0.0357		2,154.0670
Total	**1.1143**	**11.6416**	**8.1819**	**0.0651**	**3.9675**	**0.0254**	**3.9929**	**1.0781**	**0.0238**	**1.1018**		**6,745.3338**	**6,745.3338**	**0.2639**		**6,751.9309**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2719	11.2560	2.1304	0.0435	0.8148	0.0113	0.8261	0.2484	0.0108	0.2591		4,592.1580	4,592.1580	0.2282		4,597.8638
Worker	0.8424	0.3856	6.0515	0.0216	1.8445	0.0141	1.8587	0.5086	0.0130	0.5216		2,153.1758	2,153.1758	0.0357		2,154.0670
Total	**1.1143**	**11.6416**	**8.1819**	**0.0651**	**2.6593**	**0.0254**	**2.6847**	**0.7570**	**0.0238**	**0.7807**		**6,745.3338**	**6,745.3338**	**0.2639**		**6,751.9309**

3.4 Building Construction - 2028

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2676	11.1589	2.0922	0.0433	1.1395	0.0112	1.1507	0.3281	0.0107	0.3387		4,572.1313	4,572.1313	0.2218		4,577.6773
Worker	0.7964	0.3555	5.6930	0.0209	2.8279	0.0131	2.8410	0.7500	0.0120	0.7620		2,088.8757	2,088.8757	0.0328		2,089.6949
Total	**1.0640**	**11.5144**	**7.7852**	**0.0642**	**3.9675**	**0.0243**	**3.9917**	**1.0781**	**0.0227**	**1.1008**		**6,661.0070**	**6,661.0070**	**0.2546**		**6,667.3722**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2676	11.1589	2.0922	0.0433	0.8148	0.0112	0.8259	0.2484	0.0107	0.2590		4,572.1313	4,572.1313	0.2218		4,577.6773
Worker	0.7964	0.3555	5.6930	0.0209	1.8445	0.0131	1.8576	0.5086	0.0120	0.5206		2,088.8757	2,088.8757	0.0328		2,089.6949
Total	**1.0640**	**11.5144**	**7.7852**	**0.0642**	**2.6593**	**0.0243**	**2.6836**	**0.7570**	**0.0227**	**0.7797**		**6,661.0070**	**6,661.0070**	**0.2546**		**6,667.3722**

3.4 Building Construction - 2029

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2638	11.0706	2.0585	0.0431	1.1395	0.0110	1.1506	0.3281	0.0106	0.3386		4,554.2688	4,554.2688	0.2159		4,559.6672
Worker	0.7482	0.3277	5.3567	0.0204	2.8279	0.0121	2.8401	0.7500	0.0112	0.7612		2,032.6649	2,032.6649	0.0301		2,033.4167
Total	**1.0120**	**11.3982**	**7.4153**	**0.0635**	**3.9675**	**0.0232**	**3.9906**	**1.0781**	**0.0217**	**1.0998**		**6,586.9337**	**6,586.9337**	**0.2460**		**6,593.0839**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2638	11.0706	2.0585	0.0431	0.8148	0.0110	0.8258	0.2484	0.0106	0.2589		4,554.2688	4,554.2688	0.2159		4,559.6672
Worker	0.7482	0.3277	5.3567	0.0204	1.8445	0.0121	1.8567	0.5086	0.0112	0.5198		2,032.6649	2,032.6649	0.0301		2,033.4167
Total	**1.0120**	**11.3982**	**7.4153**	**0.0635**	**2.6593**	**0.0232**	**2.6825**	**0.7570**	**0.0217**	**0.7787**		**6,586.9337**	**6,586.9337**	**0.2460**		**6,593.0839**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9763	19.0492	29.2515	0.0456		0.9370	0.9370		0.8621	0.8621		4,415.0944	4,415.0944	1.4279		4,450.7927
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0375**	**19.0492**	**29.2515**	**0.0456**		**0.9370**	**0.9370**		**0.8621**	**0.8621**		**4,415.0944**	**4,415.0944**	**1.4279**		**4,450.7927**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
Total	**0.0588**	**0.0298**	**0.4426**	**1.4300e-003**	**0.1677**	**9.3000e-004**	**0.1686**	**0.0445**	**8.6000e-004**	**0.0453**		**142.7447**	**142.7447**	**2.8000e-003**		**142.8147**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,415.0944	4,415.0944	1.4279		4,450.7927
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,415.0944**	**4,415.0944**	**1.4279**		**4,450.7927**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1094	9.3000e-004	0.1103	0.0302	8.6000e-004	0.0310		142.7447	142.7447	2.8000e-003		142.8147
Total	**0.0588**	**0.0298**	**0.4426**	**1.4300e-003**	**0.1094**	**9.3000e-004**	**0.1103**	**0.0302**	**8.6000e-004**	**0.0310**		**142.7447**	**142.7447**	**2.8000e-003**		**142.8147**

3.5 Paving - 2025

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0555	0.0272	0.4107	1.3700e-003	0.1677	9.1000e-004	0.1686	0.0445	8.4000e-004	0.0453		137.0241	137.0241	2.5400e-003		137.0876
Total	**0.0555**	**0.0272**	**0.4107**	**1.3700e-003**	**0.1677**	**9.1000e-004**	**0.1686**	**0.0445**	**8.4000e-004**	**0.0453**		**137.0241**	**137.0241**	**2.5400e-003**		**137.0876**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0555	0.0272	0.4107	1.3700e-003	0.1094	9.1000e-004	0.1103	0.0302	8.4000e-004	0.0310		137.0241	137.0241	2.5400e-003		137.0876
Total	**0.0555**	**0.0272**	**0.4107**	**1.3700e-003**	**0.1094**	**9.1000e-004**	**0.1103**	**0.0302**	**8.4000e-004**	**0.0310**		**137.0241**	**137.0241**	**2.5400e-003**		**137.0876**

3.5 Paving - 2026

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0249	0.3832	1.3200e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		132.0309	132.0309	2.3100e-003		132.0888
Total	**0.0527**	**0.0249**	**0.3832**	**1.3200e-003**	**0.1677**	**8.8000e-004**	**0.1686**	**0.0445**	**8.1000e-004**	**0.0453**		**132.0309**	**132.0309**	**2.3100e-003**		**132.0888**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0249	0.3832	1.3200e-003	0.1094	8.8000e-004	0.1102	0.0302	8.1000e-004	0.0310		132.0309	132.0309	2.3100e-003		132.0888
Total	**0.0527**	**0.0249**	**0.3832**	**1.3200e-003**	**0.1094**	**8.8000e-004**	**0.1102**	**0.0302**	**8.1000e-004**	**0.0310**		**132.0309**	**132.0309**	**2.3100e-003**		**132.0888**

3.5 Paving - 2027

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0229	0.3588	1.2800e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		127.6586	127.6586	2.1100e-003		127.7115
Total	**0.0499**	**0.0229**	**0.3588**	**1.2800e-003**	**0.1677**	**8.4000e-004**	**0.1685**	**0.0445**	**7.7000e-004**	**0.0452**		**127.6586**	**127.6586**	**2.1100e-003**		**127.7115**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0229	0.3588	1.2800e-003	0.1094	8.4000e-004	0.1102	0.0302	7.7000e-004	0.0309		127.6586	127.6586	2.1100e-003		127.7115
Total	**0.0499**	**0.0229**	**0.3588**	**1.2800e-003**	**0.1094**	**8.4000e-004**	**0.1102**	**0.0302**	**7.7000e-004**	**0.0309**		**127.6586**	**127.6586**	**2.1100e-003**		**127.7115**

3.5 Paving - 2028

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0211	0.3375	1.2400e-003	0.1677	7.8000e-004	0.1684	0.0445	7.1000e-004	0.0452		123.8464	123.8464	1.9400e-003		123.8950
Total	**0.0472**	**0.0211**	**0.3375**	**1.2400e-003**	**0.1677**	**7.8000e-004**	**0.1684**	**0.0445**	**7.1000e-004**	**0.0452**		**123.8464**	**123.8464**	**1.9400e-003**		**123.8950**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0211	0.3375	1.2400e-003	0.1094	7.8000e-004	0.1101	0.0302	7.1000e-004	0.0309		123.8464	123.8464	1.9400e-003		123.8950
Total	**0.0472**	**0.0211**	**0.3375**	**1.2400e-003**	**0.1094**	**7.8000e-004**	**0.1101**	**0.0302**	**7.1000e-004**	**0.0309**		**123.8464**	**123.8464**	**1.9400e-003**		**123.8950**

3.5 Paving - 2029

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0194	0.3176	1.2100e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		120.5137	120.5137	1.7800e-003		120.5583
Total	**0.0444**	**0.0194**	**0.3176**	**1.2100e-003**	**0.1677**	**7.2000e-004**	**0.1684**	**0.0445**	**6.6000e-004**	**0.0451**		**120.5137**	**120.5137**	**1.7800e-003**		**120.5583**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0194	0.3176	1.2100e-003	0.1094	7.2000e-004	0.1101	0.0302	6.6000e-004	0.0308		120.5137	120.5137	1.7800e-003		120.5583
Total	**0.0444**	**0.0194**	**0.3176**	**1.2100e-003**	**0.1094**	**7.2000e-004**	**0.1101**	**0.0302**	**6.6000e-004**	**0.0308**		**120.5137**	**120.5137**	**1.7800e-003**		**120.5583**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885
Total	**60.9397**	**2.4376**	**3.6203**	**5.9400e-003**		**0.1218**	**0.1218**		**0.1218**	**0.1218**		**562.8961**	**562.8961**	**0.0317**		**563.6885**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		142.7447	142.7447	2.8000e-003		142.8147
Total	**0.0588**	**0.0298**	**0.4426**	**1.4300e-003**	**0.1677**	**9.3000e-004**	**0.1686**	**0.0445**	**8.6000e-004**	**0.0453**		**142.7447**	**142.7447**	**2.8000e-003**		**142.8147**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0317		563.6885
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0317**		**563.6885**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0298	0.4426	1.4300e-003	0.1094	9.3000e-004	0.1103	0.0302	8.6000e-004	0.0310		142.7447	142.7447	2.8000e-003		142.8147
Total	**0.0588**	**0.0298**	**0.4426**	**1.4300e-003**	**0.1094**	**9.3000e-004**	**0.1103**	**0.0302**	**8.6000e-004**	**0.0310**		**142.7447**	**142.7447**	**2.8000e-003**		**142.8147**

3.6 Architectural Coating - 2025

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0555	0.0272	0.4107	1.3700e-003	0.1677	9.1000e-004	0.1686	0.0445	8.4000e-004	0.0453		137.0241	137.0241	2.5400e-003		137.0876
Total	**0.0555**	**0.0272**	**0.4107**	**1.3700e-003**	**0.1677**	**9.1000e-004**	**0.1686**	**0.0445**	**8.4000e-004**	**0.0453**		**137.0241**	**137.0241**	**2.5400e-003**		**137.0876**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0555	0.0272	0.4107	1.3700e-003	0.1094	9.1000e-004	0.1103	0.0302	8.4000e-004	0.0310		137.0241	137.0241	2.5400e-003		137.0876
Total	**0.0555**	**0.0272**	**0.4107**	**1.3700e-003**	**0.1094**	**9.1000e-004**	**0.1103**	**0.0302**	**8.4000e-004**	**0.0310**		**137.0241**	**137.0241**	**2.5400e-003**		**137.0876**

3.6 Architectural Coating - 2026

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0249	0.3832	1.3200e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		132.0309	132.0309	2.3100e-003		132.0888
Total	**0.0527**	**0.0249**	**0.3832**	**1.3200e-003**	**0.1677**	**8.8000e-004**	**0.1686**	**0.0445**	**8.1000e-004**	**0.0453**		**132.0309**	**132.0309**	**2.3100e-003**		**132.0888**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0527	0.0249	0.3832	1.3200e-003	0.1094	8.8000e-004	0.1102	0.0302	8.1000e-004	0.0310		132.0309	132.0309	2.3100e-003		132.0888
Total	**0.0527**	**0.0249**	**0.3832**	**1.3200e-003**	**0.1094**	**8.8000e-004**	**0.1102**	**0.0302**	**8.1000e-004**	**0.0310**		**132.0309**	**132.0309**	**2.3100e-003**		**132.0888**

3.6 Architectural Coating - 2027

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0229	0.3588	1.2800e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		127.6586	127.6586	2.1100e-003		127.7115
Total	**0.0499**	**0.0229**	**0.3588**	**1.2800e-003**	**0.1677**	**8.4000e-004**	**0.1685**	**0.0445**	**7.7000e-004**	**0.0452**		**127.6586**	**127.6586**	**2.1100e-003**		**127.7115**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0229	0.3588	1.2800e-003	0.1094	8.4000e-004	0.1102	0.0302	7.7000e-004	0.0309		127.6586	127.6586	2.1100e-003		127.7115
Total	**0.0499**	**0.0229**	**0.3588**	**1.2800e-003**	**0.1094**	**8.4000e-004**	**0.1102**	**0.0302**	**7.7000e-004**	**0.0309**		**127.6586**	**127.6586**	**2.1100e-003**		**127.7115**

3.6 Architectural Coating - 2028

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0211	0.3375	1.2400e-003	0.1677	7.8000e-004	0.1684	0.0445	7.1000e-004	0.0452		123.8464	123.8464	1.9400e-003		123.8950
Total	**0.0472**	**0.0211**	**0.3375**	**1.2400e-003**	**0.1677**	**7.8000e-004**	**0.1684**	**0.0445**	**7.1000e-004**	**0.0452**		**123.8464**	**123.8464**	**1.9400e-003**		**123.8950**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0211	0.3375	1.2400e-003	0.1094	7.8000e-004	0.1101	0.0302	7.1000e-004	0.0309		123.8464	123.8464	1.9400e-003		123.8950
Total	**0.0472**	**0.0211**	**0.3375**	**1.2400e-003**	**0.1094**	**7.8000e-004**	**0.1101**	**0.0302**	**7.1000e-004**	**0.0309**		**123.8464**	**123.8464**	**1.9400e-003**		**123.8950**

3.6 Architectural Coating - 2029

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0194	0.3176	1.2100e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		120.5137	120.5137	1.7800e-003		120.5583
Total	**0.0444**	**0.0194**	**0.3176**	**1.2100e-003**	**0.1677**	**7.2000e-004**	**0.1684**	**0.0445**	**6.6000e-004**	**0.0451**		**120.5137**	**120.5137**	**1.7800e-003**		**120.5583**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0194	0.3176	1.2100e-003	0.1094	7.2000e-004	0.1101	0.0302	6.6000e-004	0.0308		120.5137	120.5137	1.7800e-003		120.5583
Total	**0.0444**	**0.0194**	**0.3176**	**1.2100e-003**	**0.1094**	**7.2000e-004**	**0.1101**	**0.0302**	**6.6000e-004**	**0.0308**		**120.5137**	**120.5137**	**1.7800e-003**		**120.5583**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Free-Standing Discount Superstore	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Free-Standing Discount	16.60	8.40	6.90	13.20	67.80	19.00	47.5	35.5	17
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Free-Standing Discount Superstore	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Industrial Park	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Manufacturing	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Non-Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Refrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Strip Mall	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Unrefrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Stoneridge Commerce Center - Alternative Land Use Plan - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.5552	32.3201	27.1489	0.1939		2.4563	2.4563		2.4563	2.4563		38,784.1294	38,784.1294	0.7434	0.7110	39,014.6041
NaturalGas Unmitigated	3.8507	35.0066	29.4056	0.2100		2.6605	2.6605		2.6605	2.6605		42,007.9642	42,007.9642	0.8052	0.7702	42,257.5965

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					
Free-Standing Discount Superstore	608.219	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
Industrial Park	5342.09	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398		628.4810	628.4810	0.0121	0.0115	632.2158
Manufacturing	75455.1	0.8137	7.3976	6.2140	0.0444		0.5622	0.5622		0.5622	0.5622		8,877.0744	8,877.0744	0.1701	0.1628	8,929.8264
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	240416	2.5927	23.5702	19.7990	0.1414		1.7913	1.7913		1.7913	1.7913		28,284.2332	28,284.2332	0.5421	0.5185	28,452.3123
Strip Mall	161.421	1.7400e-003	0.0158	0.0133	9.0000e-005		1.2000e-003	1.2000e-003		1.2000e-003	1.2000e-003		18.9908	18.9908	3.6000e-004	3.5000e-004	19.1036
Unrefrigerated Warehouse-No Rail	16500.7	0.3559	3.2354	2.7178	0.0194		0.2459	0.2459		0.2459	0.2459		3,882.5116	3,882.5116	0.0744	0.0712	3,905.5834
Unrefrigerated Warehouse-No Rail	2083.5	0.0225	0.2043	0.1716	1.2300e-003		0.0155	0.0155		0.0155	0.0155		245.1180	245.1180	4.7000e-003	4.4900e-003	246.5746
Total		**3.8507**	**35.0066**	**29.4056**	**0.2100**		**2.6605**	**2.6605**		**2.6605**	**2.6605**		**42,007.9642**	**42,007.9642**	**0.8051**	**0.7701**	**42,257.5965**

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					
Free-Standing Discount Superstore	0.450411	4.8600e-003	0.0442	0.0371	2.6000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003		52.9895	52.9895	1.0200e-003	9.7000e-004	53.3044
Industrial Park	3.73946	0.0403	0.3666	0.3080	2.2000e-003		0.0279	0.0279		0.0279	0.0279		439.9367	439.9367	8.4300e-003	8.0700e-003	442.5511
Manufacturing	64.7535	0.6983	6.3484	5.3326	0.0381		0.4825	0.4825		0.4825	0.4825		7,618.0544	7,618.0544	0.1460	0.1397	7,663.3247
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	235.887	2.5439	23.1262	19.4260	0.1388		1.7576	1.7576		1.7576	1.7576		27,751.4448	27,751.4448	0.5319	0.5088	27,916.3578
Strip Mall	0.119539	1.2900e-003	0.0117	9.8400e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004		14.0634	14.0634	2.7000e-004	2.6000e-004	14.1470
Unrefrigerated Warehouse-No Rail	1.46769	0.0158	0.1439	0.1209	8.6000e-004		0.0109	0.0109		0.0109	0.0109		172.6693	172.6693	3.3100e-003	3.1700e-003	173.6954
Unrefrigerated Warehouse-No Rail	11.6236	0.2507	2.2791	1.9145	0.0137		0.1732	0.1732		0.1732	0.1732		2,734.9712	2,734.9712	0.0524	0.0501	2,751.2238
Total		**3.5552**	**32.3201**	**27.1489**	**0.1939**		**2.4563**	**2.4563**		**2.4563**	**2.4563**		**38,784.1294**	**38,784.1294**	**0.7434**	**0.7111**	**39,014.6041**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	64.6650	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Unmitigated	64.6650	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378

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	24.4470					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.1287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0893	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Total	**64.6649**	**8.7900e-003**	**0.9758**	**7.0000e-005**		**3.4600e-003**	**3.4600e-003**		**3.4600e-003**	**3.4600e-003**		**2.1022**	**2.1022**	**5.4200e-003**		**2.2378**

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	24.4470					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.1287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0893	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Total	**64.6649**	**8.7900e-003**	**0.9758**	**7.0000e-005**		**3.4600e-003**	**3.4600e-003**		**3.4600e-003**	**3.4600e-003**		**2.1022**	**2.1022**	**5.4200e-003**		**2.2378**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Stoneridge Commerce Center - Alternative Land Use Plan

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	561.92	1000sqft	30.90	561,920.00	0
Manufacturing	847.68	1000sqft	38.92	847,680.00	0
Refrigerated Warehouse-No Rail	1,695.36	1000sqft	77.84	1,695,360.00	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,870.00	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,870.00	0
Unrefrigerated Warehouse-No Rail	374.62	1000sqft	20.60	374,620.00	0
Other Asphalt Surfaces	34.40	Acre	34.40	1,498,464.00	0
Other Non-Asphalt Surfaces	31.40	Acre	31.40	1,367,784.00	0
Free-Standing Discount Superstore	100.00	1000sqft	6.72	100,000.00	0
Strip Mall	26.54	1000sqft	1.78	26,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stoneridge Commerce Center - Alternative Land Use Plan - Riverside-South Coast County, Winter

Project Characteristics - 2017 SCE CO2 Intensity Factor per Edison International Sustainability Template - Section 2 Quantative Information (2018)

Land Use - Land use types are consistent with the Traffic Impact Analysis prepared for the Project (Urban Crossroads 2020). Land uses also include 34.4 acres of internal circulation and 31.4 acres of offsite infrastructure.

Construction Phase - Construction timing adjusted to reflect a 2021 start date and 2030 Opening Year. Building construction, paving, and painting assumed to occur simultaneously

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Equipment doubled to account for accelerated timeline compared with CalEEMod defaults

Trips and VMT - Building construction worker & vendor trips reflect total building s.f. divided by the number of days of construction, coupled with the rates for commercial buildings in the CalEEMod User's Guide Appendix E. Painting worker trips equate to Paving.

Grading - Haul truck emissions calculated separately

Vehicle Trips - Mobile emissions modeled separately

Consumer Products - Consumer product emission factor adusted to omit dry warehouse square footage. Cold storage, manufacturing, industrial park, and all commercial retail are included

Water And Wastewater - Water supply derived from EMWD Water Supply Assessment Repot Stoneridge Commerce Center SP 239 (2020)

Construction Off-road Equipment Mitigation - "Mitigation" accounts for County requirements to employ Tier 3 engines or better and adhere to SCAQMD Rule 403

Energy Mitigation - Energy use reflects 2019 Title 24 standards. Increase in efficiency per CEC Building Energy Efficiency Standards Frequently Asked Questions (2018)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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
tblConstructionPhase	NumDays	360.00	180.00
tblConstructionPhase	NumDays	930.00	465.00
tblConstructionPhase	NumDays	9,300.00	1,473.00
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	660.00	1,473.00
tblConsumerProducts	ROG_EF	1.98E-05	4.1E-06
tblLandUse	LotAcreage	12.90	30.90

tblLandUse	LotAcreage	19.46	38.92
tblLandUse	LotAcreage	38.92	77.84
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	8.60	20.60
tblLandUse	LotAcreage	2.30	6.72
tblLandUse	LotAcreage	0.61	1.78
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	2,033.00	178.00
tblTripsAndVMT	WorkerTripNumber	35.00	18.00
tblTripsAndVMT	WorkerTripNumber	40.00	20.00

tblTripsAndVMT	WorkerTripNumber	5,198.00	253.00
tblTripsAndVMT	WorkerTripNumber	30.00	15.00
tblTripsAndVMT	WorkerTripNumber	1,040.00	15.00
tblVehicleTrips	ST_TR	64.07	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	56.12	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	50.75	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	5,330,000.00
tblWater	IndoorWaterUseRate	129,944,000.00	12,907,430.00
tblWater	IndoorWaterUseRate	196,026,000.00	31,024,945.00
tblWater	IndoorWaterUseRate	392,052,000.00	62,754,292.00
tblWater	IndoorWaterUseRate	1,965,884.72	1,339,695.00
tblWater	IndoorWaterUseRate	1,458,808,250.00	240,584,301.00

tblWater	OutdoorWaterUseRate	4,539,928.74	246,000.00
tblWater	OutdoorWaterUseRate	1,204,897.09	54,000.00

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					
2021	7.8601	81.0445	42.8457	0.0778	36.3337	4.0901	40.4238	19.9147	3.7629	23.6776	0.0000	7,543.2486	7,543.2486	2.3880	0.0000	7,602.9487
2022	7.3369	77.7372	58.6327	0.1260	36.3337	3.2711	39.5600	19.9147	3.0094	22.8829	0.0000	12,206.8889	12,206.8889	3.8924	0.0000	12,304.1987
2023	6.7256	69.0765	56.6089	0.1260	17.5702	2.8502	20.4205	7.2523	2.6222	9.8745	0.0000	12,200.0379	12,200.0379	3.8920	0.0000	12,297.3387
2024	67.3274	60.4211	74.6042	0.1723	4.3029	2.3151	6.6180	1.1670	2.1654	3.3324	0.0000	17,008.7071	17,008.7071	2.9886	0.0000	17,083.4209
2025	66.8878	56.2614	73.7676	0.1711	4.3029	2.0243	6.3272	1.1670	1.8928	3.0598	0.0000	16,883.8382	16,883.8382	2.9689	0.0000	16,958.0606
2026	66.8308	56.0917	73.2744	0.1700	4.3029	2.0236	6.3264	1.1670	1.8922	3.0592	0.0000	16,772.8998	16,772.8998	2.9580	0.0000	16,846.8486
2027	66.7757	55.9328	72.8418	0.1690	4.3028	2.0225	6.3254	1.1670	1.8912	3.0582	0.0000	16,675.8796	16,675.8796	2.9474	0.0000	16,749.5650
2028	66.7215	55.7998	72.4728	0.1682	4.3028	2.0212	6.3241	1.1670	1.8900	3.0570	0.0000	16,592.6536	16,592.6536	2.9373	0.0000	16,666.0874
2029	66.6651	55.6786	72.1284	0.1674	4.3028	2.0200	6.3228	1.1670	1.8889	3.0559	0.0000	16,519.4968	16,519.4968	2.9280	0.0000	16,592.6970
Maximum	**67.3274**	**81.0445**	**74.6042**	**0.1723**	**36.3337**	**4.0901**	**40.4238**	**19.9147**	**3.7629**	**23.6776**	**0.0000**	**17,008.7071**	**17,008.7071**	**3.8924**	**0.0000**	**17,083.4209**

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					
2021	1.9461	38.1815	46.4572	0.0778	14.2229	1.8935	16.1164	7.7821	1.8934	9.6755	0.0000	7,543.2486	7,543.2486	2.3880	0.0000	7,602.9487
2022	3.1335	60.0067	73.9949	0.1260	14.2229	2.6001	16.1164	7.7821	2.6000	9.6755	0.0000	12,206.8889	12,206.8889	3.8924	0.0000	12,304.1987
2023	3.1283	60.0017	73.9518	0.1260	6.9110	2.6001	9.5111	2.8455	2.6000	5.4455	0.0000	12,200.0379	12,200.0379	3.8920	0.0000	12,297.3387
2024	64.6350	65.8033	83.4026	0.1723	2.8782	3.2455	6.1237	0.8173	3.2436	4.0609	0.0000	17,008.7071	17,008.7071	2.9886	0.0000	17,083.4209
2025	64.5695	65.6243	82.8278	0.1711	2.8781	3.2451	6.1232	0.8173	3.2432	4.0604	0.0000	16,883.8382	16,883.8382	2.9689	0.0000	16,958.0606
2026	64.5125	65.4546	82.3346	0.1700	2.8781	3.2443	6.1224	0.8173	3.2425	4.0598	0.0000	16,772.8998	16,772.8998	2.9580	0.0000	16,846.8486
2027	64.4574	65.2957	81.9020	0.1690	2.8781	3.2433	6.1213	0.8173	3.2415	4.0588	0.0000	16,675.8796	16,675.8796	2.9474	0.0000	16,749.5650
2028	64.4032	65.1627	81.5330	0.1682	2.8780	3.2420	6.1200	0.8173	3.2403	4.0576	0.0000	16,592.6536	16,592.6536	2.9373	0.0000	16,666.0873
2029	64.3469	65.0415	81.1886	0.1674	2.8780	3.2408	6.1188	0.8173	3.2392	4.0565	0.0000	16,519.4968	16,519.4968	2.9280	0.0000	16,592.6970
Maximum	**64.6350**	**65.8033**	**83.4026**	**0.1723**	**14.2229**	**3.2455**	**16.1164**	**7.7821**	**3.2436**	**9.6755**	**0.0000**	**17,008.7071**	**17,008.7071**	**3.8924**	**0.0000**	**17,083.4209**

	ROG	NOx	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	**6.62**	**3.08**	**-15.14**	**0.00**	**54.65**	**-17.30**	**43.40**	**56.89**	**-26.31**	**34.52**	**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	64.6650	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Energy	3.8507	35.0066	29.4056	0.2100		2.6605	2.6605		2.6605	2.6605		42,007.9642	42,007.9642	0.8052	0.7702	42,257.5965
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**68.5157**	**35.0154**	**30.3814**	**0.2101**	**0.0000**	**2.6640**	**2.6640**	**0.0000**	**2.6640**	**2.6640**		**42,010.0664**	**42,010.0664**	**0.8106**	**0.7702**	**42,259.8342**

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	64.6650	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Energy	3.5552	32.3201	27.1489	0.1939		2.4563	2.4563		2.4563	2.4563		38,784.1294	38,784.1294	0.7434	0.7110	39,014.6041
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**68.2202**	**32.3289**	**28.1247**	**0.1940**	**0.0000**	**2.4598**	**2.4598**	**0.0000**	**2.4598**	**2.4598**		**38,786.2317**	**38,786.2317**	**0.7488**	**0.7110**	**39,016.8419**

	ROG	NOx	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**	**7.67**	**7.43**	**7.67**	**0.00**	**7.66**	**7.66**	**0.00**	**7.66**	**7.66**	**0.00**	**7.67**	**7.67**	**7.62**	**7.68**	**7.67**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2021	3/9/2022	5	180	
2	Grading	Grading	3/10/2022	12/20/2023	5	465	
3	Building Construction	Building Construction	3/22/2024	11/13/2029	5	1473	
4	Paving	Paving	3/22/2024	11/13/2029	5	1473	
5	Architectural Coating	Architectural Coating	3/22/2024	11/13/2029	5	1473	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2325

Acres of Paving: 65.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,309,790; Non-Residential Outdoor: 4,769,930; Striped Parking Area: 171,975 (Architectural Coating – sqft)

OffRoad Equipment

Stoneridge Commerce Center - Alternative Land Use Plan - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	14	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	253.00	178.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	14.70	6.90	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

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	7.7764	80.9942	42.3085	0.0760		4.0889	4.0889		3.7618	3.7618		7,371.3138	7,371.3138	2.3840		7,430.9146
Total	**7.7764**	**80.9942**	**42.3085**	**0.0760**	**36.1325**	**4.0889**	**40.2214**	**19.8614**	**3.7618**	**23.6232**		**7,371.3138**	**7,371.3138**	**2.3840**		**7,430.9146**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0838	0.0503	0.5372	1.7200e-003	0.2012	1.1900e-003	0.2024	0.0534	1.0900e-003	0.0545		171.9348	171.9348	3.9700e-003		172.0342
Total	**0.0838**	**0.0503**	**0.5372**	**1.7200e-003**	**0.2012**	**1.1900e-003**	**0.2024**	**0.0534**	**1.0900e-003**	**0.0545**		**171.9348**	**171.9348**	**3.9700e-003**		**172.0342**

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					14.0917	0.0000	14.0917	7.7459	0.0000	7.7459			0.0000			0.0000
Off-Road	1.8623	38.1312	45.9201	0.0760		1.8923	1.8923		1.8923	1.8923	0.0000	7,371.3138	7,371.3138	2.3840		7,430.9146
Total	**1.8623**	**38.1312**	**45.9201**	**0.0760**	**14.0917**	**1.8923**	**15.9840**	**7.7459**	**1.8923**	**9.6383**	**0.0000**	**7,371.3138**	**7,371.3138**	**2.3840**		**7,430.9146**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0838	0.0503	0.5372	1.7200e-003	0.1312	1.1900e-003	0.1324	0.0362	1.0900e-003	0.0373		171.9348	171.9348	3.9700e-003		172.0342
Total	**0.0838**	**0.0503**	**0.5372**	**1.7200e-003**	**0.1312**	**1.1900e-003**	**0.1324**	**0.0362**	**1.0900e-003**	**0.0373**		**171.9348**	**171.9348**	**3.9700e-003**		**172.0342**

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					36.1325	0.0000	36.1325	19.8614	0.0000	19.8614			0.0000			0.0000
Off-Road	6.3403	66.1670	39.3955	0.0761		3.2252	3.2252		2.9671	2.9671		7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**6.3403**	**66.1670**	**39.3955**	**0.0761**	**36.1325**	**3.2252**	**39.3577**	**19.8614**	**2.9671**	**22.8285**		**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0786	0.0452	0.4947	1.6600e-003	0.2012	1.1500e-003	0.2024	0.0534	1.0600e-003	0.0544		165.6610	165.6610	3.5700e-003		165.7503
Total	**0.0786**	**0.0452**	**0.4947**	**1.6600e-003**	**0.2012**	**1.1500e-003**	**0.2024**	**0.0534**	**1.0600e-003**	**0.0544**		**165.6610**	**165.6610**	**3.5700e-003**		**165.7503**

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					14.0917	0.0000	14.0917	7.7459	0.0000	7.7459			0.0000			0.0000
Off-Road	1.8623	38.1312	45.9201	0.0761		1.8923	1.8923		1.8923	1.8923	0.0000	7,372.1237	7,372.1237	2.3843		7,431.7311
Total	**1.8623**	**38.1312**	**45.9201**	**0.0761**	**14.0917**	**1.8923**	**15.9840**	**7.7459**	**1.8923**	**9.6383**	**0.0000**	**7,372.1237**	**7,372.1237**	**2.3843**		**7,431.7311**

3.2 Site Preparation - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0786	0.0452	0.4947	1.6600e-003	0.1312	1.1500e-003	0.1324	0.0362	1.0600e-003	0.0373		165.6610	165.6610	3.5700e-003		165.7503
Total	**0.0786**	**0.0452**	**0.4947**	**1.6600e-003**	**0.1312**	**1.1500e-003**	**0.1324**	**0.0362**	**1.0600e-003**	**0.0373**		**165.6610**	**165.6610**	**3.5700e-003**		**165.7503**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	7.2497	77.6870	58.0830	0.1242		3.2698	3.2698		3.0082	3.0082		12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**7.2497**	**77.6870**	**58.0830**	**0.1242**	**17.3467**	**3.2698**	**20.6165**	**7.1930**	**3.0082**	**10.2012**		**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0873	0.0503	0.5497	1.8500e-003	0.2236	1.2800e-003	0.2248	0.0593	1.1800e-003	0.0605		184.0678	184.0678	3.9700e-003		184.1670
Total	**0.0873**	**0.0503**	**0.5497**	**1.8500e-003**	**0.2236**	**1.2800e-003**	**0.2248**	**0.0593**	**1.1800e-003**	**0.0605**		**184.0678**	**184.0678**	**3.9700e-003**		**184.1670**

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					6.7652	0.0000	6.7652	2.8053	0.0000	2.8053			0.0000			0.0000
Off-Road	3.0462	59.9564	73.4452	0.1242		2.5989	2.5989		2.5989	2.5989	0.0000	12,022.8211	12,022.8211	3.8884		12,120.0317
Total	**3.0462**	**59.9564**	**73.4452**	**0.1242**	**6.7652**	**2.5989**	**9.3641**	**2.8053**	**2.5989**	**5.4041**	**0.0000**	**12,022.8211**	**12,022.8211**	**3.8884**		**12,120.0317**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0873	0.0503	0.5497	1.8500e-003	0.1458	1.2800e-003	0.1471	0.0402	1.1800e-003	0.0414		184.0678	184.0678	3.9700e-003		184.1670
Total	**0.0873**	**0.0503**	**0.5497**	**1.8500e-003**	**0.1458**	**1.2800e-003**	**0.1471**	**0.0402**	**1.1800e-003**	**0.0414**		**184.0678**	**184.0678**	**3.9700e-003**		**184.1670**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					17.3467	0.0000	17.3467	7.1930	0.0000	7.1930			0.0000			0.0000
Off-Road	6.6435	69.0312	56.1023	0.1242		2.8490	2.8490		2.6211	2.6211		12,022.9555	12,022.9555	3.8885		12,120.1671
Total	**6.6435**	**69.0312**	**56.1023**	**0.1242**	**17.3467**	**2.8490**	**20.1957**	**7.1930**	**2.6211**	**9.8141**		**12,022.9555**	**12,022.9555**	**3.8885**		**12,120.1671**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0821	0.0453	0.5066	1.7800e-003	0.2236	1.2500e-003	0.2248	0.0593	1.1500e-003	0.0604		177.0824	177.0824	3.5700e-003		177.1716
Total	**0.0821**	**0.0453**	**0.5066**	**1.7800e-003**	**0.2236**	**1.2500e-003**	**0.2248**	**0.0593**	**1.1500e-003**	**0.0604**		**177.0824**	**177.0824**	**3.5700e-003**		**177.1716**

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					6.7652	0.0000	6.7652	2.8053	0.0000	2.8053			0.0000			0.0000
Off-Road	3.0462	59.9564	73.4452	0.1242		2.5989	2.5989		2.5989	2.5989	0.0000	12,022.9554	12,022.9554	3.8885		12,120.1671
Total	**3.0462**	**59.9564**	**73.4452**	**0.1242**	**6.7652**	**2.5989**	**9.3641**	**2.8053**	**2.5989**	**5.4041**	**0.0000**	**12,022.9554**	**12,022.9554**	**3.8885**		**12,120.1671**

3.3 Grading - 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	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0821	0.0453	0.5066	1.7800e-003	0.1458	1.2500e-003	0.1471	0.0402	1.1500e-003	0.0414		177.0824	177.0824	3.5700e-003		177.1716
Total	**0.0821**	**0.0453**	**0.5066**	**1.7800e-003**	**0.1458**	**1.2500e-003**	**0.1471**	**0.0402**	**1.1500e-003**	**0.0414**		**177.0824**	**177.0824**	**3.5700e-003**		**177.1716**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.9431	26.8876	32.3336	0.0539		1.2266	1.2266		1.1538	1.1538		5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**2.9431**	**26.8876**	**32.3336**	**0.0539**		**1.2266**	**1.2266**		**1.1538**	**1.1538**		**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3088	11.4658	2.6931	0.0427	1.1397	0.0121	1.1517	0.3281	0.0115	0.3396		4,503.4232	4,503.4232	0.2742		4,510.2774
Worker	0.9818	0.5194	5.9949	0.0217	2.8279	0.0157	2.8436	0.7500	0.0144	0.7644		2,159.7936	2,159.7936	0.0412		2,160.8230
Total	**1.2907**	**11.9852**	**8.6880**	**0.0643**	**3.9676**	**0.0277**	**3.9953**	**1.0781**	**0.0260**	**1.1041**		**6,663.2168**	**6,663.2168**	**0.3154**		**6,671.1003**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,111.3978	5,111.3978	1.2087		5,141.6153
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,111.3978**	**5,111.3978**	**1.2087**		**5,141.6153**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3088	11.4658	2.6931	0.0427	0.8149	0.0121	0.8270	0.2484	0.0115	0.2599		4,503.4232	4,503.4232	0.2742		4,510.2774
Worker	0.9818	0.5194	5.9949	0.0217	1.8445	0.0157	1.8602	0.5086	0.0144	0.5230		2,159.7936	2,159.7936	0.0412		2,160.8230
Total	**1.2907**	**11.9852**	**8.6880**	**0.0643**	**2.6594**	**0.0277**	**2.6872**	**0.7570**	**0.0260**	**0.7830**		**6,663.2168**	**6,663.2168**	**0.3154**		**6,671.1003**

3.4 Building Construction - 2025

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3011	11.3389	2.6073	0.0424	1.1396	0.0119	1.1515	0.3281	0.0114	0.3395		4,475.2824	4,475.2824	0.2671		4,481.9599
Worker	0.9303	0.4728	5.5577	0.0208	2.8279	0.0154	2.8433	0.7500	0.0142	0.7642		2,073.3669	2,073.3669	0.0374		2,074.3007
Total	**1.2313**	**11.8117**	**8.1650**	**0.0632**	**3.9676**	**0.0273**	**3.9949**	**1.0781**	**0.0255**	**1.1036**		**6,548.6493**	**6,548.6493**	**0.3045**		**6,556.2606**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3011	11.3389	2.6073	0.0424	0.8149	0.0119	0.8268	0.2484	0.0114	0.2598		4,475.2824	4,475.2824	0.2671		4,481.9599
Worker	0.9303	0.4728	5.5577	0.0208	1.8445	0.0154	1.8599	0.5086	0.0142	0.5228		2,073.3669	2,073.3669	0.0374		2,074.3007
Total	**1.2313**	**11.8117**	**8.1650**	**0.0632**	**2.6594**	**0.0273**	**2.6867**	**0.7570**	**0.0255**	**0.7825**		**6,548.6493**	**6,548.6493**	**0.3045**		**6,556.2606**

3.4 Building Construction - 2026

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2943	11.2136	2.5373	0.0421	1.1396	0.0117	1.1513	0.3281	0.0112	0.3393		4,448.8244	4,448.8244	0.2599		4,455.3205
Worker	0.8854	0.4331	5.1795	0.0200	2.8279	0.0149	2.8429	0.7500	0.0137	0.7637		1,997.8421	1,997.8421	0.0341		1,998.6934
Total	**1.1797**	**11.6467**	**7.7167**	**0.0621**	**3.9675**	**0.0266**	**3.9942**	**1.0781**	**0.0249**	**1.1030**		**6,446.6664**	**6,446.6664**	**0.2939**		**6,454.0140**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2943	11.2136	2.5373	0.0421	0.8148	0.0117	0.8266	0.2484	0.0112	0.2596		4,448.8244	4,448.8244	0.2599		4,455.3205
Worker	0.8854	0.4331	5.1795	0.0200	1.8445	0.0149	1.8594	0.5086	0.0137	0.5223		1,997.8421	1,997.8421	0.0341		1,998.6934
Total	**1.1797**	**11.6467**	**7.7167**	**0.0621**	**2.6594**	**0.0266**	**2.6860**	**0.7570**	**0.0249**	**0.7819**		**6,446.6664**	**6,446.6664**	**0.2939**		**6,454.0140**

3.4 Building Construction - 2027

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2887	11.0942	2.4802	0.0419	1.1396	0.0115	1.1511	0.3281	0.0110	0.3391		4,425.8936	4,425.8936	0.2526		4,432.2085
Worker	0.8411	0.3978	4.8437	0.0194	2.8279	0.0141	2.8421	0.7500	0.0130	0.7630		1,931.6067	1,931.6067	0.0311		1,932.3846
Total	**1.1298**	**11.4920**	**7.3239**	**0.0613**	**3.9675**	**0.0257**	**3.9932**	**1.0781**	**0.0240**	**1.1021**		**6,357.5002**	**6,357.5002**	**0.2837**		**6,364.5931**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2887	11.0942	2.4802	0.0419	0.8148	0.0115	0.8264	0.2484	0.0110	0.2594		4,425.8936	4,425.8936	0.2526		4,432.2085
Worker	0.8411	0.3978	4.8437	0.0194	1.8445	0.0141	1.8587	0.5086	0.0130	0.5216		1,931.6067	1,931.6067	0.0311		1,932.3846
Total	**1.1298**	**11.4920**	**7.3239**	**0.0613**	**2.6593**	**0.0257**	**2.6850**	**0.7570**	**0.0240**	**0.7810**		**6,357.5002**	**6,357.5002**	**0.2837**		**6,364.5931**

3.4 Building Construction - 2028

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2842	10.9962	2.4390	0.0417	1.1395	0.0114	1.1510	0.3281	0.0109	0.3390		4,407.3401	4,407.3401	0.2454		4,413.4742
Worker	0.7967	0.3666	4.5507	0.0188	2.8279	0.0131	2.8410	0.7500	0.0120	0.7620		1,873.7898	1,873.7898	0.0286		1,874.5045
Total	**1.0809**	**11.3627**	**6.9897**	**0.0605**	**3.9675**	**0.0245**	**3.9920**	**1.0781**	**0.0230**	**1.1010**		**6,281.1299**	**6,281.1299**	**0.2739**		**6,287.9786**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2842	10.9962	2.4390	0.0417	0.8148	0.0114	0.8262	0.2484	0.0109	0.2593		4,407.3401	4,407.3401	0.2454		4,413.4742
Worker	0.7967	0.3666	4.5507	0.0188	1.8445	0.0131	1.8576	0.5086	0.0120	0.5206		1,873.7898	1,873.7898	0.0286		1,874.5045
Total	**1.0809**	**11.3627**	**6.9897**	**0.0605**	**2.6593**	**0.0245**	**2.6838**	**0.7570**	**0.0230**	**0.7799**		**6,281.1299**	**6,281.1299**	**0.2739**		**6,287.9786**

3.4 Building Construction - 2029

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	2.7348	24.9394	32.1693	0.0539		1.0551	1.0551		0.9925	0.9925		5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**2.7348**	**24.9394**	**32.1693**	**0.0539**		**1.0551**	**1.0551**		**0.9925**	**0.9925**		**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2804	10.9072	2.4024	0.0416	1.1395	0.0113	1.1508	0.3281	0.0108	0.3388		4,390.7934	4,390.7934	0.2387		4,396.7600
Worker	0.7497	0.3377	4.2755	0.0183	2.8279	0.0121	2.8401	0.7500	0.0112	0.7612		1,823.1809	1,823.1809	0.0262		1,823.8363
Total	**1.0301**	**11.2449**	**6.6779**	**0.0598**	**3.9675**	**0.0234**	**3.9909**	**1.0781**	**0.0219**	**1.1000**		**6,213.9742**	**6,213.9742**	**0.2649**		**6,220.5964**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3478	28.4521	35.7476	0.0539		1.8071	1.8071		1.8071	1.8071	0.0000	5,112.9487	5,112.9487	1.2019		5,142.9961
Total	**1.3478**	**28.4521**	**35.7476**	**0.0539**		**1.8071**	**1.8071**		**1.8071**	**1.8071**	**0.0000**	**5,112.9487**	**5,112.9487**	**1.2019**		**5,142.9961**

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2804	10.9072	2.4024	0.0416	0.8148	0.0113	0.8260	0.2484	0.0108	0.2591		4,390.7934	4,390.7934	0.2387		4,396.7600
Worker	0.7497	0.3377	4.2755	0.0183	1.8445	0.0121	1.8567	0.5086	0.0112	0.5198		1,823.1809	1,823.1809	0.0262		1,823.8363
Total	**1.0301**	**11.2449**	**6.6779**	**0.0598**	**2.6593**	**0.0234**	**2.6827**	**0.7570**	**0.0219**	**0.7789**		**6,213.9742**	**6,213.9742**	**0.2649**		**6,220.5964**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9763	19.0492	29.2515	0.0456		0.9370	0.9370		0.8621	0.8621		4,415.0944	4,415.0944	1.4279		4,450.7927
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**2.0375**	**19.0492**	**29.2515**	**0.0456**		**0.9370**	**0.9370**		**0.8621**	**0.8621**		**4,415.0944**	**4,415.0944**	**1.4279**		**4,450.7927**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
Total	**0.0582**	**0.0308**	**0.3554**	**1.2800e-003**	**0.1677**	**9.3000e-004**	**0.1686**	**0.0445**	**8.6000e-004**	**0.0453**		**128.0510**	**128.0510**	**2.4400e-003**		**128.1120**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,415.0944	4,415.0944	1.4279		4,450.7927
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,415.0944**	**4,415.0944**	**1.4279**		**4,450.7927**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1094	9.3000e-004	0.1103	0.0302	8.6000e-004	0.0310		128.0510	128.0510	2.4400e-003		128.1120
Total	**0.0582**	**0.0308**	**0.3554**	**1.2800e-003**	**0.1094**	**9.3000e-004**	**0.1103**	**0.0302**	**8.6000e-004**	**0.0310**		**128.0510**	**128.0510**	**2.4400e-003**		**128.1120**

3.5 Paving - 2025

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0280	0.3295	1.2300e-003	0.1677	9.1000e-004	0.1686	0.0445	8.4000e-004	0.0453		122.9269	122.9269	2.2100e-003		122.9823
Total	**0.0552**	**0.0280**	**0.3295**	**1.2300e-003**	**0.1677**	**9.1000e-004**	**0.1686**	**0.0445**	**8.4000e-004**	**0.0453**		**122.9269**	**122.9269**	**2.2100e-003**		**122.9823**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0280	0.3295	1.2300e-003	0.1094	9.1000e-004	0.1103	0.0302	8.4000e-004	0.0310		122.9269	122.9269	2.2100e-003		122.9823
Total	**0.0552**	**0.0280**	**0.3295**	**1.2300e-003**	**0.1094**	**9.1000e-004**	**0.1103**	**0.0302**	**8.4000e-004**	**0.0310**		**122.9269**	**122.9269**	**2.2100e-003**		**122.9823**

3.5 Paving - 2026

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3071	1.1900e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		118.4491	118.4491	2.0200e-003		118.4996
Total	**0.0525**	**0.0257**	**0.3071**	**1.1900e-003**	**0.1677**	**8.8000e-004**	**0.1686**	**0.0445**	**8.1000e-004**	**0.0453**		**118.4491**	**118.4491**	**2.0200e-003**		**118.4996**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3071	1.1900e-003	0.1094	8.8000e-004	0.1102	0.0302	8.1000e-004	0.0310		118.4491	118.4491	2.0200e-003		118.4996
Total	**0.0525**	**0.0257**	**0.3071**	**1.1900e-003**	**0.1094**	**8.8000e-004**	**0.1102**	**0.0302**	**8.1000e-004**	**0.0310**		**118.4491**	**118.4491**	**2.0200e-003**		**118.4996**

3.5 Paving - 2027

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0236	0.2872	1.1500e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		114.5221	114.5221	1.8400e-003		114.5683
Total	**0.0499**	**0.0236**	**0.2872**	**1.1500e-003**	**0.1677**	**8.4000e-004**	**0.1685**	**0.0445**	**7.7000e-004**	**0.0452**		**114.5221**	**114.5221**	**1.8400e-003**		**114.5683**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0236	0.2872	1.1500e-003	0.1094	8.4000e-004	0.1102	0.0302	7.7000e-004	0.0309		114.5221	114.5221	1.8400e-003		114.5683
Total	**0.0499**	**0.0236**	**0.2872**	**1.1500e-003**	**0.1094**	**8.4000e-004**	**0.1102**	**0.0302**	**7.7000e-004**	**0.0309**		**114.5221**	**114.5221**	**1.8400e-003**		**114.5683**

3.5 Paving - 2028

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0217	0.2698	1.1100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.1000e-004	0.0452		111.0943	111.0943	1.6900e-003		111.1366
Total	**0.0472**	**0.0217**	**0.2698**	**1.1100e-003**	**0.1677**	**7.8000e-004**	**0.1684**	**0.0445**	**7.1000e-004**	**0.0452**		**111.0943**	**111.0943**	**1.6900e-003**		**111.1366**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0217	0.2698	1.1100e-003	0.1094	7.8000e-004	0.1101	0.0302	7.1000e-004	0.0309		111.0943	111.0943	1.6900e-003		111.1366
Total	**0.0472**	**0.0217**	**0.2698**	**1.1100e-003**	**0.1094**	**7.8000e-004**	**0.1101**	**0.0302**	**7.1000e-004**	**0.0309**		**111.0943**	**111.0943**	**1.6900e-003**		**111.1366**

3.5 Paving - 2029

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	1.8303	17.1633	29.1559	0.0456		0.8371	0.8371		0.7701	0.7701		4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.8915**	**17.1633**	**29.1559**	**0.0456**		**0.8371**	**0.8371**		**0.7701**	**0.7701**		**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0200	0.2535	1.0800e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		108.0937	108.0937	1.5500e-003		108.1326
Total	**0.0445**	**0.0200**	**0.2535**	**1.0800e-003**	**0.1677**	**7.2000e-004**	**0.1684**	**0.0445**	**6.6000e-004**	**0.0451**		**108.0937**	**108.0937**	**1.5500e-003**		**108.1326**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1219	22.5905	34.5913	0.0456		1.2187	1.2187		1.2187	1.2187	0.0000	4,413.4903	4,413.4903	1.4274		4,449.1756
Paving	0.0612					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.1831**	**22.5905**	**34.5913**	**0.0456**		**1.2187**	**1.2187**		**1.2187**	**1.2187**	**0.0000**	**4,413.4903**	**4,413.4903**	**1.4274**		**4,449.1756**

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0200	0.2535	1.0800e-003	0.1094	7.2000e-004	0.1101	0.0302	6.6000e-004	0.0308		108.0937	108.0937	1.5500e-003		108.1326
Total	**0.0445**	**0.0200**	**0.2535**	**1.0800e-003**	**0.1094**	**7.2000e-004**	**0.1101**	**0.0302**	**6.6000e-004**	**0.0308**		**108.0937**	**108.0937**	**1.5500e-003**		**108.1326**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3615	2.4376	3.6203	5.9400e-003		0.1218	0.1218		0.1218	0.1218		562.8961	562.8961	0.0317		563.6885
Total	**60.9397**	**2.4376**	**3.6203**	**5.9400e-003**		**0.1218**	**0.1218**		**0.1218**	**0.1218**		**562.8961**	**562.8961**	**0.0317**		**563.6885**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1677	9.3000e-004	0.1686	0.0445	8.6000e-004	0.0453		128.0510	128.0510	2.4400e-003		128.1120
Total	**0.0582**	**0.0308**	**0.3554**	**1.2800e-003**	**0.1677**	**9.3000e-004**	**0.1686**	**0.0445**	**8.6000e-004**	**0.0453**		**128.0510**	**128.0510**	**2.4400e-003**		**128.1120**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0317		563.6885
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0317**		**563.6885**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0582	0.0308	0.3554	1.2800e-003	0.1094	9.3000e-004	0.1103	0.0302	8.6000e-004	0.0310		128.0510	128.0510	2.4400e-003		128.1120
Total	**0.0582**	**0.0308**	**0.3554**	**1.2800e-003**	**0.1094**	**9.3000e-004**	**0.1103**	**0.0302**	**8.6000e-004**	**0.0310**		**128.0510**	**128.0510**	**2.4400e-003**		**128.1120**

3.6 Architectural Coating - 2025

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0280	0.3295	1.2300e-003	0.1677	9.1000e-004	0.1686	0.0445	8.4000e-004	0.0453		122.9269	122.9269	2.2100e-003		122.9823
Total	**0.0552**	**0.0280**	**0.3295**	**1.2300e-003**	**0.1677**	**9.1000e-004**	**0.1686**	**0.0445**	**8.4000e-004**	**0.0453**		**122.9269**	**122.9269**	**2.2100e-003**		**122.9823**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0552	0.0280	0.3295	1.2300e-003	0.1094	9.1000e-004	0.1103	0.0302	8.4000e-004	0.0310		122.9269	122.9269	2.2100e-003		122.9823
Total	**0.0552**	**0.0280**	**0.3295**	**1.2300e-003**	**0.1094**	**9.1000e-004**	**0.1103**	**0.0302**	**8.4000e-004**	**0.0310**		**122.9269**	**122.9269**	**2.2100e-003**		**122.9823**

3.6 Architectural Coating - 2026

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3071	1.1900e-003	0.1677	8.8000e-004	0.1686	0.0445	8.1000e-004	0.0453		118.4491	118.4491	2.0200e-003		118.4996
Total	**0.0525**	**0.0257**	**0.3071**	**1.1900e-003**	**0.1677**	**8.8000e-004**	**0.1686**	**0.0445**	**8.1000e-004**	**0.0453**		**118.4491**	**118.4491**	**2.0200e-003**		**118.4996**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0525	0.0257	0.3071	1.1900e-003	0.1094	8.8000e-004	0.1102	0.0302	8.1000e-004	0.0310		118.4491	118.4491	2.0200e-003		118.4996
Total	**0.0525**	**0.0257**	**0.3071**	**1.1900e-003**	**0.1094**	**8.8000e-004**	**0.1102**	**0.0302**	**8.1000e-004**	**0.0310**		**118.4491**	**118.4491**	**2.0200e-003**		**118.4996**

3.6 Architectural Coating - 2027

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0236	0.2872	1.1500e-003	0.1677	8.4000e-004	0.1685	0.0445	7.7000e-004	0.0452		114.5221	114.5221	1.8400e-003		114.5683
Total	**0.0499**	**0.0236**	**0.2872**	**1.1500e-003**	**0.1677**	**8.4000e-004**	**0.1685**	**0.0445**	**7.7000e-004**	**0.0452**		**114.5221**	**114.5221**	**1.8400e-003**		**114.5683**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0499	0.0236	0.2872	1.1500e-003	0.1094	8.4000e-004	0.1102	0.0302	7.7000e-004	0.0309		114.5221	114.5221	1.8400e-003		114.5683
Total	**0.0499**	**0.0236**	**0.2872**	**1.1500e-003**	**0.1094**	**8.4000e-004**	**0.1102**	**0.0302**	**7.7000e-004**	**0.0309**		**114.5221**	**114.5221**	**1.8400e-003**		**114.5683**

3.6 Architectural Coating - 2028

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0217	0.2698	1.1100e-003	0.1677	7.8000e-004	0.1684	0.0445	7.1000e-004	0.0452		111.0943	111.0943	1.6900e-003		111.1366
Total	**0.0472**	**0.0217**	**0.2698**	**1.1100e-003**	**0.1677**	**7.8000e-004**	**0.1684**	**0.0445**	**7.1000e-004**	**0.0452**		**111.0943**	**111.0943**	**1.6900e-003**		**111.1366**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0472	0.0217	0.2698	1.1100e-003	0.1094	7.8000e-004	0.1101	0.0302	7.1000e-004	0.0309		111.0943	111.0943	1.6900e-003		111.1366
Total	**0.0472**	**0.0217**	**0.2698**	**1.1100e-003**	**0.1094**	**7.8000e-004**	**0.1101**	**0.0302**	**7.1000e-004**	**0.0309**		**111.0943**	**111.0943**	**1.6900e-003**		**111.1366**

3.6 Architectural Coating - 2029

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3417	2.2910	3.6183	5.9400e-003		0.1030	0.1030		0.1030	0.1030		562.8961	562.8961	0.0307		563.6637
Total	**60.9199**	**2.2910**	**3.6183**	**5.9400e-003**		**0.1030**	**0.1030**		**0.1030**	**0.1030**		**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0200	0.2535	1.0800e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		108.0937	108.0937	1.5500e-003		108.1326
Total	**0.0445**	**0.0200**	**0.2535**	**1.0800e-003**	**0.1677**	**7.2000e-004**	**0.1684**	**0.0445**	**6.6000e-004**	**0.0451**		**108.0937**	**108.0937**	**1.5500e-003**		**108.1326**

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	60.5781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1189	2.7140	3.6648	5.9400e-003		0.1902	0.1902		0.1902	0.1902	0.0000	562.8961	562.8961	0.0307		563.6637
Total	**60.6970**	**2.7140**	**3.6648**	**5.9400e-003**		**0.1902**	**0.1902**		**0.1902**	**0.1902**	**0.0000**	**562.8961**	**562.8961**	**0.0307**		**563.6637**

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0445	0.0200	0.2535	1.0800e-003	0.1094	7.2000e-004	0.1101	0.0302	6.6000e-004	0.0308		108.0937	108.0937	1.5500e-003		108.1326
Total	**0.0445**	**0.0200**	**0.2535**	**1.0800e-003**	**0.1094**	**7.2000e-004**	**0.1101**	**0.0302**	**6.6000e-004**	**0.0308**		**108.0937**	**108.0937**	**1.5500e-003**		**108.1326**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Free-Standing Discount Superstore	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Free-Standing Discount	16.60	8.40	6.90	13.20	67.80	19.00	47.5	35.5	17
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Free-Standing Discount Superstore	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Industrial Park	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Manufacturing	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Non-Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Refrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Strip Mall	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Unrefrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Stoneridge Commerce Center - Alternative Land Use Plan - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.5552	32.3201	27.1489	0.1939		2.4563	2.4563		2.4563	2.4563		38,784.1294	38,784.1294	0.7434	0.7110	39,014.6041
NaturalGas Unmitigated	3.8507	35.0066	29.4056	0.2100		2.6605	2.6605		2.6605	2.6605		42,007.9642	42,007.9642	0.8052	0.7702	42,257.5965

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					
Free-Standing Discount Superstore	608.219	6.5600e-003	0.0596	0.0501	3.6000e-004		4.5300e-003	4.5300e-003		4.5300e-003	4.5300e-003		71.5552	71.5552	1.3700e-003	1.3100e-003	71.9804
Industrial Park	5342.09	0.0576	0.5237	0.4399	3.1400e-003		0.0398	0.0398		0.0398	0.0398		628.4810	628.4810	0.0121	0.0115	632.2158
Manufacturing	75455.1	0.8137	7.3976	6.2140	0.0444		0.5622	0.5622		0.5622	0.5622		8,877.0744	8,877.0744	0.1701	0.1628	8,929.8264
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	240416	2.5927	23.5702	19.7990	0.1414		1.7913	1.7913		1.7913	1.7913		28,284.2332	28,284.2332	0.5421	0.5185	28,452.3123
Strip Mall	161.421	1.7400e-003	0.0158	0.0133	9.0000e-005		1.2000e-003	1.2000e-003		1.2000e-003	1.2000e-003		18.9908	18.9908	3.6000e-004	3.5000e-004	19.1036
Unrefrigerated Warehouse-No Rail	16500.7	0.3559	3.2354	2.7178	0.0194		0.2459	0.2459		0.2459	0.2459		3,882.5116	3,882.5116	0.0744	0.0712	3,905.5834
Unrefrigerated Warehouse-No Rail	2083.5	0.0225	0.2043	0.1716	1.2300e-003		0.0155	0.0155		0.0155	0.0155		245.1180	245.1180	4.7000e-003	4.4900e-003	246.5746
Total		**3.8507**	**35.0066**	**29.4056**	**0.2100**		**2.6605**	**2.6605**		**2.6605**	**2.6605**		**42,007.9642**	**42,007.9642**	**0.8051**	**0.7701**	**42,257.5965**

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					
Free-Standing Discount Superstore	0.450411	4.8600e-003	0.0442	0.0371	2.6000e-004		3.3600e-003	3.3600e-003		3.3600e-003	3.3600e-003		52.9895	52.9895	1.0200e-003	9.7000e-004	53.3044
Industrial Park	3.73946	0.0403	0.3666	0.3080	2.2000e-003		0.0279	0.0279		0.0279	0.0279		439.9367	439.9367	8.4300e-003	8.0700e-003	442.5511
Manufacturing	64.7535	0.6983	6.3484	5.3326	0.0381		0.4825	0.4825		0.4825	0.4825		7,618.0544	7,618.0544	0.1460	0.1397	7,663.3247
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	235.887	2.5439	23.1262	19.4260	0.1388		1.7576	1.7576		1.7576	1.7576		27,751.4448	27,751.4448	0.5319	0.5088	27,916.3578
Strip Mall	0.119539	1.2900e-003	0.0117	9.8400e-003	7.0000e-005		8.9000e-004	8.9000e-004		8.9000e-004	8.9000e-004		14.0634	14.0634	2.7000e-004	2.6000e-004	14.1470
Unrefrigerated Warehouse-No Rail	1.46769	0.0158	0.1439	0.1209	8.6000e-004		0.0109	0.0109		0.0109	0.0109		172.6693	172.6693	3.3100e-003	3.1700e-003	173.6954
Unrefrigerated Warehouse-No Rail	11.6236	0.2507	2.2791	1.9145	0.0137		0.1732	0.1732		0.1732	0.1732		2,734.9712	2,734.9712	0.0524	0.0501	2,751.2238
Total		**3.5552**	**32.3201**	**27.1489**	**0.1939**		**2.4563**	**2.4563**		**2.4563**	**2.4563**		**38,784.1294**	**38,784.1294**	**0.7434**	**0.7111**	**39,014.6041**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	64.6650	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Unmitigated	64.6650	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378

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	24.4470					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.1287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0893	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Total	**64.6649**	**8.7900e-003**	**0.9758**	**7.0000e-005**		**3.4600e-003**	**3.4600e-003**		**3.4600e-003**	**3.4600e-003**		**2.1022**	**2.1022**	**5.4200e-003**		**2.2378**

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	24.4470					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	40.1287					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0893	8.7900e-003	0.9758	7.0000e-005		3.4600e-003	3.4600e-003		3.4600e-003	3.4600e-003		2.1022	2.1022	5.4200e-003		2.2378
Total	**64.6649**	**8.7900e-003**	**0.9758**	**7.0000e-005**		**3.4600e-003**	**3.4600e-003**		**3.4600e-003**	**3.4600e-003**		**2.1022**	**2.1022**	**5.4200e-003**		**2.2378**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

ATTACHMENT B

Project Construction Health Risk Assessment

Construction Health Risk Assessment

Stoneridge Commerce Center Specific Plan

Riverside County, California

Prepared For:

County of Riverside Planning Department
4080 Lemon Street, 12th Floor
Riverside, California

Owner Applicant:

Richland Planned Communities, Inc.
3161 Michelson Drive, Suite 425
Irvine, California

July 2020

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

CONTENTS

LIST OF TABLES

APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

µg/m^3	Micrograms per cubic meter
AB	Assembly Bill
ASF	Age sensitivity factor
ATCM	Airborne toxics control measure
BW	Body weight
CAA	Clean Air Act
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
Dose-air	Exposure through inhalation
DPM	Diesel particulate matter
FAH	Fraction of time at home
HAP	Hazardous Air Pollutants
HRA	Health Risk Assessment
L/kg	Liters per kilogram

LIST OF ACRONYMS AND ABBREVIATIONS

mg/kg-day	Milligrams per kilogram per day
MSAT	Mobile source air toxic
NAAQS	National Ambient Air Quality Standards
NESHAPs	National Emissions Standards for Hazardous Air Pollutants
OEHHA	Office of Environmental Health Hazard Assessment
PM	Particulate matter
$PM_{2.5}$	Fine particulate matter less than 2.5 microns in diameter
Project	Stoneridge Commerce Center Project
REL	Reference Exposure Level
Risk Reduction Plan	Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles
SCAQMD	South Coast Air Quality Management District
SRA	Source Receptor Area
TAC	Toxic air contaminant
USEPA	U.S. Environmental Protection Agency

1.0 INTRODUCTION

This report evaluates the potential health risks associated with the construction of the Stoneridge Commerce Center Specific Plan Project (Project), which includes the development of a 582.6-acre site in the western portion of unincorporated Riverside County (County), California. The purpose of this Health Risk Assessment (HRA) is to evaluate potential health risks associated with the toxic air contaminant (TAC), diesel particulate matter (DPM), resulting from the Project construction activity. This HRA was prepared in accordance with the requirements of the Office of Environmental Health Hazard Assessment (OEHHA) to determine if health risks are likely to occur from the proposed Project. Technical data are included as Appendix A.

1.1 Project Location and Description

The Project site is located in the western portion of unincorporated Riverside County, more specifically within the Lakeview/ Nuevo community. The Project site is a 582.6-acre property located south of the Ramona Expressway, north of Nuevo Road, east of Foothill Drive, and west of the future extension of Menifee Road. Under existing conditions, the Project site is vacant and undeveloped but has been disturbed in the past by agricultural activities and on-going discing for fire abatement purposes. The site is generally bound by Ramona Expressway with undeveloped land to the north, undeveloped/ agricultural land with residents beyond to the east, Nuevo Road and undeveloped/ agricultural land to the south, and undeveloped/ agricultural land to the west with Lakeside Middle School, Sierra Vista Elementary School and residents beyond.

The Project is proposing two separate land use plans for the Project site. The "Primary Land Use Plan" anticipates that the Project would be constructed with Ramona Expressway providing primary access from the north and Nuevo Road providing access from the south and would include a mix of light industrial, business park, commercial retail, open space conservation, open space conservation habitat, and major roadways. The "Alternative Land Use Plan" would accommodate the same land uses but anticipates the construction of a regional transportation facility, the "Mid-County Parkway (MCP)," a segment of which, along with an interchange, are planned to traverse the northwestern portions of the Project site. The Riverside County Transportation Commission has not secured or identified funding for the segment of the MCP which traverses the Project area, and therefore the timing of this segment of the MCP and the associated interchange is unknown at this time.

The level of construction to construct either the Primary Land Use Plan or Alternative Land Use Plan is largely identical. While the Alternative Land Use Plan would result in less building square footage (9,539,858 square feet compared with 9,668,142 square feet under the Primary Land Use), the calculated *annual* emission outputs are identical for each scenario. Therefore, this HRA addresses construction DPM generated under both the Primary Land Use Plan and Alternative Land Use Plan collectively.

2.0 CONSTRUCTION HEALTH RISK ASSESSMENT

2.1 Environmental Setting

2.1.1 Toxic Air Contaminants

TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous Air Pollutants (HAP) is a term used by the federal Clean Air Act (CAA) that includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California CAA, 10 have been singled out through ambient air quality data as being the most substantial health risks in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders. The California Air Resources Board (CARB) provides emission inventories for only the larger air basins.

TACs do not have ambient air quality standards because safe levels of TACs cannot be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of the AB 2588 must prepare and submit toxic emission inventory plans and reports, and periodically update those reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities, and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Sources of air toxics go beyond industry, however. Automobile exhaust also contains toxic air pollutants.

Diesel Particulate Matter

DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about five percent of total DPM. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program, and the Diesel Off-Road Reporting System.

Diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by OEHHA. CARB

estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in 2000 could cause 540 "excess" cancers in a population of one million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health, have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine-particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particulate pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen.

Construction-related activities would result in temporary, short-term Project-generated emissions of DPM from the exhaust of off-road, heavy-duty diesel equipment for demolition, site preparation (e.g., excavation, grading), and other miscellaneous activities. For construction activity, DPM is the primary TAC of concern.

2.1.2 Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The nearest existing noise-sensitive land uses to the Project site are Lakeside Middle School and Sierra Vista Elementary School to the west of the northern portion of the site, with a residential development

beyond. Lakeside Middle School is located closest to the Project site boundary approximately 2,000 feet (0.4 miles) to the west. The installation of the proposed offsite water line would occur south of the Middle School, largely within the Walnut Avenue right-of-way.

It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary.

2.2 Regulatory Framework

2.2.1 Federal

Clean Air Act

The federal CAA was amended in 1990 to address a large number of air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. One hundred and eighty eight specific pollutants and chemical groups were initially identified as HAPs, and the list has been modified over time. The federal CAA Amendments included new regulatory programs to control acid deposition and for the issuance of stationary source operating permits.

In 2001, the U.S. Environmental Protection Agency (USEPA) issued its first Mobile Source Air Toxics Rule, which identified 21 mobile source air toxic (MSAT) compounds as being HAPs that required regulation. A subset of six of these MSAT compounds were identified as having the greatest influence on health and included benzene, 1,3-butadiene, formaldehyde, acrolein, acetaldehyde, and DPM. More recently, the USEPA issued a second MSAT Rule in February 2007, which generally supported the findings in the first rule and provided additional recommendations for compounds having the greatest impact on health. The rule also identified several engine emission certification standards that must be implemented. Unlike the criteria pollutants, toxics do not have National Ambient Air Quality Standards (NAAQS) making evaluation of their impacts more subjective.

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) were incorporated into a greatly expanded program for controlling toxic air pollutants. The provisions for attainment and maintenance of the NAAQS were substantially modified and expanded. Other revisions included provisions regarding stratospheric ozone protection, increased enforcement authority, and expanded research programs.

Section 112 of the federal CAA Amendments governs the federal control program for HAPs. NESHAPs are issued to limit the release of specified HAPs from specific industrial sectors. These standards are technology-based, meaning that they represent the best available control technology an industrial sector could afford. The level of emissions controls required by NESHAPs are not based on health risk considerations because allowable releases and resulting concentrations have not been determined to be safe for the general public. The federal CAA does not establish air quality standards for HAPs that define legally acceptable concentrations of these pollutants in ambient air.

2.2.2 State

California Air Resources Board

CARB's statewide comprehensive air toxics program was established in 1983 with AB 1807 the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the State's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High-priority facilities are required to perform a HRA and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, AB 2588 was amended by Senate Bill 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (Risk Reduction Plan) in October 2000. The Risk Reduction Plan's goals include an 85-percent reduction in DPM by 2020 from the 2000 baseline (CARB 2000). The Risk Reduction Plan includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce particulate matter (PM) and oxides of nitrogen emissions from existing diesel vehicles operating in California. The regulation requires diesel trucks and buses that operate in California be upgraded to reduce emissions. Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel-fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks by reporting, and there are a number of extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations.

Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of the CARB ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is to reduce public exposure to DPM and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles.[1] The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, beginning in 2008, would require that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged.

2.3 Health Risk and Hazard Assessment

2.3.1 Thresholds of Significance

In order to determine whether or not a proposed project would cause a significant effect on the environment, the impact of the project must be determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality. The thresholds for air toxic emissions are as follows.

- Cancer Risk: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.
- Non-Cancer Risk: Emit toxic contaminants that exceed the maximum hazard quotient of one in one million.

Cancer risk is expressed in terms of expected incremental incidence per million population. An incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure has been established by the South Coast Air Quality Management District (SCAQMD). This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact. The 10 in one million standard is a very health-protective significance threshold. A risk level of 10 in one million implies a likelihood that up to 10 persons out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics. To put this risk in perspective, the risk of dying from

[1] The ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is codified in Title 13 of the California Code of Regulations, Chapter 10, Section 2485.

accidental drowning is 1,000 in a million, which is 100 times more than the threshold of 10 in one million. The 10 in one million threshold is consistent with the mandates of the AB 2588.

Non-carcinogenic risk parameters for use in HRAs has also been established. Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). A REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

2.3.2 Methodology

This HRA evaluates potential health risks associated with the emission of DPM resulting from the construction activities necessary to build the Project. As previously described, CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

The air dispersion modeling for the HRA was performed using the USEPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data provided by the SCAQMD for the Perris (237 ½ North D Street, Perris) air quality monitoring station was selected as being the most representative meteorology based on proximity to the Project site (approximately 3.5 miles distant) and the fact that the Perris air quality monitoring station is located in the same SCAQMD Source Receptor Area (SRA). SCAQMD SRAs are categorized based on existing ambient pollutant concentrations and meteorological conditions. The SCAQMD divides the Basin into 38 SRAs to forecast and report air quality. Both the Project site and the Perris air quality monitoring station are located in SCAQMD SRA 24, known as the Perris Valley.

Emissions sources in the model include 245 line-volume sources on the Project site each day of construction, which is estimated to span a nine-year period, to represent construction equipment maneuvering around the construction site. Additionally, emissions sources in the model include four separate line sources (comprised of 155 line-volume sources collectively) representing the material haul truck routes from the Project site 5,000 feet in each direction at the minimum on the Ramona Expressway and 3,000 feet in each direction at the minimum on Nuevo Road. Finally, emissions sources in the model include two separate line sources representing offsite construction, one at the southwest corner of the site and extending westward parallel to Nuevo Road, and the other extending from the northwest corner of the site to Evans Road. These line sources representing offsite construction are comprised of 70 line-volume sources combined (see Appendix A). The maximum daily exhaust emissions for all diesel equipment was used to produce an emission rate in terms of grams per second per square meter. Emissions from construction equipment were assigned a release height of 2.5 meters and heavy trucks were assigned a release height of 3.65 meters in order to provide a conservative analysis (i.e., using higher

release heights would result in a smaller impact by allowing pollutants to disperse before they affect a receptor).

Construction equipment emissions were estimated using emission factors for exhaust fine particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and exhaust coarse particulate matter spanning between 2.5 and 10 microns in diameter (PM_{10}) combined, as generated by the CARB-approved CalEEMod, version 2016.3.2. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Haul truck DPM emissions (also conservatively represented by the combined total of PM_{10} and $PM_{2.5}$ emissions) were estimated using the 2017 version of the EMission FACtor model (EMFAC) developed by CARB. EMFAC 2017 is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to estimate changes in future emissions from on-road mobile sources.

The model was run to obtain the peak one-hour and annual average concentration in micrograms per cubic meter ($\mu g/m^3$) at nearby sensitive receptors as well as locations where future sensitive receptors are approved for construction. Note that the concentration estimates developed using this methodology is considered conservative and is not a specific prediction of the actual concentrations that would occur as a result of the Project any one point in time. Actual one-hour and annual average concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology.

A health risk computation was performed to determine the risk of developing an excess cancer risk as a result of the full span of construction. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual (2015).

Based on the OEHHA methodology, the residential inhalation cancer risk from the annual average DPM concentrations are calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor (ASF), the frequency of time spent at home or at work, and the exposure duration divided by averaging time, to yield the excess cancer risk. These factors are discussed in more detail below. Cancer risk must be separately calculated for specified age groups, because of age differences in sensitivity to carcinogens and age differences in intake rates (per kilogram body weight). Separate risk estimates for these age groups provide a health-protective estimate of cancer risk by accounting for greater susceptibility in early life, including both age-related sensitivity and amount of exposure.

Exposure through inhalation (Dose-air) is a function of the breathing rate, the exposure frequency, and the concentration of a substance in the air. For receptor exposure, the breathing rates are determined for specific age groups, so Dose-air is calculated for each of these age groups, third trimester, 0<2, 2<9, 2<16, 16<30, and 16-70 years. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

$$\textbf{Dose-air} = (C_{air} * \{BR/BW\} * A * EF * 10^{-6})$$

Where:

Dose-air = dose through inhalation (milligrams per kilogram per day [mg/kg-day])

C_{air} = air concentration (µg/m^3) from air dispersion model

{BR/BW} = daily breathing rate normalized to body weight (BW; liters per kg [L/kg] BW-day) (361 L\kg BW-day for 3rd Trimester, 1,090 L/kg BW-day for 0<2 years, 861 L/kg BW-day for 2<9 years, 745 L/kg BW-day for 2<16 years, 335 L/kg BW-day for 16<30 years, and 209 L/kg BW-day 16<70 years)

A = Inhalation absorption factor (unitless [1])

EF = exposure frequency (unitless), days/365 days (0.69 [255 days per year[2]])

10^{-6} = conversion factor (µg to mg, liters to cubic meters)

OEHHA developed ASFs to take into account the increased sensitivity to carcinogens during early-in-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age two years, an ASF of 3 for ages two through 15 years to account for potential increased sensitivity to carcinogens during childhood, and an ASF of 1 for ages 16 through 70 years.

Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. OEHHA recommends the following FAH values: from the third trimester to age <two years, 85 percent of time is spent at home; from age two through <16 years, 72 percent of time is spent at home; from age 16 years and greater, 73 percent of time is spent at home.

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

$$\mathbf{Risk_{inh\text{-}res} = (Dose_{air} * CPH * ASF * ED/AT * FAH)}$$

Where:

$Risk_{inh\text{-}res}$ = inhalation cancer risk (potential chances per million)

$Dose_{air}$ = daily dose through inhalation (mg/kg-day)

CPF = inhalation cancer potency factor (mg/kg-day^{-1})

ASF = age sensitivity factor for a specified age group (unitless)

ED = exposure duration (in years) for a specified age group (0.25 years

[2] 255 workdays per year accounts for weekends and six major holidays.

for 3rd trimester, 2 years for 0<2, 7 years for 2<9, 14 years for 2<16, 14 years for 16<30, 54 years for 16-70)

AT = averaging time of lifetime cancer risk (years)

FAH = fraction of time spent at home (unitless)

Chronic Non-Cancer Hazard

Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

Hazard Quotient = Ci/RELi

Where:

Ci = Concentration in the air of substance i (annual average concentration in $\mu g/m^3$)

RELi = Chronic noncancer Reference Exposure Level for substance i ($\mu g/m^3$)

Acute Non-Cancer Hazard

The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts. The equation is as follows:

Acute HQ = Maximum Hourly Air Concentration ($\mu g/m^3$) / Acute REL ($\mu g/m^3$)

2.3.3 Impact Analysis

Project Construction Risk and Hazard Assessment

CARB identified DPM as a TAC in 1998. Mobile sources (including trucks, buses, automobiles, trains, ships, and farm equipment) are by far the largest source of diesel emissions. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Diesel exhaust is composed of two phases, either gas or particulate – both contribute to the risk. The gas phase is composed of many of the urban HAPs such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particulate phase has many different types that can be classified by size or composition. The sizes of diesel particulates of greatest health concern are fine and ultrafine particles. These particles may be composed of elemental carbon with adsorbed[3] compounds

[3] This term is specifically used for gases.

such as organics, sulfates, nitrates, metals, and other trace elements. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines. As the Project would require the use of off-road construction equipment and heavy-duty diesel haul trucks during construction, an analysis of DPM was performed using the USEPA-approved AERMOD model.

Non-Carcinogenic Hazards

The significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index would occur just to the west of the northwestern boundary of the site at the location of vacant land approved for residential land uses. Specifically, the highest maximum chronic and acute hazard index would be 0.008 and 0.22, respectively. Therefore, non-carcinogenic hazards are calculated to be within acceptable limits.

Carcinogenic Risk

Based on the AERMOD outputs, the expected annual average DPM emission concentrations at the most exposed sensitive receptor resulting from Project construction would be 0.042 µg/m^3 at the greatest and this would occur just to the west of the northwestern boundary of the site at the location of vacant land approved for residential land uses. The calculated carcinogenic risk at this location as well as several other locations in the Project vicinity as a result of the construction allowed under the Specific Plan is depicted in Table 1.

Table 1. Maximum Operational Health Risk in the Project Vicinity

Exposure Scenario	Location	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds Significance Threshold?
Construction – Highest Concentration	Just west of the northwestern boundary of the site, vacant land approved for residential land uses	5.12	*10*	**No**
Construction	Lakeside Middle School	1.06	*10*	**No**
Construction	Sierra Vista Elementary School	1.07	*10*	**No**
Construction	Neighborhoods to Southeast	0.58	*10*	**No**
Construction	Neighborhoods to South	0.56	*10*	**No**
Construction	Neighborhoods to West	0.38	*10*	**No**
Construction	Triple Crown Elementary	0.38	*10*	**No**
Construction	Avalon Elementary	0.48	*10*	**No**
Construction	Neighborhoods to East	0.54	*10*	**No**

Source: ECORP 2020. Refer to Appendix A for Model Data Outputs.

In conclusion, non-carcinogenic hazards resulting from the Project construction are calculated to be within acceptable limits. Additionally, potential cancer risk from Project construction would be below the 10 in one million threshold that was developed based on the requirements of AB 2588 and serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact.

3.0 REFERENCES

CARB. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*.

OEHHA. 2015. *Guidance Manual for Preparation of Health Risk Assessments. Risk Assessment Guidelines. Air, Community, and Environmental Research Branch Office of Environmental Health Hazard Assessment*. California Environmental Protection Agency. February. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

APPENDIX A

Health Risk Calculations and AERMOD Outputs

Stoneridge Commerce Center
DPM Emission Rates
Construction

Stoneridge Commerce Center Specific Plan - Construction
Emissions Calculations

Maximum ON-SITE Daily DPM **DPM**

On-Site	g/day	g/sec
On-Site Project Construction Activities	7.00E+02	8.10E-03

Maximum OFFSITE Daily DPM

Off-Site	g/day	g/sec
Off-Site Project Haul Trucks	5.57E+00	6.45E-05

Maximum OFF-SITE Daily DPM **DPM**

Off-Site	g/day	g/sec
Off-Site Project Infrastructure	9.47E+00	1.10E-04

Sources:
DPM Emission Factors for On-Site Construction Activities are derived from CalEEMod v. 2016.3.2 and include the combined Exhaust PM10 and Exhaust PM2.5 emissions
DPM Emission Factors for Off-Site Construction Haul Trucks are derived from EMFAC2017 and include the combined Exhaust PM10 and Exhaust PM2.5 emissions
Notations

Annual On-Site

	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Construction	0.51	0.81	0.69	0.44	0.50	0.50	0.50	0.50	0.43	
										Total months
Months	*5*	*12*	*12*	*9*	*12*	*12*	*12*	*12*	*11*	97
Percentage	*5%*	*12%*	*12%*	*9%*	12%	12%	12%	12%	11%	100%
Weighted Total	0.0263	0.1002	0.0854	0.0408	0.0619	0.0619	0.0619	0.0619	0.0488	0.5489

Days **2134**
Hrs/Day **8**
Total Seconds **61,459,200**

Ton/Year: 0.5489
Gram/Sec 0.008102 onsite equipment

Annual Off-Site Haul Trucks

	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Construction Haul Trucks	0.008	0.016	0.016	0.000	0.000	0.000	0.000	0.000	0.000	
										Total months
Months	*5*	*12*	*12*	*9*	*12*	*12*	*12*	*12*	*11*	97
Percentage	*5%*	*12%*	*12%*	*9%*	12%	12%	12%	12%	11%	100%
Weighted Total	0.0004	0.0020	0.0020	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0044

Days **2134**
Hrs/Day **8**
Total Seconds **61,459,200**

Ton/Year: 0.0044
Gram/Sec 0.000065 haul trucks

Annual Off-Site Infrastructure

	2021	2022	2023	2024	2025	2026	2027	2028	2029	
Construction Haul Trucks	0.000	0.000	0.000	0.080	0.000	0.000	0.000	0.000	0.000	
										Total months
Months	*5*	*12*	*12*	*9*	*12*	*12*	*12*	*12*	*11*	97
Percentage	*5%*	*12%*	*12%*	*9%*	12%	12%	12%	12%	11%	100%
Weighted Total	0.0000	0.0000	0.0000	0.0074	0.0000	0.0000	0.0000	0.0000	0.0000	0.0074

Days **2134**
Hrs/Day **8**
Total Seconds **61,459,200**

Ton/Year: 0.0074
Gram/Sec 0.000110 infrastructure installation equipment

Conversions:
1 ton = 907184.7 grams
1 year = 3.15E+07 seconds

Cancer Risk Calcuations at Highest Pollutant Concentration
Northwest Boundary of Site - Future McCanna SP

Risk Calculations

1 Hour Avg Concentration: 0.181
Annual Avg Concentration: 0.0429

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	1.06785E-05	3.22425E-05	2.54686E-05	2.20373E-05	9.9094E-06	8.57829E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.14107E-07	3.01468E-06	1.9883E-06	2.16923E-06	3.296574E-07	2.85375E-07

		Risk	in one million
Cancer Risk:	9-year exposure	5.12E-06	**5.12**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
BR/BW	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.04287	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
ED	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
FAH	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **8.57E-03**

C_i 4.29E-02 Concentration (annual average)
REL_i 5 Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **2.26E-01**

Max Hourly 4.29E-02
Acute REL (Acrolein) 0.19

Cancer Risk Calcuations at
Lakeside Middle School

Risk Calculations

1 Hour Avg Concentration:	0.062
Annual Avg Concentration:	0.0089

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	2.20445E-06	6.65609E-06	5.2577E-06	4.54934E-06	2.04568E-06	1.77089E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	2.35561E-08	6.22344E-07	4.10461E-07	4.47811E-07	6.805385E-08	5.89123E-08

		Risk	in one million
Cancer Risk:	9-year exposure	1.06E-06	**1.06**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.00885	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
ED	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold:	1	
Hazard Quotient = C_i/REL_i		
HQ =	**1.77E-03**	
C_i	8.85E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold:	1	
Acute HQ = Maximum Hourly Concentration/Acute REL		
Acute HQ =	**4.66E-02**	
Max Hourly	8.85E-03	
Acute REL (Acrolein)	0.19	

Cancer Risk Calcuations at Sierra Vista Elementary School

Risk Calculations

1 Hour Avg Concentration: 0.062
Annual Avg Concentration: 0.0089

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	2.22437E-06	6.71625E-06	5.30522E-06	4.59047E-06	2.06417E-06	1.78689E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	2.3769E-08	6.2797E-07	4.14171E-07	4.51859E-07	6.866902E-08	5.94448E-08

		Risk	in one million
Cancer Risk:	9-year exposure	1.07E-06	**1.07**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.00893	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
ED	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **1.79E-03**

C_i 8.93E-03 Concentration (annual average)
REL_i 5 Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **4.70E-02**

Max Hourly 8.93E-03
Acute REL (Acrolein) 0.19

Cancer Risk Calcuations at
Neighborhoods to the Southeast

Risk Calculations

1 Hour Avg Concentration:	0.021
Annual Avg Concentration:	0.0048

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	1.20061E-06	3.62512E-06	2.86351E-06	2.47772E-06	1.11414E-06	9.64482E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.28294E-08	3.38949E-07	2.2355E-07	2.43893E-07	3.706435E-08	3.20856E-08

		Risk	in one million
Cancer Risk:	9-year exposure	5.75E-07	**0.58**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.00482	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
ED	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **9.64E-04**

C_i	4.82E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **2.54E-02**

Max Hourly	4.82E-03
Acute REL (Acrolein)	0.19

Cancer Risk Calcuations at Neighborhoods to the South

Risk Calculations

1 Hour Avg Concentration: 0.022
Annual Avg Concentration: 0.0047

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	1.1782E-06	3.55743E-06	2.81005E-06	2.43146E-06	1.09334E-06	9.46473E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.25899E-08	3.3262E-07	2.19376E-07	2.39339E-07	3.637228E-08	3.14865E-08

		Risk	in one million
Cancer Risk:	9-year exposure	5.65E-07	**0.56**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.00473	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
ED	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **9.46E-04**

C_i 4.73E-03 Concentration (annual average)
REL_i 5 Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **2.49E-02**

Max Hourly 4.73E-03
Acute REL (Acrolein) 0.19

Cancer Risk Calcuations at Neighborhoods to the West

Risk Calculations

1 Hour Avg Concentration: 0.033

Annual Avg Concentration: 0.0032

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	7.87124E-07	2.37664E-06	1.87732E-06	1.6244E-06	7.30434E-07	6.32316E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	8.41099E-09	2.22215E-07	1.4656E-07	1.59896E-07	2.429945E-08	2.10353E-08

		Risk	in one million
Cancer Risk:	9-year exposure	3.77E-07	**0.38**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.00316	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
ED	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **6.32E-04**

C_i 3.16E-03 Concentration (annual average)

REL_i 5 Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **1.66E-02**

Max Hourly 3.16E-03

Acute REL (Acrolein) 0.19

Cancer Risk Calcuations at Triple Crown Elementary

Risk Calculations

1 Hour Avg Concentration:	0.033
Annual Avg Concentration:	0.0032

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	7.89615E-07	2.38416E-06	1.88327E-06	1.62954E-06	7.32746E-07	6.34317E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	8.4376E-09	2.22919E-07	1.47024E-07	1.60402E-07	2.437635E-08	2.11019E-08

		Risk	in one million
Cancer Risk:	9-year exposure	3.78E-07	**0.38**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
BR/BW	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.00317	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
ED	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
ASF	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
FAH	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **6.34E-04**

C_i	3.17E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **1.67E-02**

Max Hourly	3.17E-03
Acute REL (Acrolein)	0.19

Cancer Risk Calcuations at Avalon Elementary School

Risk Calculations

1 Hour Avg Concentration:	0.028
Annual Avg Concentration:	0.0040

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	9.98851E-07	3.01592E-06	2.3823E-06	2.06134E-06	9.26912E-07	8.02401E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.06734E-08	2.81989E-07	1.85983E-07	2.02907E-07	3.083570E-08	2.66936E-08

		Risk	in one million
Cancer Risk:	9-year exposure	4.79E-07	**0.48**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.00401	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
ED	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **8.02E-04**

C_i	4.01E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **2.11E-02**

Max Hourly	4.01E-03
Acute REL (Acrolein)	0.19

Cancer Risk Calcuations at Neighborhoods to the East

Risk Calculations

1 Hour Avg Concentration:	0.021
Annual Avg Concentration:	0.0046

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	1.13585E-06	3.42958E-06	2.70905E-06	2.34407E-06	1.05404E-06	9.12456E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.21374E-08	3.20665E-07	2.11492E-07	2.30737E-07	3.506503E-08	3.03548E-08

		Risk	in one million
Cancer Risk:	9-year exposure	5.44E-07	**0.54**
			10 in one million

Threshold:	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years)	335		
	BR/BW (16 < 70 years)	290		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.00456	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.69	days/year	Exposure frequency (days/year) - 255 days of construction (factoring weekends & six major holidays)
ED	ED (3rd trimester)	0.08	years	Exposure duration (years) - Adjusted to reflect 8 hour work day
	ED (0 < 2 years)	0.7		
	ED (2 < 9 years)	2.3		
	ED (2 < 16, 16 < 30 years)	2.9		
	ED (16 - 70 years)	2.9		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 years)	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 years)	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **9.12E-04**

C_i	4.56E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

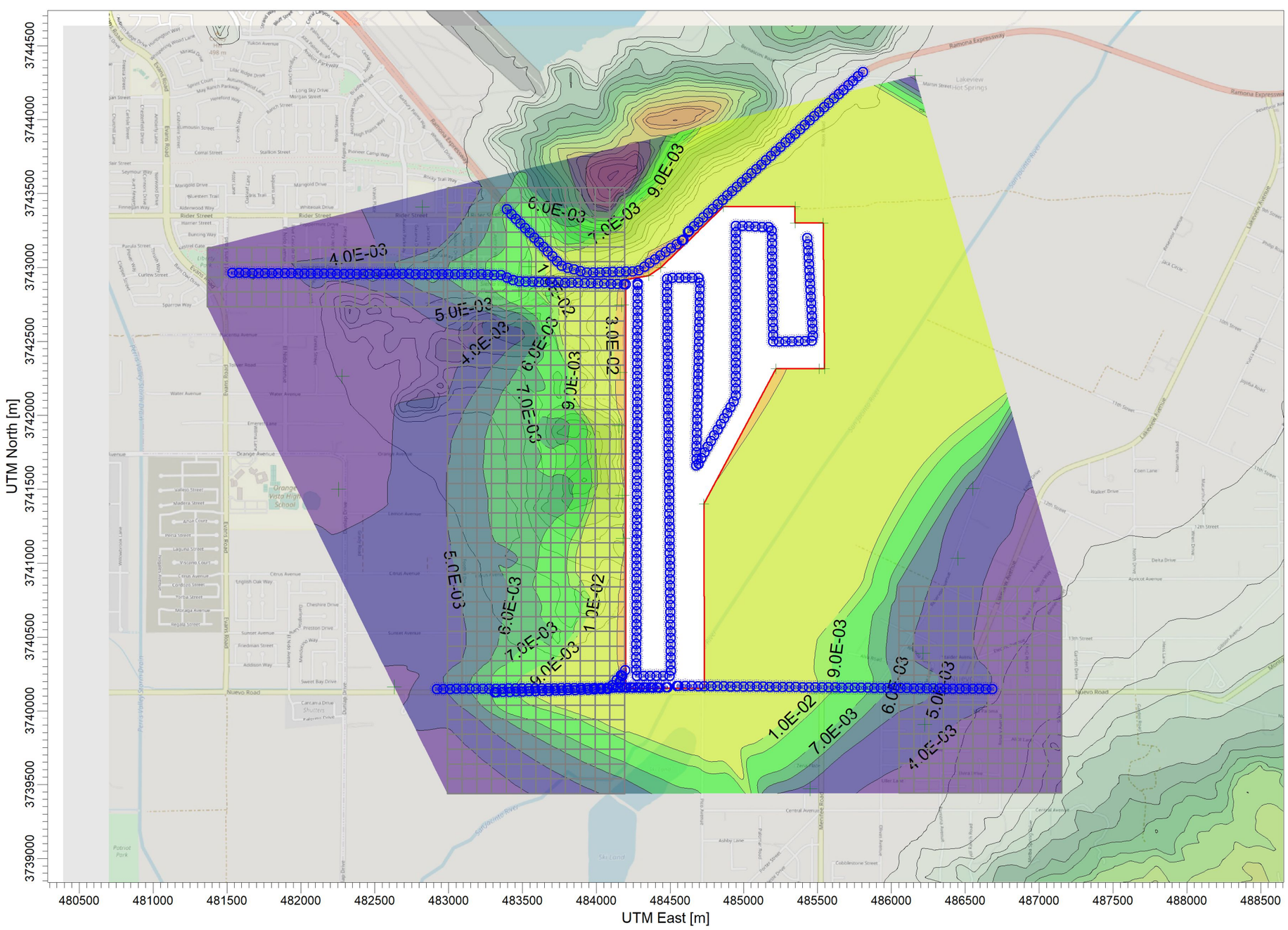
Acute HQ = Maximum Hourly Concentration/Acute REL

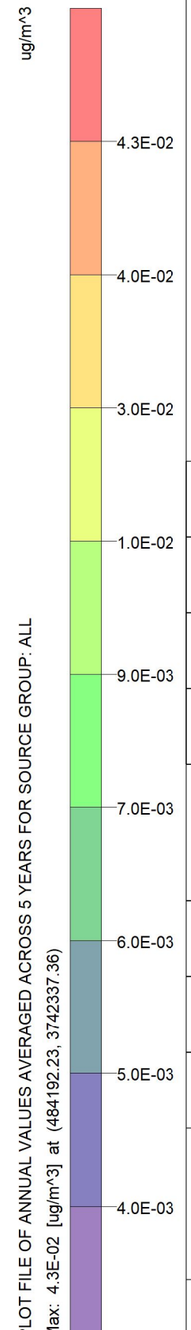
Acute HQ = **2.40E-02**

Max Hourly	4.56E-03
Acute REL (Acrolein)	0.19

PROJECT TITLE:

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri





COMMENTS:

SOURCES:

7

RECEPTORS:

841

OUTPUT TYPE:

Concentration

MAX:

4.3E-02 ug/m^3

COMPANY NAME:

MODELER:

DATE:

7/13/2020

SCALE: 1:28,383

0 0.5 km

PROJECT NO.:

Control Pathway

Dispersion Options

Titles

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

Dispersion Options

☑ Regulatory Default ☐ Non-Default Options

Dispersion Coefficient

Urban

Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours ☑ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24

☐ Month ☐ Period ☑ Annual

Exponential Decay

Half-life of 4 hrs will be used

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: Stoneridge Commerce Center Construction.err

Source Pathway - Source Inputs

AERMOD

Source Pathway - Source Inputs

Line Volume Sources

Source Type: LINE VOLUME

Source: SLINE1 (onsite construction)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00810		484278.98	3742892.70	472.82	2.50
			484269.95	3740238.23	433.98	2.50
			484504.70	3740238.23	432.16	2.50
			484477.61	3742928.82	461.88	2.50
			484703.33	3742928.82	453.67	2.50
			484676.25	3741646.73	444.62	2.50
			484947.11	3742116.22	438.27	2.50
			484947.11	3743280.94	452.20	2.50
			485190.89	3743271.91	445.50	2.50
			485199.92	3742495.43	434.79	2.50
			485470.78	3742504.46	433.00	2.50
			485434.66	3743190.65	438.71	2.50
			485425.64	3743208.71	439.20	2.50

Source Type: LINE VOLUME

Source: SLINE2 (offsite construction 1)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00011		484197.62	3742886.38	477.17	2.50
			483462.33	3742905.24	480.37	2.50
			483358.63	3742947.66	476.94	2.50
			483231.37	3742952.37	471.96	2.50
			482246.27	3742957.08	452.14	2.50
			481509.06	3742962.98	440.40	2.50

Source Pathway - Source Inputs

Source Type: LINE VOLUME
Source: SLINE3 (offsite construction 2)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00011		483313.27	3740127.52	445.12	2.50
			484088.75	3740148.76	434.37	2.50
			484194.99	3740276.24	436.17	2.50
			484141.87	3740159.39	433.94	2.50
			484418.07	3740159.39	432.44	2.50

Source Type: LINE VOLUME
Source: SLINE4 (Haul truck 1)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00006		484481.81	3740159.39	432.35	1.11
			482909.59	3740148.76	442.17	1.11

Source Type: LINE VOLUME
Source: SLINE5 (Haul truck 2)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00006		484545.55	3740170.01	431.75	1.11
			486691.42	3740148.76	458.40	1.11

Source Type: LINE VOLUME
Source: SLINE6 (Haul truck 3)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00006		484588.04	3743186.98	465.99	1.11
			484279.97	3742974.52	476.69	1.11
			483940.03	3742963.90	491.46	1.11
			483770.06	3743006.39	492.11	1.11
			483366.38	3743420.69	468.48	1.11

Source Pathway - Source Inputs

Source Type: LINE VOLUME
Source: SLINE7 (Haul truck 4)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00006		484619.91	3743240.10	465.88	1.11
			485809.70	3744323.66	470.19	1.11

Source Pathway - Source Inputs

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000001	484278.94	3742881.62	472.27	2.50	0.00003	22.15		20.53	2.37
	L0000002	484278.79	3742837.48	470.89	2.50	0.00003	22.15		20.53	2.37
	L0000003	484278.64	3742793.33	470.16	2.50	0.00003	22.15		20.53	2.37
	L0000004	484278.49	3742749.19	468.43	2.50	0.00003	22.15		20.53	2.37
	L0000005	484278.34	3742705.04	466.41	2.50	0.00003	22.15		20.53	2.37
	L0000006	484278.19	3742660.90	464.78	2.50	0.00003	22.15		20.53	2.37
	L0000007	484278.04	3742616.75	463.76	2.50	0.00003	22.15		20.53	2.37
	L0000008	484277.89	3742572.61	463.75	2.50	0.00003	22.15		20.53	2.37
	L0000009	484277.74	3742528.46	463.39	2.50	0.00003	22.15		20.53	2.37
	L0000010	484277.59	3742484.32	462.91	2.50	0.00003	22.15		20.53	2.37
	L0000011	484277.44	3742440.17	463.23	2.50	0.00003	22.15		20.53	2.37
	L0000012	484277.29	3742396.03	464.18	2.50	0.00003	22.15		20.53	2.37
	L0000013	484277.14	3742351.88	464.88	2.50	0.00003	22.15		20.53	2.37
	L0000014	484276.99	3742307.74	465.79	2.50	0.00003	22.15		20.53	2.37
	L0000015	484276.84	3742263.59	466.41	2.50	0.00003	22.15		20.53	2.37
	L0000016	484276.69	3742219.45	467.02	2.50	0.00003	22.15		20.53	2.37
	L0000017	484276.54	3742175.30	467.57	2.50	0.00003	22.15		20.53	2.37
	L0000018	484276.39	3742131.16	468.24	2.50	0.00003	22.15		20.53	2.37
	L0000019	484276.24	3742087.01	468.99	2.50	0.00003	22.15		20.53	2.37
	L0000020	484276.09	3742042.87	468.82	2.50	0.00003	22.15		20.53	2.37
	L0000021	484275.94	3741998.72	470.70	2.50	0.00003	22.15		20.53	2.37
	L0000022	484275.79	3741954.58	471.00	2.50	0.00003	22.15		20.53	2.37
	L0000023	484275.64	3741910.43	470.54	2.50	0.00003	22.15		20.53	2.37
	L0000024	484275.49	3741866.29	472.19	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000025	484275.34	3741822.14	472.62	2.50	0.00003	22.15		20.53	2.37
	L0000026	484275.19	3741778.00	472.79	2.50	0.00003	22.15		20.53	2.37
	L0000027	484275.04	3741733.85	473.96	2.50	0.00003	22.15		20.53	2.37
	L0000028	484274.89	3741689.71	474.20	2.50	0.00003	22.15		20.53	2.37
	L0000029	484274.74	3741645.56	474.25	2.50	0.00003	22.15		20.53	2.37
	L0000030	484274.59	3741601.42	475.85	2.50	0.00003	22.15		20.53	2.37
	L0000031	484274.44	3741557.27	476.66	2.50	0.00003	22.15		20.53	2.37
	L0000032	484274.29	3741513.13	478.36	2.50	0.00003	22.15		20.53	2.37
	L0000033	484274.14	3741468.98	477.27	2.50	0.00003	22.15		20.53	2.37
	L0000034	484273.99	3741424.84	478.52	2.50	0.00003	22.15		20.53	2.37
	L0000035	484273.84	3741380.69	479.56	2.50	0.00003	22.15		20.53	2.37
	L0000036	484273.69	3741336.55	481.74	2.50	0.00003	22.15		20.53	2.37
	L0000037	484273.54	3741292.40	486.80	2.50	0.00003	22.15		20.53	2.37
	L0000038	484273.39	3741248.26	481.16	2.50	0.00003	22.15		20.53	2.37
	L0000039	484273.24	3741204.11	482.16	2.50	0.00003	22.15		20.53	2.37
	L0000040	484273.09	3741159.97	496.68	2.50	0.00003	22.15		20.53	2.37
	L0000041	484272.94	3741115.82	514.60	2.50	0.00003	22.15		20.53	2.37
	L0000042	484272.79	3741071.68	521.14	2.50	0.00003	22.15		20.53	2.37
	L0000043	484272.64	3741027.53	520.70	2.50	0.00003	22.15		20.53	2.37
	L0000044	484272.49	3740983.39	517.26	2.50	0.00003	22.15		20.53	2.37
	L0000045	484272.34	3740939.24	499.15	2.50	0.00003	22.15		20.53	2.37
	L0000046	484272.18	3740895.10	478.86	2.50	0.00003	22.15		20.53	2.37
	L0000047	484272.03	3740850.95	465.04	2.50	0.00003	22.15		20.53	2.37
	L0000048	484271.88	3740806.81	459.92	2.50	0.00003	22.15		20.53	2.37
	L0000049	484271.73	3740762.66	456.49	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000050	484271.58	3740718.52	454.70	2.50	0.00003	22.15		20.53	2.37
	L0000051	484271.43	3740674.37	453.40	2.50	0.00003	22.15		20.53	2.37
	L0000052	484271.28	3740630.23	451.65	2.50	0.00003	22.15		20.53	2.37
	L0000053	484271.13	3740586.08	449.34	2.50	0.00003	22.15		20.53	2.37
	L0000054	484270.98	3740541.94	446.86	2.50	0.00003	22.15		20.53	2.37
	L0000055	484270.83	3740497.79	444.38	2.50	0.00003	22.15		20.53	2.37
	L0000056	484270.68	3740453.65	442.11	2.50	0.00003	22.15		20.53	2.37
	L0000057	484270.53	3740409.50	440.01	2.50	0.00003	22.15		20.53	2.37
	L0000058	484270.38	3740365.36	438.11	2.50	0.00003	22.15		20.53	2.37
	L0000059	484270.23	3740321.21	436.41	2.50	0.00003	22.15		20.53	2.37
	L0000060	484270.08	3740277.07	435.02	2.50	0.00003	22.15		20.53	2.37
	L0000061	484275.26	3740238.23	433.98	2.50	0.00003	22.15		20.53	2.37
	L0000062	484319.41	3740238.23	433.37	2.50	0.00003	22.15		20.53	2.37
	L0000063	484363.55	3740238.23	432.88	2.50	0.00003	22.15		20.53	2.37
	L0000064	484407.70	3740238.23	432.61	2.50	0.00003	22.15		20.53	2.37
	L0000065	484451.84	3740238.23	432.38	2.50	0.00003	22.15		20.53	2.37
	L0000066	484495.99	3740238.23	432.22	2.50	0.00003	22.15		20.53	2.37
	L0000067	484504.34	3740273.67	432.24	2.50	0.00003	22.15		20.53	2.37
	L0000068	484503.90	3740317.81	432.55	2.50	0.00003	22.15		20.53	2.37
	L0000069	484503.45	3740361.95	433.33	2.50	0.00003	22.15		20.53	2.37
	L0000070	484503.01	3740406.10	434.29	2.50	0.00003	22.15		20.53	2.37
	L0000071	484502.57	3740450.24	435.40	2.50	0.00003	22.15		20.53	2.37
	L0000072	484502.12	3740494.38	436.46	2.50	0.00003	22.15		20.53	2.37
	L0000073	484501.68	3740538.53	437.59	2.50	0.00003	22.15		20.53	2.37
	L0000074	484501.23	3740582.67	438.89	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000075	484500.79	3740626.81	440.16	2.50	0.00003	22.15		20.53	2.37
	L0000076	484500.34	3740670.95	440.80	2.50	0.00003	22.15		20.53	2.37
	L0000077	484499.90	3740715.10	441.10	2.50	0.00003	22.15		20.53	2.37
	L0000078	484499.45	3740759.24	441.15	2.50	0.00003	22.15		20.53	2.37
	L0000079	484499.01	3740803.38	442.41	2.50	0.00003	22.15		20.53	2.37
	L0000080	484498.57	3740847.53	445.47	2.50	0.00003	22.15		20.53	2.37
	L0000081	484498.12	3740891.67	449.87	2.50	0.00003	22.15		20.53	2.37
	L0000082	484497.68	3740935.81	451.16	2.50	0.00003	22.15		20.53	2.37
	L0000083	484497.23	3740979.96	453.89	2.50	0.00003	22.15		20.53	2.37
	L0000084	484496.79	3741024.10	454.47	2.50	0.00003	22.15		20.53	2.37
	L0000085	484496.34	3741068.24	455.14	2.50	0.00003	22.15		20.53	2.37
	L0000086	484495.90	3741112.38	455.67	2.50	0.00003	22.15		20.53	2.37
	L0000087	484495.45	3741156.53	457.29	2.50	0.00003	22.15		20.53	2.37
	L0000088	484495.01	3741200.67	458.46	2.50	0.00003	22.15		20.53	2.37
	L0000089	484494.57	3741244.81	458.93	2.50	0.00003	22.15		20.53	2.37
	L0000090	484494.12	3741288.96	459.19	2.50	0.00003	22.15		20.53	2.37
	L0000091	484493.68	3741333.10	457.41	2.50	0.00003	22.15		20.53	2.37
	L0000092	484493.23	3741377.24	456.70	2.50	0.00003	22.15		20.53	2.37
	L0000093	484492.79	3741421.39	456.29	2.50	0.00003	22.15		20.53	2.37
	L0000094	484492.34	3741465.53	456.24	2.50	0.00003	22.15		20.53	2.37
	L0000095	484491.90	3741509.67	455.93	2.50	0.00003	22.15		20.53	2.37
	L0000096	484491.46	3741553.82	455.34	2.50	0.00003	22.15		20.53	2.37
	L0000097	484491.01	3741597.96	455.21	2.50	0.00003	22.15		20.53	2.37
	L0000098	484490.57	3741642.10	454.88	2.50	0.00003	22.15		20.53	2.37
	L0000099	484490.12	3741686.24	454.52	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000100	484489.68	3741730.39	454.65	2.50	0.00003	22.15		20.53	2.37
	L0000101	484489.23	3741774.53	454.42	2.50	0.00003	22.15		20.53	2.37
	L0000102	484488.79	3741818.67	454.02	2.50	0.00003	22.15		20.53	2.37
	L0000103	484488.34	3741862.82	453.78	2.50	0.00003	22.15		20.53	2.37
	L0000104	484487.90	3741906.96	453.74	2.50	0.00003	22.15		20.53	2.37
	L0000105	484487.46	3741951.10	454.29	2.50	0.00003	22.15		20.53	2.37
	L0000106	484487.01	3741995.25	454.66	2.50	0.00003	22.15		20.53	2.37
	L0000107	484486.57	3742039.39	454.64	2.50	0.00003	22.15		20.53	2.37
	L0000108	484486.12	3742083.53	455.10	2.50	0.00003	22.15		20.53	2.37
	L0000109	484485.68	3742127.67	455.47	2.50	0.00003	22.15		20.53	2.37
	L0000110	484485.23	3742171.82	455.71	2.50	0.00003	22.15		20.53	2.37
	L0000111	484484.79	3742215.96	455.18	2.50	0.00003	22.15		20.53	2.37
	L0000112	484484.34	3742260.10	454.97	2.50	0.00003	22.15		20.53	2.37
	L0000113	484483.90	3742304.25	455.08	2.50	0.00003	22.15		20.53	2.37
	L0000114	484483.46	3742348.39	455.11	2.50	0.00003	22.15		20.53	2.37
	L0000115	484483.01	3742392.53	455.36	2.50	0.00003	22.15		20.53	2.37
	L0000116	484482.57	3742436.68	455.35	2.50	0.00003	22.15		20.53	2.37
	L0000117	484482.12	3742480.82	455.29	2.50	0.00003	22.15		20.53	2.37
	L0000118	484481.68	3742524.96	455.69	2.50	0.00003	22.15		20.53	2.37
	L0000119	484481.23	3742569.11	456.41	2.50	0.00003	22.15		20.53	2.37
	L0000120	484480.79	3742613.25	456.45	2.50	0.00003	22.15		20.53	2.37
	L0000121	484480.35	3742657.39	456.51	2.50	0.00003	22.15		20.53	2.37
	L0000122	484479.90	3742701.53	457.65	2.50	0.00003	22.15		20.53	2.37
	L0000123	484479.46	3742745.68	459.68	2.50	0.00003	22.15		20.53	2.37
	L0000124	484479.01	3742789.82	460.66	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000125	484478.57	3742833.96	460.43	2.50	0.00003	22.15		20.53	2.37
	L0000126	484478.12	3742878.11	460.92	2.50	0.00003	22.15		20.53	2.37
	L0000127	484477.68	3742922.25	461.76	2.50	0.00003	22.15		20.53	2.37
	L0000128	484515.19	3742928.82	460.09	2.50	0.00003	22.15		20.53	2.37
	L0000129	484559.34	3742928.82	458.47	2.50	0.00003	22.15		20.53	2.37
	L0000130	484603.48	3742928.82	456.91	2.50	0.00003	22.15		20.53	2.37
	L0000131	484647.63	3742928.82	455.48	2.50	0.00003	22.15		20.53	2.37
	L0000132	484691.77	3742928.82	454.17	2.50	0.00003	22.15		20.53	2.37
	L0000133	484702.64	3742896.24	452.79	2.50	0.00003	22.15		20.53	2.37
	L0000134	484701.71	3742852.10	451.78	2.50	0.00003	22.15		20.53	2.37
	L0000135	484700.78	3742807.97	450.92	2.50	0.00003	22.15		20.53	2.37
	L0000136	484699.85	3742763.83	450.08	2.50	0.00003	22.15		20.53	2.37
	L0000137	484698.91	3742719.69	449.51	2.50	0.00003	22.15		20.53	2.37
	L0000138	484697.98	3742675.56	448.86	2.50	0.00003	22.15		20.53	2.37
	L0000139	484697.05	3742631.42	449.03	2.50	0.00003	22.15		20.53	2.37
	L0000140	484696.12	3742587.29	449.10	2.50	0.00003	22.15		20.53	2.37
	L0000141	484695.18	3742543.15	449.44	2.50	0.00003	22.15		20.53	2.37
	L0000142	484694.25	3742499.02	449.34	2.50	0.00003	22.15		20.53	2.37
	L0000143	484693.32	3742454.88	448.53	2.50	0.00003	22.15		20.53	2.37
	L0000144	484692.39	3742410.75	448.40	2.50	0.00003	22.15		20.53	2.37
	L0000145	484691.46	3742366.61	447.96	2.50	0.00003	22.15		20.53	2.37
	L0000146	484690.52	3742322.48	447.35	2.50	0.00003	22.15		20.53	2.37
	L0000147	484689.59	3742278.34	446.88	2.50	0.00003	22.15		20.53	2.37
	L0000148	484688.66	3742234.20	446.63	2.50	0.00003	22.15		20.53	2.37
	L0000149	484687.73	3742190.07	446.57	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000150	484686.79	3742145.93	446.55	2.50	0.00003	22.15		20.53	2.37
	L0000151	484685.86	3742101.80	446.13	2.50	0.00003	22.15		20.53	2.37
	L0000152	484684.93	3742057.66	445.76	2.50	0.00003	22.15		20.53	2.37
	L0000153	484684.00	3742013.53	445.45	2.50	0.00003	22.15		20.53	2.37
	L0000154	484683.06	3741969.39	445.00	2.50	0.00003	22.15		20.53	2.37
	L0000155	484682.13	3741925.26	444.94	2.50	0.00003	22.15		20.53	2.37
	L0000156	484681.20	3741881.12	445.31	2.50	0.00003	22.15		20.53	2.37
	L0000157	484680.27	3741836.99	445.03	2.50	0.00003	22.15		20.53	2.37
	L0000158	484679.33	3741792.85	444.73	2.50	0.00003	22.15		20.53	2.37
	L0000159	484678.40	3741748.72	444.42	2.50	0.00003	22.15		20.53	2.37
	L0000160	484677.47	3741704.58	444.35	2.50	0.00003	22.15		20.53	2.37
	L0000161	484676.54	3741660.44	444.58	2.50	0.00003	22.15		20.53	2.37
	L0000162	484691.45	3741673.08	443.88	2.50	0.00003	22.15		20.53	2.37
	L0000163	484713.51	3741711.32	442.88	2.50	0.00003	22.15		20.53	2.37
	L0000164	484735.57	3741749.56	442.24	2.50	0.00003	22.15		20.53	2.37
	L0000165	484757.63	3741787.79	441.79	2.50	0.00003	22.15		20.53	2.37
	L0000166	484779.69	3741826.03	441.61	2.50	0.00003	22.15		20.53	2.37
	L0000167	484801.75	3741864.27	441.36	2.50	0.00003	22.15		20.53	2.37
	L0000168	484823.81	3741902.51	440.62	2.50	0.00003	22.15		20.53	2.37
	L0000169	484845.87	3741940.75	439.86	2.50	0.00003	22.15		20.53	2.37
	L0000170	484867.93	3741978.98	439.27	2.50	0.00003	22.15		20.53	2.37
	L0000171	484889.99	3742017.22	438.85	2.50	0.00003	22.15		20.53	2.37
	L0000172	484912.05	3742055.46	438.52	2.50	0.00003	22.15		20.53	2.37
	L0000173	484934.11	3742093.70	438.39	2.50	0.00003	22.15		20.53	2.37
	L0000174	484947.11	3742134.36	438.42	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000175	484947.11	3742178.51	438.94	2.50	0.00003	22.15		20.53	2.37
	L0000176	484947.11	3742222.65	439.19	2.50	0.00003	22.15		20.53	2.37
	L0000177	484947.11	3742266.80	439.66	2.50	0.00003	22.15		20.53	2.37
	L0000178	484947.11	3742310.94	440.16	2.50	0.00003	22.15		20.53	2.37
	L0000179	484947.11	3742355.09	440.87	2.50	0.00003	22.15		20.53	2.37
	L0000180	484947.11	3742399.23	440.98	2.50	0.00003	22.15		20.53	2.37
	L0000181	484947.11	3742443.38	440.71	2.50	0.00003	22.15		20.53	2.37
	L0000182	484947.11	3742487.52	440.42	2.50	0.00003	22.15		20.53	2.37
	L0000183	484947.11	3742531.67	440.51	2.50	0.00003	22.15		20.53	2.37
	L0000184	484947.11	3742575.82	440.67	2.50	0.00003	22.15		20.53	2.37
	L0000185	484947.11	3742619.96	441.14	2.50	0.00003	22.15		20.53	2.37
	L0000186	484947.11	3742664.11	441.61	2.50	0.00003	22.15		20.53	2.37
	L0000187	484947.11	3742708.25	442.16	2.50	0.00003	22.15		20.53	2.37
	L0000188	484947.11	3742752.40	442.47	2.50	0.00003	22.15		20.53	2.37
	L0000189	484947.11	3742796.54	443.17	2.50	0.00003	22.15		20.53	2.37
	L0000190	484947.11	3742840.69	443.54	2.50	0.00003	22.15		20.53	2.37
	L0000191	484947.11	3742884.83	444.03	2.50	0.00003	22.15		20.53	2.37
	L0000192	484947.11	3742928.98	444.79	2.50	0.00003	22.15		20.53	2.37
	L0000193	484947.11	3742973.12	445.64	2.50	0.00003	22.15		20.53	2.37
	L0000194	484947.11	3743017.27	446.56	2.50	0.00003	22.15		20.53	2.37
	L0000195	484947.11	3743061.41	447.73	2.50	0.00003	22.15		20.53	2.37
	L0000196	484947.11	3743105.56	448.89	2.50	0.00003	22.15		20.53	2.37
	L0000197	484947.11	3743149.70	449.69	2.50	0.00003	22.15		20.53	2.37
	L0000198	484947.11	3743193.85	450.48	2.50	0.00003	22.15		20.53	2.37
	L0000199	484947.11	3743237.99	451.32	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000200	484948.31	3743280.89	452.12	2.50	0.00003	22.15		20.53	2.37
	L0000201	484992.43	3743279.26	451.17	2.50	0.00003	22.15		20.53	2.37
	L0000202	485036.54	3743277.63	449.95	2.50	0.00003	22.15		20.53	2.37
	L0000203	485080.66	3743275.99	448.63	2.50	0.00003	22.15		20.53	2.37
	L0000204	485124.77	3743274.36	447.38	2.50	0.00003	22.15		20.53	2.37
	L0000205	485168.89	3743272.72	446.18	2.50	0.00003	22.15		20.53	2.37
	L0000206	485191.14	3743249.78	445.34	2.50	0.00003	22.15		20.53	2.37
	L0000207	485191.66	3743205.64	444.66	2.50	0.00003	22.15		20.53	2.37
	L0000208	485192.17	3743161.50	443.89	2.50	0.00003	22.15		20.53	2.37
	L0000209	485192.68	3743117.35	443.51	2.50	0.00003	22.15		20.53	2.37
	L0000210	485193.20	3743073.21	443.51	2.50	0.00003	22.15		20.53	2.37
	L0000211	485193.71	3743029.07	443.23	2.50	0.00003	22.15		20.53	2.37
	L0000212	485194.22	3742984.93	442.33	2.50	0.00003	22.15		20.53	2.37
	L0000213	485194.74	3742940.79	441.42	2.50	0.00003	22.15		20.53	2.37
	L0000214	485195.25	3742896.64	440.20	2.50	0.00003	22.15		20.53	2.37
	L0000215	485195.76	3742852.50	439.04	2.50	0.00003	22.15		20.53	2.37
	L0000216	485196.28	3742808.36	438.07	2.50	0.00003	22.15		20.53	2.37
	L0000217	485196.79	3742764.22	437.07	2.50	0.00003	22.15		20.53	2.37
	L0000218	485197.30	3742720.07	436.49	2.50	0.00003	22.15		20.53	2.37
	L0000219	485197.82	3742675.93	435.95	2.50	0.00003	22.15		20.53	2.37
	L0000220	485198.33	3742631.79	435.53	2.50	0.00003	22.15		20.53	2.37
	L0000221	485198.84	3742587.65	435.30	2.50	0.00003	22.15		20.53	2.37
	L0000222	485199.36	3742543.50	435.03	2.50	0.00003	22.15		20.53	2.37
	L0000223	485199.87	3742499.36	434.79	2.50	0.00003	22.15		20.53	2.37
	L0000224	485240.11	3742496.77	434.32	2.50	0.00003	22.15		20.53	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0000225	485284.23	3742498.24	434.04	2.50	0.00003	22.15		20.53	2.37
	L0000226	485328.35	3742499.71	433.64	2.50	0.00003	22.15		20.53	2.37
	L0000227	485372.47	3742501.18	433.36	2.50	0.00003	22.15		20.53	2.37
	L0000228	485416.59	3742502.66	433.08	2.50	0.00003	22.15		20.53	2.37
	L0000229	485460.71	3742504.13	433.02	2.50	0.00003	22.15		20.53	2.37
	L0000230	485468.99	3742538.49	433.12	2.50	0.00003	22.15		20.53	2.37
	L0000231	485466.67	3742582.57	433.27	2.50	0.00003	22.15		20.53	2.37
	L0000232	485464.35	3742626.66	433.41	2.50	0.00003	22.15		20.53	2.37
	L0000233	485462.03	3742670.74	433.58	2.50	0.00003	22.15		20.53	2.37
	L0000234	485459.71	3742714.82	433.72	2.50	0.00003	22.15		20.53	2.37
	L0000235	485457.39	3742758.91	434.21	2.50	0.00003	22.15		20.53	2.37
	L0000236	485455.07	3742802.99	434.91	2.50	0.00003	22.15		20.53	2.37
	L0000237	485452.75	3742847.08	435.65	2.50	0.00003	22.15		20.53	2.37
	L0000238	485450.43	3742891.16	436.28	2.50	0.00003	22.15		20.53	2.37
	L0000239	485448.11	3742935.25	436.78	2.50	0.00003	22.15		20.53	2.37
	L0000240	485445.79	3742979.33	437.19	2.50	0.00003	22.15		20.53	2.37
	L0000241	485443.47	3743023.41	437.22	2.50	0.00003	22.15		20.53	2.37
	L0000242	485441.15	3743067.50	437.32	2.50	0.00003	22.15		20.53	2.37
	L0000243	485438.83	3743111.58	437.68	2.50	0.00003	22.15		20.53	2.37
	L0000244	485436.51	3743155.67	438.34	2.50	0.00003	22.15		20.53	2.37
	L0000245	485430.59	3743198.80	438.92	2.50	0.00003	22.15		20.53	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE2	L0000738	484186.55	3742886.67	477.87	2.50	1.80E-6	22.15		20.60	2.37
	L0000739	484142.26	3742887.80	480.16	2.50	1.80E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE2	L0000740	484097.98	3742888.94	481.26	2.50	1.80E-6	22.15		20.60	2.37
	L0000741	484053.69	3742890.07	483.58	2.50	1.80E-6	22.15		20.60	2.37
	L0000742	484009.41	3742891.21	486.21	2.50	1.80E-6	22.15		20.60	2.37
	L0000743	483965.12	3742892.34	490.90	2.50	1.80E-6	22.15		20.60	2.37
	L0000744	483920.84	3742893.48	495.80	2.50	1.80E-6	22.15		20.60	2.37
	L0000745	483876.55	3742894.62	502.18	2.50	1.80E-6	22.15		20.60	2.37
	L0000746	483832.26	3742895.75	513.08	2.50	1.80E-6	22.15		20.60	2.37
	L0000747	483787.98	3742896.89	516.02	2.50	1.80E-6	22.15		20.60	2.37
	L0000748	483743.69	3742898.02	519.40	2.50	1.80E-6	22.15		20.60	2.37
	L0000749	483699.41	3742899.16	509.25	2.50	1.80E-6	22.15		20.60	2.37
	L0000750	483655.12	3742900.29	497.41	2.50	1.80E-6	22.15		20.60	2.37
	L0000751	483610.84	3742901.43	490.95	2.50	1.80E-6	22.15		20.60	2.37
	L0000752	483566.55	3742902.56	484.36	2.50	1.80E-6	22.15		20.60	2.37
	L0000753	483522.27	3742903.70	482.01	2.50	1.80E-6	22.15		20.60	2.37
	L0000754	483477.98	3742904.84	480.88	2.50	1.80E-6	22.15		20.60	2.37
	L0000755	483435.82	3742916.08	479.60	2.50	1.80E-6	22.15		20.60	2.37
	L0000756	483394.82	3742932.85	478.49	2.50	1.80E-6	22.15		20.60	2.37
	L0000757	483353.43	3742947.85	476.75	2.50	1.80E-6	22.15		20.60	2.37
	L0000758	483309.16	3742949.49	475.04	2.50	1.80E-6	22.15		20.60	2.37
	L0000759	483264.89	3742951.13	473.28	2.50	1.80E-6	22.15		20.60	2.37
	L0000760	483220.62	3742952.42	471.57	2.50	1.80E-6	22.15		20.60	2.37
	L0000761	483176.32	3742952.63	470.22	2.50	1.80E-6	22.15		20.60	2.37
	L0000762	483132.02	3742952.85	469.34	2.50	1.80E-6	22.15		20.60	2.37
	L0000763	483087.72	3742953.06	468.78	2.50	1.80E-6	22.15		20.60	2.37
	L0000764	483043.42	3742953.27	467.90	2.50	1.80E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE2	L0000765	482999.12	3742953.48	467.09	2.50	1.80E-6	22.15		20.60	2.37
	L0000766	482954.82	3742953.69	466.40	2.50	1.80E-6	22.15		20.60	2.37
	L0000767	482910.52	3742953.91	465.82	2.50	1.80E-6	22.15		20.60	2.37
	L0000768	482866.22	3742954.12	465.17	2.50	1.80E-6	22.15		20.60	2.37
	L0000769	482821.92	3742954.33	464.47	2.50	1.80E-6	22.15		20.60	2.37
	L0000770	482777.62	3742954.54	463.88	2.50	1.80E-6	22.15		20.60	2.37
	L0000771	482733.32	3742954.75	463.26	2.50	1.80E-6	22.15		20.60	2.37
	L0000772	482689.02	3742954.97	462.28	2.50	1.80E-6	22.15		20.60	2.37
	L0000773	482644.72	3742955.18	461.59	2.50	1.80E-6	22.15		20.60	2.37
	L0000774	482600.42	3742955.39	460.91	2.50	1.80E-6	22.15		20.60	2.37
	L0000775	482556.12	3742955.60	460.21	2.50	1.80E-6	22.15		20.60	2.37
	L0000776	482511.82	3742955.81	459.56	2.50	1.80E-6	22.15		20.60	2.37
	L0000777	482467.52	3742956.03	458.82	2.50	1.80E-6	22.15		20.60	2.37
	L0000778	482423.22	3742956.24	458.15	2.50	1.80E-6	22.15		20.60	2.37
	L0000779	482378.92	3742956.45	457.35	2.50	1.80E-6	22.15		20.60	2.37
	L0000780	482334.63	3742956.66	455.87	2.50	1.80E-6	22.15		20.60	2.37
	L0000781	482290.33	3742956.87	454.01	2.50	1.80E-6	22.15		20.60	2.37
	L0000782	482246.03	3742957.09	452.28	2.50	1.80E-6	22.15		20.60	2.37
	L0000783	482201.73	3742957.44	450.53	2.50	1.80E-6	22.15		20.60	2.37
	L0000784	482157.43	3742957.80	448.87	2.50	1.80E-6	22.15		20.60	2.37
	L0000785	482113.13	3742958.15	447.35	2.50	1.80E-6	22.15		20.60	2.37
	L0000786	482068.83	3742958.50	446.30	2.50	1.80E-6	22.15		20.60	2.37
	L0000787	482024.53	3742958.86	445.68	2.50	1.80E-6	22.15		20.60	2.37
	L0000788	481980.23	3742959.21	445.25	2.50	1.80E-6	22.15		20.60	2.37
	L0000789	481935.94	3742959.57	444.94	2.50	1.80E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE2	L0000790	481891.64	3742959.92	444.16	2.50	1.80E-6	22.15		20.60	2.37
	L0000791	481847.34	3742960.28	443.47	2.50	1.80E-6	22.15		20.60	2.37
	L0000792	481803.04	3742960.63	442.86	2.50	1.80E-6	22.15		20.60	2.37
	L0000793	481758.74	3742960.99	442.16	2.50	1.80E-6	22.15		20.60	2.37
	L0000794	481714.44	3742961.34	441.73	2.50	1.80E-6	22.15		20.60	2.37
	L0000795	481670.14	3742961.69	441.28	2.50	1.80E-6	22.15		20.60	2.37
	L0000796	481625.85	3742962.05	441.00	2.50	1.80E-6	22.15		20.60	2.37
	L0000797	481581.55	3742962.40	440.82	2.50	1.80E-6	22.15		20.60	2.37
	L0000798	481537.25	3742962.76	440.61	2.50	1.80E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE3	L0000799	483324.34	3740127.82	445.12	2.50	3.55E-6	22.15		20.60	2.37
	L0000800	483368.62	3740129.03	444.93	2.50	3.55E-6	22.15		20.60	2.37
	L0000801	483412.90	3740130.25	444.64	2.50	3.55E-6	22.15		20.60	2.37
	L0000802	483457.19	3740131.46	444.14	2.50	3.55E-6	22.15		20.60	2.37
	L0000803	483501.47	3740132.67	443.57	2.50	3.55E-6	22.15		20.60	2.37
	L0000804	483545.75	3740133.89	442.67	2.50	3.55E-6	22.15		20.60	2.37
	L0000805	483590.04	3740135.10	441.72	2.50	3.55E-6	22.15		20.60	2.37
	L0000806	483634.32	3740136.31	440.66	2.50	3.55E-6	22.15		20.60	2.37
	L0000807	483678.60	3740137.53	439.73	2.50	3.55E-6	22.15		20.60	2.37
	L0000808	483722.89	3740138.74	438.99	2.50	3.55E-6	22.15		20.60	2.37
	L0000809	483767.17	3740139.95	438.29	2.50	3.55E-6	22.15		20.60	2.37
	L0000810	483811.45	3740141.17	437.65	2.50	3.55E-6	22.15		20.60	2.37
	L0000811	483855.74	3740142.38	437.05	2.50	3.55E-6	22.15		20.60	2.37
	L0000812	483900.02	3740143.59	436.47	2.50	3.55E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE3	L0000813	483944.30	3740144.81	435.93	2.50	3.55E-6	22.15		20.60	2.37
	L0000814	483988.59	3740146.02	435.47	2.50	3.55E-6	22.15		20.60	2.37
	L0000815	484032.87	3740147.23	435.01	2.50	3.55E-6	22.15		20.60	2.37
	L0000816	484077.15	3740148.45	434.52	2.50	3.55E-6	22.15		20.60	2.37
	L0000817	484109.69	3740173.88	434.67	2.50	3.55E-6	22.15		20.60	2.37
	L0000818	484138.05	3740207.91	435.16	2.50	3.55E-6	22.15		20.60	2.37
	L0000819	484166.41	3740241.95	435.58	2.50	3.55E-6	22.15		20.60	2.37
	L0000820	484194.77	3740275.98	436.16	2.50	3.55E-6	22.15		20.60	2.37
	L0000821	484176.80	3740236.23	435.22	2.50	3.55E-6	22.15		20.60	2.37
	L0000822	484158.47	3740195.90	434.55	2.50	3.55E-6	22.15		20.60	2.37
	L0000823	484146.07	3740159.39	434.03	2.50	3.55E-6	22.15		20.60	2.37
	L0000824	484190.37	3740159.39	433.53	2.50	3.55E-6	22.15		20.60	2.37
	L0000825	484234.67	3740159.39	433.19	2.50	3.55E-6	22.15		20.60	2.37
	L0000826	484278.97	3740159.39	432.94	2.50	3.55E-6	22.15		20.60	2.37
	L0000827	484323.27	3740159.39	432.73	2.50	3.55E-6	22.15		20.60	2.37
	L0000828	484367.57	3740159.39	432.55	2.50	3.55E-6	22.15		20.60	2.37
	L0000829	484411.87	3740159.39	432.47	2.50	3.55E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE4	L0000830	484470.74	3740159.31	432.29	1.11	1.79E-6	22.15		20.60	2.37
	L0000831	484426.44	3740159.01	432.40	1.11	1.79E-6	22.15		20.60	2.37
	L0000832	484382.14	3740158.71	432.49	1.11	1.79E-6	22.15		20.60	2.37
	L0000833	484337.84	3740158.41	432.69	1.11	1.79E-6	22.15		20.60	2.37
	L0000834	484293.54	3740158.11	432.86	1.11	1.79E-6	22.15		20.60	2.37
	L0000835	484249.24	3740157.82	433.10	1.11	1.79E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE4	L0000836	484204.94	3740157.52	433.39	1.11	1.79E-6	22.15		20.60	2.37
	L0000837	484160.64	3740157.22	433.83	1.11	1.79E-6	22.15		20.60	2.37
	L0000838	484116.34	3740156.92	434.26	1.11	1.79E-6	22.15		20.60	2.37
	L0000839	484072.05	3740156.62	434.66	1.11	1.79E-6	22.15		20.60	2.37
	L0000840	484027.75	3740156.32	435.21	1.11	1.79E-6	22.15		20.60	2.37
	L0000841	483983.45	3740156.02	435.74	1.11	1.79E-6	22.15		20.60	2.37
	L0000842	483939.15	3740155.72	436.29	1.11	1.79E-6	22.15		20.60	2.37
	L0000843	483894.85	3740155.42	436.64	1.11	1.79E-6	22.15		20.60	2.37
	L0000844	483850.55	3740155.12	437.11	1.11	1.79E-6	22.15		20.60	2.37
	L0000845	483806.25	3740154.82	437.67	1.11	1.79E-6	22.15		20.60	2.37
	L0000846	483761.95	3740154.52	438.31	1.11	1.79E-6	22.15		20.60	2.37
	L0000847	483717.65	3740154.22	439.05	1.11	1.79E-6	22.15		20.60	2.37
	L0000848	483673.35	3740153.92	439.76	1.11	1.79E-6	22.15		20.60	2.37
	L0000849	483629.06	3740153.63	440.69	1.11	1.79E-6	22.15		20.60	2.37
	L0000850	483584.76	3740153.33	441.79	1.11	1.79E-6	22.15		20.60	2.37
	L0000851	483540.46	3740153.03	442.77	1.11	1.79E-6	22.15		20.60	2.37
	L0000852	483496.16	3740152.73	443.75	1.11	1.79E-6	22.15		20.60	2.37
	L0000853	483451.86	3740152.43	444.41	1.11	1.79E-6	22.15		20.60	2.37
	L0000854	483407.56	3740152.13	444.97	1.11	1.79E-6	22.15		20.60	2.37
	L0000855	483363.26	3740151.83	445.21	1.11	1.79E-6	22.15		20.60	2.37
	L0000856	483318.96	3740151.53	445.35	1.11	1.79E-6	22.15		20.60	2.37
	L0000857	483274.66	3740151.23	445.67	1.11	1.79E-6	22.15		20.60	2.37
	L0000858	483230.36	3740150.93	445.56	1.11	1.79E-6	22.15		20.60	2.37
	L0000859	483186.07	3740150.63	445.10	1.11	1.79E-6	22.15		20.60	2.37
	L0000860	483141.77	3740150.33	445.34	1.11	1.79E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE4	L0000861	483097.47	3740150.03	445.01	1.11	1.79E-6	22.15		20.60	2.37
	L0000862	483053.17	3740149.73	444.06	1.11	1.79E-6	22.15		20.60	2.37
	L0000863	483008.87	3740149.43	443.57	1.11	1.79E-6	22.15		20.60	2.37
	L0000864	482964.57	3740149.14	443.09	1.11	1.79E-6	22.15		20.60	2.37
	L0000865	482920.27	3740148.84	442.35	1.11	1.79E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0000866	484556.62	3740169.90	431.11	1.11	1.32E-6	22.15		20.60	2.37
	L0000867	484600.92	3740169.46	431.47	1.11	1.32E-6	22.15		20.60	2.37
	L0000868	484645.22	3740169.02	432.23	1.11	1.32E-6	22.15		20.60	2.37
	L0000869	484689.52	3740168.58	432.11	1.11	1.32E-6	22.15		20.60	2.37
	L0000870	484733.82	3740168.15	431.97	1.11	1.32E-6	22.15		20.60	2.37
	L0000871	484778.11	3740167.71	431.81	1.11	1.32E-6	22.15		20.60	2.37
	L0000872	484822.41	3740167.27	431.92	1.11	1.32E-6	22.15		20.60	2.37
	L0000873	484866.71	3740166.83	432.06	1.11	1.32E-6	22.15		20.60	2.37
	L0000874	484911.01	3740166.39	432.10	1.11	1.32E-6	22.15		20.60	2.37
	L0000875	484955.30	3740165.95	432.09	1.11	1.32E-6	22.15		20.60	2.37
	L0000876	484999.60	3740165.51	432.11	1.11	1.32E-6	22.15		20.60	2.37
	L0000877	485043.90	3740165.08	432.15	1.11	1.32E-6	22.15		20.60	2.37
	L0000878	485088.20	3740164.64	432.26	1.11	1.32E-6	22.15		20.60	2.37
	L0000879	485132.50	3740164.20	432.18	1.11	1.32E-6	22.15		20.60	2.37
	L0000880	485176.79	3740163.76	432.18	1.11	1.32E-6	22.15		20.60	2.37
	L0000881	485221.09	3740163.32	432.47	1.11	1.32E-6	22.15		20.60	2.37
	L0000882	485265.39	3740162.88	434.65	1.11	1.32E-6	22.15		20.60	2.37
	L0000883	485309.69	3740162.44	433.63	1.11	1.32E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0000884	485353.98	3740162.01	432.68	1.11	1.32E-6	22.15		20.60	2.37
	L0000885	485398.28	3740161.57	432.93	1.11	1.32E-6	22.15		20.60	2.37
	L0000886	485442.58	3740161.13	433.28	1.11	1.32E-6	22.15		20.60	2.37
	L0000887	485486.88	3740160.69	433.70	1.11	1.32E-6	22.15		20.60	2.37
	L0000888	485531.18	3740160.25	433.98	1.11	1.32E-6	22.15		20.60	2.37
	L0000889	485575.47	3740159.81	434.57	1.11	1.32E-6	22.15		20.60	2.37
	L0000890	485619.77	3740159.37	435.21	1.11	1.32E-6	22.15		20.60	2.37
	L0000891	485664.07	3740158.94	436.19	1.11	1.32E-6	22.15		20.60	2.37
	L0000892	485708.37	3740158.50	437.07	1.11	1.32E-6	22.15		20.60	2.37
	L0000893	485752.67	3740158.06	437.85	1.11	1.32E-6	22.15		20.60	2.37
	L0000894	485796.96	3740157.62	438.44	1.11	1.32E-6	22.15		20.60	2.37
	L0000895	485841.26	3740157.18	438.95	1.11	1.32E-6	22.15		20.60	2.37
	L0000896	485885.56	3740156.74	440.20	1.11	1.32E-6	22.15		20.60	2.37
	L0000897	485929.86	3740156.30	440.47	1.11	1.32E-6	22.15		20.60	2.37
	L0000898	485974.15	3740155.87	441.07	1.11	1.32E-6	22.15		20.60	2.37
	L0000899	486018.45	3740155.43	441.58	1.11	1.32E-6	22.15		20.60	2.37
	L0000900	486062.75	3740154.99	442.24	1.11	1.32E-6	22.15		20.60	2.37
	L0000901	486107.05	3740154.55	442.88	1.11	1.32E-6	22.15		20.60	2.37
	L0000902	486151.35	3740154.11	443.49	1.11	1.32E-6	22.15		20.60	2.37
	L0000903	486195.64	3740153.67	444.32	1.11	1.32E-6	22.15		20.60	2.37
	L0000904	486239.94	3740153.23	444.87	1.11	1.32E-6	22.15		20.60	2.37
	L0000905	486284.24	3740152.80	445.88	1.11	1.32E-6	22.15		20.60	2.37
	L0000906	486328.54	3740152.36	447.74	1.11	1.32E-6	22.15		20.60	2.37
	L0000907	486372.83	3740151.92	448.83	1.11	1.32E-6	22.15		20.60	2.37
	L0000908	486417.13	3740151.48	450.40	1.11	1.32E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0000909	486461.43	3740151.04	452.22	1.11	1.32E-6	22.15		20.60	2.37
	L0000910	486505.73	3740150.60	453.06	1.11	1.32E-6	22.15		20.60	2.37
	L0000911	486550.03	3740150.16	454.49	1.11	1.32E-6	22.15		20.60	2.37
	L0000912	486594.32	3740149.73	455.22	1.11	1.32E-6	22.15		20.60	2.37
	L0000913	486638.62	3740149.29	456.25	1.11	1.32E-6	22.15		20.60	2.37
	L0000914	486682.92	3740148.85	458.09	1.11	1.32E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE6	L0000915	484578.92	3743180.69	466.50	1.11	1.95E-6	22.15		20.60	2.37
	L0000916	484542.46	3743155.54	469.46	1.11	1.95E-6	22.15		20.60	2.37
	L0000917	484505.99	3743130.39	471.75	1.11	1.95E-6	22.15		20.60	2.37
	L0000918	484469.52	3743105.24	471.95	1.11	1.95E-6	22.15		20.60	2.37
	L0000919	484433.05	3743080.09	471.32	1.11	1.95E-6	22.15		20.60	2.37
	L0000920	484396.58	3743054.94	471.33	1.11	1.95E-6	22.15		20.60	2.37
	L0000921	484360.12	3743029.79	472.96	1.11	1.95E-6	22.15		20.60	2.37
	L0000922	484323.65	3743004.64	475.17	1.11	1.95E-6	22.15		20.60	2.37
	L0000923	484287.18	3742979.49	476.48	1.11	1.95E-6	22.15		20.60	2.37
	L0000924	484244.44	3742973.41	479.19	1.11	1.95E-6	22.15		20.60	2.37
	L0000925	484200.17	3742972.02	482.27	1.11	1.95E-6	22.15		20.60	2.37
	L0000926	484155.89	3742970.64	485.52	1.11	1.95E-6	22.15		20.60	2.37
	L0000927	484111.61	3742969.26	487.78	1.11	1.95E-6	22.15		20.60	2.37
	L0000928	484067.33	3742967.87	489.31	1.11	1.95E-6	22.15		20.60	2.37
	L0000929	484023.05	3742966.49	490.75	1.11	1.95E-6	22.15		20.60	2.37
	L0000930	483978.77	3742965.11	491.52	1.11	1.95E-6	22.15		20.60	2.37
	L0000931	483934.66	3742965.24	491.45	1.11	1.95E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE6	L0000932	483891.68	3742975.98	492.16	1.11	1.95E-6	22.15		20.60	2.37
	L0000933	483848.70	3742986.73	492.23	1.11	1.95E-6	22.15		20.60	2.37
	L0000934	483805.73	3742997.47	492.14	1.11	1.95E-6	22.15		20.60	2.37
	L0000935	483764.80	3743011.79	491.96	1.11	1.95E-6	22.15		20.60	2.37
	L0000936	483733.89	3743043.52	490.89	1.11	1.95E-6	22.15		20.60	2.37
	L0000937	483702.97	3743075.24	490.16	1.11	1.95E-6	22.15		20.60	2.37
	L0000938	483672.05	3743106.97	488.92	1.11	1.95E-6	22.15		20.60	2.37
	L0000939	483641.14	3743138.70	486.93	1.11	1.95E-6	22.15		20.60	2.37
	L0000940	483610.22	3743170.43	484.21	1.11	1.95E-6	22.15		20.60	2.37
	L0000941	483579.31	3743202.16	481.26	1.11	1.95E-6	22.15		20.60	2.37
	L0000942	483548.39	3743233.89	478.79	1.11	1.95E-6	22.15		20.60	2.37
	L0000943	483517.48	3743265.62	476.35	1.11	1.95E-6	22.15		20.60	2.37
	L0000944	483486.56	3743297.35	474.18	1.11	1.95E-6	22.15		20.60	2.37
	L0000945	483455.65	3743329.08	472.33	1.11	1.95E-6	22.15		20.60	2.37
	L0000946	483424.73	3743360.80	470.75	1.11	1.95E-6	22.15		20.60	2.37
	L0000947	483393.82	3743392.53	469.43	1.11	1.95E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE7	L0000948	484628.10	3743247.55	465.21	1.11	1.74E-6	22.15		20.60	2.37
	L0000949	484660.85	3743277.38	463.55	1.11	1.74E-6	22.15		20.60	2.37
	L0000950	484693.61	3743307.21	462.65	1.11	1.74E-6	22.15		20.60	2.37
	L0000951	484726.36	3743337.04	461.49	1.11	1.74E-6	22.15		20.60	2.37
	L0000952	484759.11	3743366.87	460.55	1.11	1.74E-6	22.15		20.60	2.37
	L0000953	484791.86	3743396.70	459.71	1.11	1.74E-6	22.15		20.60	2.37
	L0000954	484824.62	3743426.53	459.77	1.11	1.74E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE7	L0000955	484857.37	3743456.35	459.88	1.11	1.74E-6	22.15		20.60	2.37
	L0000956	484890.12	3743486.18	459.97	1.11	1.74E-6	22.15		20.60	2.37
	L0000957	484922.88	3743516.01	460.28	1.11	1.74E-6	22.15		20.60	2.37
	L0000958	484955.63	3743545.84	460.68	1.11	1.74E-6	22.15		20.60	2.37
	L0000959	484988.38	3743575.67	460.94	1.11	1.74E-6	22.15		20.60	2.37
	L0000960	485021.13	3743605.50	461.10	1.11	1.74E-6	22.15		20.60	2.37
	L0000961	485053.89	3743635.32	461.75	1.11	1.74E-6	22.15		20.60	2.37
	L0000962	485086.64	3743665.15	462.56	1.11	1.74E-6	22.15		20.60	2.37
	L0000963	485119.39	3743694.98	463.06	1.11	1.74E-6	22.15		20.60	2.37
	L0000964	485152.15	3743724.81	463.92	1.11	1.74E-6	22.15		20.60	2.37
	L0000965	485184.90	3743754.64	464.75	1.11	1.74E-6	22.15		20.60	2.37
	L0000966	485217.65	3743784.47	465.52	1.11	1.74E-6	22.15		20.60	2.37
	L0000967	485250.40	3743814.30	466.12	1.11	1.74E-6	22.15		20.60	2.37
	L0000968	485283.16	3743844.12	466.43	1.11	1.74E-6	22.15		20.60	2.37
	L0000969	485315.91	3743873.95	466.65	1.11	1.74E-6	22.15		20.60	2.37
	L0000970	485348.66	3743903.78	466.91	1.11	1.74E-6	22.15		20.60	2.37
	L0000971	485381.42	3743933.61	467.17	1.11	1.74E-6	22.15		20.60	2.37
	L0000972	485414.17	3743963.44	467.39	1.11	1.74E-6	22.15		20.60	2.37
	L0000973	485446.92	3743993.27	467.68	1.11	1.74E-6	22.15		20.60	2.37
	L0000974	485479.67	3744023.10	467.94	1.11	1.74E-6	22.15		20.60	2.37
	L0000975	485512.43	3744052.92	468.18	1.11	1.74E-6	22.15		20.60	2.37
	L0000976	485545.18	3744082.75	468.45	1.11	1.74E-6	22.15		20.60	2.37
	L0000977	485577.93	3744112.58	468.67	1.11	1.74E-6	22.15		20.60	2.37
	L0000978	485610.69	3744142.41	468.93	1.11	1.74E-6	22.15		20.60	2.37
	L0000979	485643.44	3744172.24	469.10	1.11	1.74E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE7	L0000980	485676.19	3744202.07	469.29	1.11	1.74E-6	22.15		20.60	2.37
	L0000981	485708.94	3744231.89	469.71	1.11	1.74E-6	22.15		20.60	2.37
	L0000982	485741.70	3744261.72	470.03	1.11	1.74E-6	22.15		20.60	2.37
	L0000983	485774.45	3744291.55	470.17	1.11	1.74E-6	22.15		20.60	2.37
	L0000984	485807.20	3744321.38	470.09	1.11	1.74E-6	22.15		20.60	2.37

Receptor Pathway

Receptor Networks

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

Uniform Cartesian Grid

Receptor Network ID	Grid Origin X Coordinate [m]	Grid Origin Y Coordinate [m]	No. of X-Axis Receptors	No. of Y-Axis Receptors	Spacing for X-Axis [m]	Spacing for Y-Axis [m]
UCART1	482992.23	3739437.36	13	42	100.00	100.00
UCART3	486053.76	3739441.06	12	15	100.00	100.00
UCART2	481367.86	3742732.67	17	5	100.00	100.00

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	484179.65	3741167.05		496.92	
2	484174.79	3741458.65		501.56	
3	484155.35	3741930.07		495.97	
4	484160.21	3742289.71		472.10	
5	484169.93	3742746.55		472.32	
6	483544.35	3743003.42		481.98	
7	483475.70	3742848.22		482.52	
8	486224.98	3739906.11		450.76	
9	486213.54	3740392.13		440.95	
10	485450.31	3739469.76		437.50	
11	482278.28	3742264.20		460.99	
12	482255.62	3741499.48		446.16	
13	482822.08	3743408.45		453.17	
14	486550.00	3741504.57		438.25	
15	486450.71	3741032.94		441.24	
16	482631.48	3740163.30		438.18	
17	486161.19	3744297.25		452.04	

Plant Boundary Receptors

Receptor Pathway

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	484200.22	3742916.26	FENCEPRI	479.19	
2	484200.22	3740154.09	FENCEPRI	433.40	
3	484735.58	3740154.09	FENCEPRI	431.59	
4	484730.35	3741401.91	FENCEPRI	442.87	
5	485219.99	3742313.64	FENCEPRI	434.02	
6	485512.10	3742313.64	FENCEPRI	432.72	
7	485548.61	3742313.64	FENCEPRI	432.75	
8	485539.48	3743299.49	FENCEPRI	437.92	
9	485347.79	3743299.49	FENCEPRI	445.66	
10	485347.79	3743409.03	FENCEPRI	445.30	
11	484863.99	3743409.03	FENCEPRI	459.26	
12	484434.96	3742998.26	FENCEPRI	466.26	
13	484352.81	3742943.49	FENCEPRI	470.06	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors

Receptor Pathway

Terrain Elevations and Flagpole Heights for Network Grids

Uniform Cartesian Grid

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	482992.23	3739437.36	432.10	Option not Selected
	483092.23	3739437.36	432.20	
	483192.23	3739437.36	432.00	
	483292.23	3739437.36	431.90	
	483392.23	3739437.36	431.70	
	483492.23	3739437.36	431.90	
	483592.23	3739437.36	431.40	
	483692.23	3739437.36	431.10	
	483792.23	3739437.36	431.90	
	483892.23	3739437.36	432.00	
	483992.23	3739437.36	431.40	
	484092.23	3739437.36	432.80	
	484192.23	3739437.36	428.50	
	482992.23	3739537.36	433.00	
	483092.23	3739537.36	433.00	
	483192.23	3739537.36	432.80	
	483292.23	3739537.36	432.70	
	483392.23	3739537.36	432.40	
	483492.23	3739537.36	432.00	
	483592.23	3739537.36	431.70	
	483692.23	3739537.36	431.70	
	483792.23	3739537.36	431.10	
	483892.23	3739537.36	431.00	
	483992.23	3739537.36	431.40	
	484092.23	3739537.36	431.60	
	484192.23	3739537.36	430.80	
	482992.23	3739637.36	434.30	
	483092.23	3739637.36	434.00	
	483192.23	3739637.36	434.00	
	483292.23	3739637.36	433.80	
	483392.23	3739637.36	433.40	
	483492.23	3739637.36	432.90	
	483592.23	3739637.36	432.30	
	483692.23	3739637.36	431.80	
	483792.23	3739637.36	431.70	
	483892.23	3739637.36	431.60	
	483992.23	3739637.36	431.70	
	484092.23	3739637.36	431.80	
	484192.23	3739637.36	431.30	
	482992.23	3739737.36	435.50	
	483092.23	3739737.36	435.30	
	483192.23	3739737.36	435.30	
	483292.23	3739737.36	435.30	
	483392.23	3739737.36	434.90	
	483492.23	3739737.36	434.30	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483592.23	3739737.36	433.80	Option not Selected
	483692.23	3739737.36	432.70	
	483792.23	3739737.36	432.00	
	483892.23	3739737.36	431.80	
	483992.23	3739737.36	431.80	
	484092.23	3739737.36	431.90	
	484192.23	3739737.36	431.80	
	482992.23	3739837.36	436.20	
	483092.23	3739837.36	436.90	
	483192.23	3739837.36	436.90	
	483292.23	3739837.36	436.70	
	483392.23	3739837.36	437.10	
	483492.23	3739837.36	436.20	
	483592.23	3739837.36	435.90	
	483692.23	3739837.36	434.70	
	483792.23	3739837.36	433.20	
	483892.23	3739837.36	432.40	
	483992.23	3739837.36	431.90	
	484092.23	3739837.36	431.90	
	484192.23	3739837.36	431.90	
	482992.23	3739937.36	437.70	
	483092.23	3739937.36	438.90	
	483192.23	3739937.36	439.90	
	483292.23	3739937.36	439.10	
	483392.23	3739937.36	439.40	
	483492.23	3739937.36	438.30	
	483592.23	3739937.36	438.20	
	483692.23	3739937.36	436.30	
	483792.23	3739937.36	434.90	
	483892.23	3739937.36	433.70	
	483992.23	3739937.36	432.50	
	484092.23	3739937.36	432.00	
	484192.23	3739937.36	431.90	
	482992.23	3740037.36	441.00	
	483092.23	3740037.36	447.50	
	483192.23	3740037.36	441.70	
	483292.23	3740037.36	442.10	
	483392.23	3740037.36	442.30	
	483492.23	3740037.36	441.00	
	483592.23	3740037.36	440.20	
	483692.23	3740037.36	438.10	
	483792.23	3740037.36	436.50	
	483892.23	3740037.36	434.80	
	483992.23	3740037.36	433.40	
	484092.23	3740037.36	432.40	
	484192.23	3740037.36	432.10	
	482992.23	3740137.36	443.30	
	483092.23	3740137.36	444.90	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483192.23	3740137.36	445.00	Option not Selected
	483292.23	3740137.36	445.40	
	483392.23	3740137.36	444.90	
	483492.23	3740137.36	443.70	
	483592.23	3740137.36	441.60	
	483692.23	3740137.36	439.50	
	483792.23	3740137.36	438.00	
	483892.23	3740137.36	436.70	
	483992.23	3740137.36	435.30	
	484092.23	3740137.36	434.20	
	484192.23	3740137.36	433.40	
	482992.23	3740237.36	444.50	
	483092.23	3740237.36	446.40	
	483192.23	3740237.36	447.00	
	483292.23	3740237.36	448.80	
	483392.23	3740237.36	447.30	
	483492.23	3740237.36	445.10	
	483592.23	3740237.36	443.30	
	483692.23	3740237.36	441.50	
	483792.23	3740237.36	440.00	
	483892.23	3740237.36	439.00	
	483992.23	3740237.36	438.00	
	484092.23	3740237.36	436.70	
	484192.23	3740237.36	435.00	
	482992.23	3740337.36	445.80	
	483092.23	3740337.36	448.30	
	483192.23	3740337.36	449.60	
	483292.23	3740337.36	451.10	
	483392.23	3740337.36	452.70	
	483492.23	3740337.36	449.20	
	483592.23	3740337.36	448.60	
	483692.23	3740337.36	453.80	
	483792.23	3740337.36	446.10	
	483892.23	3740337.36	443.60	
	483992.23	3740337.36	442.60	
	484092.23	3740337.36	440.30	
	484192.23	3740337.36	438.30	
	482992.23	3740437.36	447.30	
	483092.23	3740437.36	449.80	
	483192.23	3740437.36	452.70	
	483292.23	3740437.36	454.30	
	483392.23	3740437.36	456.40	
	483492.23	3740437.36	457.70	
	483592.23	3740437.36	455.80	
	483692.23	3740437.36	473.70	
	483792.23	3740437.36	458.90	
	483892.23	3740437.36	454.10	
	483992.23	3740437.36	449.50	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	484092.23	3740437.36	444.40	Option not Selected
	484192.23	3740437.36	442.90	
	482992.23	3740537.36	448.30	
	483092.23	3740537.36	451.60	
	483192.23	3740537.36	454.30	
	483292.23	3740537.36	456.70	
	483392.23	3740537.36	459.60	
	483492.23	3740537.36	467.00	
	483592.23	3740537.36	472.80	
	483692.23	3740537.36	478.70	
	483792.23	3740537.36	479.40	
	483892.23	3740537.36	470.00	
	483992.23	3740537.36	460.40	
	484092.23	3740537.36	450.80	
	484192.23	3740537.36	448.80	
	482992.23	3740637.36	449.10	
	483092.23	3740637.36	451.80	
	483192.23	3740637.36	455.00	
	483292.23	3740637.36	459.10	
	483392.23	3740637.36	462.20	
	483492.23	3740637.36	464.40	
	483592.23	3740637.36	470.80	
	483692.23	3740637.36	474.70	
	483792.23	3740637.36	484.90	
	483892.23	3740637.36	484.30	
	483992.23	3740637.36	483.10	
	484092.23	3740637.36	462.40	
	484192.23	3740637.36	455.60	
	482992.23	3740737.36	450.10	
	483092.23	3740737.36	452.60	
	483192.23	3740737.36	456.20	
	483292.23	3740737.36	460.10	
	483392.23	3740737.36	466.60	
	483492.23	3740737.36	467.60	
	483592.23	3740737.36	477.40	
	483692.23	3740737.36	475.00	
	483792.23	3740737.36	483.50	
	483892.23	3740737.36	495.80	
	483992.23	3740737.36	497.80	
	484092.23	3740737.36	474.10	
	484192.23	3740737.36	461.20	
	482992.23	3740837.36	451.60	
	483092.23	3740837.36	453.70	
	483192.23	3740837.36	458.10	
	483292.23	3740837.36	462.70	
	483392.23	3740837.36	471.10	
	483492.23	3740837.36	473.30	
	483592.23	3740837.36	474.40	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483692.23	3740837.36	480.30	Option not Selected
	483792.23	3740837.36	480.70	
	483892.23	3740837.36	494.80	
	483992.23	3740837.36	490.80	
	484092.23	3740837.36	477.10	
	484192.23	3740837.36	472.80	
	482992.23	3740937.36	453.00	
	483092.23	3740937.36	455.60	
	483192.23	3740937.36	458.50	
	483292.23	3740937.36	465.50	
	483392.23	3740937.36	470.00	
	483492.23	3740937.36	475.70	
	483592.23	3740937.36	480.20	
	483692.23	3740937.36	481.60	
	483792.23	3740937.36	485.10	
	483892.23	3740937.36	487.50	
	483992.23	3740937.36	489.50	
	484092.23	3740937.36	481.40	
	484192.23	3740937.36	485.10	
	482992.23	3741037.36	453.80	
	483092.23	3741037.36	457.00	
	483192.23	3741037.36	459.80	
	483292.23	3741037.36	465.10	
	483392.23	3741037.36	482.90	
	483492.23	3741037.36	484.50	
	483592.23	3741037.36	484.70	
	483692.23	3741037.36	488.00	
	483792.23	3741037.36	490.30	
	483892.23	3741037.36	492.20	
	483992.23	3741037.36	494.60	
	484092.23	3741037.36	490.60	
	484192.23	3741037.36	506.00	
	482992.23	3741137.36	455.60	
	483092.23	3741137.36	458.90	
	483192.23	3741137.36	462.60	
	483292.23	3741137.36	467.50	
	483392.23	3741137.36	474.70	
	483492.23	3741137.36	483.80	
	483592.23	3741137.36	488.20	
	483692.23	3741137.36	494.10	
	483792.23	3741137.36	496.30	
	483892.23	3741137.36	499.80	
	483992.23	3741137.36	497.50	
	484092.23	3741137.36	496.40	
	484192.23	3741137.36	504.50	
	482992.23	3741237.36	456.70	
	483092.23	3741237.36	460.30	
	483192.23	3741237.36	464.40	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483292.23	3741237.36	468.40	Option not Selected
	483392.23	3741237.36	474.30	
	483492.23	3741237.36	482.60	
	483592.23	3741237.36	493.20	
	483692.23	3741237.36	500.20	
	483792.23	3741237.36	506.70	
	483892.23	3741237.36	509.40	
	483992.23	3741237.36	506.50	
	484092.23	3741237.36	498.90	
	484192.23	3741237.36	493.20	
	482992.23	3741337.36	458.80	
	483092.23	3741337.36	461.20	
	483192.23	3741337.36	465.50	
	483292.23	3741337.36	469.90	
	483392.23	3741337.36	474.90	
	483492.23	3741337.36	481.90	
	483592.23	3741337.36	501.50	
	483692.23	3741337.36	509.50	
	483792.23	3741337.36	520.70	
	483892.23	3741337.36	523.20	
	483992.23	3741337.36	517.00	
	484092.23	3741337.36	514.60	
	484192.23	3741337.36	501.60	
	482992.23	3741437.36	460.40	
	483092.23	3741437.36	463.20	
	483192.23	3741437.36	467.00	
	483292.23	3741437.36	472.80	
	483392.23	3741437.36	478.20	
	483492.23	3741437.36	484.90	
	483592.23	3741437.36	496.30	
	483692.23	3741437.36	512.50	
	483792.23	3741437.36	540.90	
	483892.23	3741437.36	544.70	
	483992.23	3741437.36	527.00	
	484092.23	3741437.36	531.70	
	484192.23	3741437.36	498.40	
	482992.23	3741537.36	461.80	
	483092.23	3741537.36	464.10	
	483192.23	3741537.36	467.70	
	483292.23	3741537.36	473.50	
	483392.23	3741537.36	479.40	
	483492.23	3741537.36	486.30	
	483592.23	3741537.36	496.10	
	483692.23	3741537.36	507.90	
	483792.23	3741537.36	535.50	
	483892.23	3741537.36	573.80	
	483992.23	3741537.36	557.70	
	484092.23	3741537.36	532.30	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	484192.23	3741537.36	491.30	Option not Selected
	482992.23	3741637.36	463.70	
	483092.23	3741637.36	466.10	
	483192.23	3741637.36	468.70	
	483292.23	3741637.36	473.70	
	483392.23	3741637.36	479.30	
	483492.23	3741637.36	486.70	
	483592.23	3741637.36	495.20	
	483692.23	3741637.36	505.30	
	483792.23	3741637.36	522.40	
	483892.23	3741637.36	553.40	
	483992.23	3741637.36	565.90	
	484092.23	3741637.36	520.90	
	484192.23	3741637.36	485.60	
	482992.23	3741737.36	468.00	
	483092.23	3741737.36	468.20	
	483192.23	3741737.36	471.00	
	483292.23	3741737.36	475.20	
	483392.23	3741737.36	481.50	
	483492.23	3741737.36	488.70	
	483592.23	3741737.36	497.20	
	483692.23	3741737.36	506.20	
	483792.23	3741737.36	515.10	
	483892.23	3741737.36	531.10	
	483992.23	3741737.36	562.80	
	484092.23	3741737.36	526.90	
	484192.23	3741737.36	485.70	
	482992.23	3741837.36	470.10	
	483092.23	3741837.36	472.20	
	483192.23	3741837.36	473.30	
	483292.23	3741837.36	475.90	
	483392.23	3741837.36	481.50	
	483492.23	3741837.36	487.00	
	483592.23	3741837.36	496.50	
	483692.23	3741837.36	521.20	
	483792.23	3741837.36	546.20	
	483892.23	3741837.36	534.10	
	483992.23	3741837.36	558.20	
	484092.23	3741837.36	529.90	
	484192.23	3741837.36	483.70	
	482992.23	3741937.36	475.10	
	483092.23	3741937.36	475.90	
	483192.23	3741937.36	476.20	
	483292.23	3741937.36	478.60	
	483392.23	3741937.36	484.80	
	483492.23	3741937.36	489.50	
	483592.23	3741937.36	497.30	
	483692.23	3741937.36	516.70	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483792.23	3741937.36	558.20	Option not Selected
	483892.23	3741937.36	561.30	
	483992.23	3741937.36	533.50	
	484092.23	3741937.36	526.80	
	484192.23	3741937.36	483.70	
	482992.23	3742037.36	483.50	
	483092.23	3742037.36	480.40	
	483192.23	3742037.36	481.50	
	483292.23	3742037.36	481.80	
	483392.23	3742037.36	484.90	
	483492.23	3742037.36	490.10	
	483592.23	3742037.36	496.80	
	483692.23	3742037.36	506.60	
	483792.23	3742037.36	516.30	
	483892.23	3742037.36	512.80	
	483992.23	3742037.36	503.10	
	484092.23	3742037.36	487.70	
	484192.23	3742037.36	477.60	
	482992.23	3742137.36	493.20	
	483092.23	3742137.36	485.80	
	483192.23	3742137.36	487.00	
	483292.23	3742137.36	487.00	
	483392.23	3742137.36	487.90	
	483492.23	3742137.36	494.90	
	483592.23	3742137.36	497.80	
	483692.23	3742137.36	511.80	
	483792.23	3742137.36	510.20	
	483892.23	3742137.36	496.10	
	483992.23	3742137.36	489.00	
	484092.23	3742137.36	480.70	
	484192.23	3742137.36	473.60	
	482992.23	3742237.36	500.10	
	483092.23	3742237.36	493.00	
	483192.23	3742237.36	494.30	
	483292.23	3742237.36	494.00	
	483392.23	3742237.36	494.50	
	483492.23	3742237.36	496.30	
	483592.23	3742237.36	507.30	
	483692.23	3742237.36	509.70	
	483792.23	3742237.36	511.00	
	483892.23	3742237.36	507.90	
	483992.23	3742237.36	487.70	
	484092.23	3742237.36	478.80	
	484192.23	3742237.36	472.60	
	482992.23	3742337.36	506.90	
	483092.23	3742337.36	500.40	
	483192.23	3742337.36	502.10	
	483292.23	3742337.36	501.70	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483392.23	3742337.36	503.00	Option not Selected
	483492.23	3742337.36	503.50	
	483592.23	3742337.36	501.20	
	483692.23	3742337.36	506.70	
	483792.23	3742337.36	509.20	
	483892.23	3742337.36	490.20	
	483992.23	3742337.36	481.90	
	484092.23	3742337.36	475.00	
	484192.23	3742337.36	469.10	
	482992.23	3742437.36	524.20	
	483092.23	3742437.36	511.50	
	483192.23	3742437.36	510.40	
	483292.23	3742437.36	516.30	
	483392.23	3742437.36	514.70	
	483492.23	3742437.36	517.90	
	483592.23	3742437.36	515.80	
	483692.23	3742437.36	507.30	
	483792.23	3742437.36	494.40	
	483892.23	3742437.36	490.70	
	483992.23	3742437.36	484.40	
	484092.23	3742437.36	474.80	
	484192.23	3742437.36	468.60	
	482992.23	3742537.36	502.60	
	483092.23	3742537.36	512.40	
	483192.23	3742537.36	531.30	
	483292.23	3742537.36	527.80	
	483392.23	3742537.36	542.90	
	483492.23	3742537.36	547.30	
	483592.23	3742537.36	540.70	
	483692.23	3742537.36	502.30	
	483792.23	3742537.36	487.80	
	483892.23	3742537.36	488.90	
	483992.23	3742537.36	480.00	
	484092.23	3742537.36	471.90	
	484192.23	3742537.36	467.10	
	482992.23	3742637.36	494.50	
	483092.23	3742637.36	501.70	
	483192.23	3742637.36	527.30	
	483292.23	3742637.36	536.70	
	483392.23	3742637.36	515.80	
	483492.23	3742637.36	532.80	
	483592.23	3742637.36	514.00	
	483692.23	3742637.36	496.70	
	483792.23	3742637.36	489.70	
	483892.23	3742637.36	482.30	
	483992.23	3742637.36	477.40	
	484092.23	3742637.36	472.10	
	484192.23	3742637.36	467.50	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	482992.23	3742737.36	483.90	Option not Selected
	483092.23	3742737.36	486.70	
	483192.23	3742737.36	489.60	
	483292.23	3742737.36	491.40	
	483392.23	3742737.36	493.60	
	483492.23	3742737.36	496.80	
	483592.23	3742737.36	499.50	
	483692.23	3742737.36	498.00	
	483792.23	3742737.36	490.90	
	483892.23	3742737.36	486.80	
	483992.23	3742737.36	480.90	
	484092.23	3742737.36	475.30	
	484192.23	3742737.36	471.00	
	482992.23	3742837.36	475.50	
	483092.23	3742837.36	476.60	
	483192.23	3742837.36	479.90	
	483292.23	3742837.36	479.70	
	483392.23	3742837.36	480.50	
	483492.23	3742837.36	483.30	
	483592.23	3742837.36	495.40	
	483692.23	3742837.36	511.30	
	483792.23	3742837.36	508.20	
	483892.23	3742837.36	490.50	
	483992.23	3742837.36	487.50	
	484092.23	3742837.36	481.20	
	484192.23	3742837.36	475.40	
	482992.23	3742937.36	468.10	
	483092.23	3742937.36	469.50	
	483192.23	3742937.36	472.90	
	483292.23	3742937.36	474.00	
	483392.23	3742937.36	478.10	
	483492.23	3742937.36	482.00	
	483592.23	3742937.36	482.00	
	483692.23	3742937.36	497.60	
	483792.23	3742937.36	505.50	
	483892.23	3742937.36	497.70	
	483992.23	3742937.36	489.30	
	484092.23	3742937.36	485.20	
	484192.23	3742937.36	481.40	
	482992.23	3743037.36	463.00	
	483092.23	3743037.36	464.50	
	483192.23	3743037.36	465.50	
	483292.23	3743037.36	467.20	
	483392.23	3743037.36	477.80	
	483492.23	3743037.36	480.10	
	483592.23	3743037.36	483.00	
	483692.23	3743037.36	489.30	
	483792.23	3743037.36	496.00	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483892.23	3743037.36	502.30	Option not Selected
	483992.23	3743037.36	499.30	
	484092.23	3743037.36	494.50	
	484192.23	3743037.36	487.10	
	482992.23	3743137.36	459.40	
	483092.23	3743137.36	462.30	
	483192.23	3743137.36	463.70	
	483292.23	3743137.36	465.30	
	483392.23	3743137.36	475.20	
	483492.23	3743137.36	475.80	
	483592.23	3743137.36	484.00	
	483692.23	3743137.36	492.70	
	483792.23	3743137.36	506.50	
	483892.23	3743137.36	515.70	
	483992.23	3743137.36	519.40	
	484092.23	3743137.36	514.20	
	484192.23	3743137.36	502.90	
	482992.23	3743237.36	457.30	
	483092.23	3743237.36	459.80	
	483192.23	3743237.36	462.20	
	483292.23	3743237.36	464.30	
	483392.23	3743237.36	474.40	
	483492.23	3743237.36	475.10	
	483592.23	3743237.36	482.80	
	483692.23	3743237.36	496.00	
	483792.23	3743237.36	532.50	
	483892.23	3743237.36	568.50	
	483992.23	3743237.36	584.40	
	484092.23	3743237.36	585.00	
	484192.23	3743237.36	560.40	
	482992.23	3743337.36	457.40	
	483092.23	3743337.36	459.00	
	483192.23	3743337.36	462.10	
	483292.23	3743337.36	464.90	
	483392.23	3743337.36	467.60	
	483492.23	3743337.36	474.20	
	483592.23	3743337.36	482.60	
	483692.23	3743337.36	518.70	
	483792.23	3743337.36	566.90	
	483892.23	3743337.36	620.50	
	483992.23	3743337.36	656.50	
	484092.23	3743337.36	664.90	
	484192.23	3743337.36	598.90	
	482992.23	3743437.36	455.80	
	483092.23	3743437.36	459.00	
	483192.23	3743437.36	461.00	
	483292.23	3743437.36	461.20	
	483392.23	3743437.36	469.30	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483492.23	3743437.36	475.40	Option not Selected
	483592.23	3743437.36	497.80	
	483692.23	3743437.36	543.50	
	483792.23	3743437.36	606.90	
	483892.23	3743437.36	646.00	
	483992.23	3743437.36	681.90	
	484092.23	3743437.36	702.70	
	484192.23	3743437.36	650.10	
	482992.23	3743537.36	455.70	
	483092.23	3743537.36	457.00	
	483192.23	3743537.36	458.80	
	483292.23	3743537.36	465.70	
	483392.23	3743537.36	470.10	
	483492.23	3743537.36	486.40	
	483592.23	3743537.36	536.70	
	483692.23	3743537.36	570.00	
	483792.23	3743537.36	611.30	
	483892.23	3743537.36	658.60	
	483992.23	3743537.36	705.00	
	484092.23	3743537.36	740.80	
	484192.23	3743537.36	697.80	

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	481367.86	3742732.67	441.40	Option not Selected
	481467.86	3742732.67	439.80	
	481567.86	3742732.67	440.50	
	481667.86	3742732.67	441.50	
	481767.86	3742732.67	443.20	
	481867.86	3742732.67	444.80	
	481967.86	3742732.67	447.30	
	482067.86	3742732.67	452.70	
	482167.86	3742732.67	462.70	
	482267.86	3742732.67	495.40	
	482367.86	3742732.67	502.20	
	482467.86	3742732.67	495.30	
	482567.86	3742732.67	495.30	
	482667.86	3742732.67	484.20	
	482767.86	3742732.67	481.10	
	482867.86	3742732.67	482.50	
	482967.86	3742732.67	484.60	
	481367.86	3742832.67	441.50	
	481467.86	3742832.67	440.90	
	481567.86	3742832.67	440.20	
	481667.86	3742832.67	441.20	
	481767.86	3742832.67	442.40	
	481867.86	3742832.67	443.80	
	481967.86	3742832.67	446.00	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	482067.86	3742832.67	450.10	Option not Selected
	482167.86	3742832.67	460.60	
	482267.86	3742832.67	471.00	
	482367.86	3742832.67	472.60	
	482467.86	3742832.67	475.10	
	482567.86	3742832.67	475.40	
	482667.86	3742832.67	473.00	
	482767.86	3742832.67	471.10	
	482867.86	3742832.67	473.80	
	482967.86	3742832.67	475.50	
	481367.86	3742932.67	439.90	
	481467.86	3742932.67	437.70	
	481567.86	3742932.67	440.90	
	481667.86	3742932.67	441.30	
	481767.86	3742932.67	442.40	
	481867.86	3742932.67	443.80	
	481967.86	3742932.67	445.20	
	482067.86	3742932.67	447.10	
	482167.86	3742932.67	451.00	
	482267.86	3742932.67	455.60	
	482367.86	3742932.67	459.20	
	482467.86	3742932.67	460.70	
	482567.86	3742932.67	462.40	
	482667.86	3742932.67	463.60	
	482767.86	3742932.67	465.30	
	482867.86	3742932.67	466.70	
	482967.86	3742932.67	468.40	
	481367.86	3743032.67	438.80	
	481467.86	3743032.67	437.90	
	481567.86	3743032.67	440.80	
	481667.86	3743032.67	441.30	
	481767.86	3743032.67	442.10	
	481867.86	3743032.67	443.50	
	481967.86	3743032.67	444.60	
	482067.86	3743032.67	446.40	
	482167.86	3743032.67	446.50	
	482267.86	3743032.67	449.30	
	482367.86	3743032.67	451.50	
	482467.86	3743032.67	452.40	
	482567.86	3743032.67	454.20	
	482667.86	3743032.67	455.30	
	482767.86	3743032.67	459.50	
	482867.86	3743032.67	461.00	
	482967.86	3743032.67	462.20	
	481367.86	3743132.67	440.20	
	481467.86	3743132.67	441.00	
	481567.86	3743132.67	441.20	
	481667.86	3743132.67	441.60	

Receptor Pathway

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	481767.86	3743132.67	442.10	Option not Selected
	481867.86	3743132.67	443.40	
	481967.86	3743132.67	444.30	
	482067.86	3743132.67	446.80	
	482167.86	3743132.67	447.10	
	482267.86	3743132.67	450.00	
	482367.86	3743132.67	450.30	
	482467.86	3743132.67	451.90	
	482567.86	3743132.67	455.20	
	482667.86	3743132.67	456.70	
	482767.86	3743132.67	456.00	
	482867.86	3743132.67	457.80	
	482967.86	3743132.67	459.20	

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	486053.76	3739441.06	449.90	Option not Selected
	486153.76	3739441.06	453.40	
	486253.76	3739441.06	455.70	
	486353.76	3739441.06	459.20	
	486453.76	3739441.06	462.90	
	486553.76	3739441.06	466.70	
	486653.76	3739441.06	467.70	
	486753.76	3739441.06	475.90	
	486853.76	3739441.06	481.30	
	486953.76	3739441.06	486.80	
	487053.76	3739441.06	493.60	
	487153.76	3739441.06	505.30	
	486053.76	3739541.06	450.50	
	486153.76	3739541.06	452.80	
	486253.76	3739541.06	455.30	
	486353.76	3739541.06	458.40	
	486453.76	3739541.06	461.50	
	486553.76	3739541.06	464.90	
	486653.76	3739541.06	465.70	
	486753.76	3739541.06	473.20	
	486853.76	3739541.06	477.60	
	486953.76	3739541.06	483.90	
	487053.76	3739541.06	492.80	
	487153.76	3739541.06	500.20	
	486053.76	3739641.06	448.50	
	486153.76	3739641.06	451.90	
	486253.76	3739641.06	454.70	
	486353.76	3739641.06	457.90	
	486453.76	3739641.06	460.30	
	486553.76	3739641.06	465.10	
	486653.76	3739641.06	465.50	
	486753.76	3739641.06	472.50	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	486853.76	3739641.06	476.90	Option not Selected
	486953.76	3739641.06	482.50	
	487053.76	3739641.06	489.20	
	487153.76	3739641.06	495.10	
	486053.76	3739741.06	448.40	
	486153.76	3739741.06	452.00	
	486253.76	3739741.06	454.20	
	486353.76	3739741.06	456.60	
	486453.76	3739741.06	459.10	
	486553.76	3739741.06	462.90	
	486653.76	3739741.06	467.20	
	486753.76	3739741.06	471.80	
	486853.76	3739741.06	476.30	
	486953.76	3739741.06	483.10	
	487053.76	3739741.06	494.50	
	487153.76	3739741.06	504.30	
	486053.76	3739841.06	447.90	
	486153.76	3739841.06	450.60	
	486253.76	3739841.06	452.60	
	486353.76	3739841.06	454.90	
	486453.76	3739841.06	457.90	
	486553.76	3739841.06	462.50	
	486653.76	3739841.06	465.90	
	486753.76	3739841.06	469.80	
	486853.76	3739841.06	473.30	
	486953.76	3739841.06	477.50	
	487053.76	3739841.06	487.70	
	487153.76	3739841.06	490.50	
	486053.76	3739941.06	447.10	
	486153.76	3739941.06	448.60	
	486253.76	3739941.06	450.30	
	486353.76	3739941.06	452.90	
	486453.76	3739941.06	456.10	
	486553.76	3739941.06	459.90	
	486653.76	3739941.06	463.20	
	486753.76	3739941.06	465.20	
	486853.76	3739941.06	468.50	
	486953.76	3739941.06	473.30	
	487053.76	3739941.06	478.10	
	487153.76	3739941.06	481.00	
	486053.76	3740041.06	445.00	
	486153.76	3740041.06	446.20	
	486253.76	3740041.06	448.00	
	486353.76	3740041.06	450.80	
	486453.76	3740041.06	454.10	
	486553.76	3740041.06	458.10	
	486653.76	3740041.06	459.80	
	486753.76	3740041.06	462.10	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	486853.76	3740041.06	466.50	Option not Selected
	486953.76	3740041.06	470.40	
	487053.76	3740041.06	474.30	
	487153.76	3740041.06	477.10	
	486053.76	3740141.06	442.60	
	486153.76	3740141.06	444.00	
	486253.76	3740141.06	445.60	
	486353.76	3740141.06	448.40	
	486453.76	3740141.06	452.00	
	486553.76	3740141.06	454.50	
	486653.76	3740141.06	456.70	
	486753.76	3740141.06	460.20	
	486853.76	3740141.06	463.60	
	486953.76	3740141.06	467.60	
	487053.76	3740141.06	471.10	
	487153.76	3740141.06	474.90	
	486053.76	3740241.06	440.30	
	486153.76	3740241.06	441.60	
	486253.76	3740241.06	444.00	
	486353.76	3740241.06	447.20	
	486453.76	3740241.06	449.40	
	486553.76	3740241.06	452.30	
	486653.76	3740241.06	455.60	
	486753.76	3740241.06	459.60	
	486853.76	3740241.06	463.00	
	486953.76	3740241.06	466.70	
	487053.76	3740241.06	470.20	
	487153.76	3740241.06	474.10	
	486053.76	3740341.06	438.60	
	486153.76	3740341.06	440.30	
	486253.76	3740341.06	442.30	
	486353.76	3740341.06	444.80	
	486453.76	3740341.06	447.30	
	486553.76	3740341.06	450.60	
	486653.76	3740341.06	453.80	
	486753.76	3740341.06	457.70	
	486853.76	3740341.06	461.50	
	486953.76	3740341.06	464.80	
	487053.76	3740341.06	467.30	
	487153.76	3740341.06	472.40	
	486053.76	3740441.06	437.60	
	486153.76	3740441.06	438.80	
	486253.76	3740441.06	440.90	
	486353.76	3740441.06	443.10	
	486453.76	3740441.06	445.50	
	486553.76	3740441.06	447.80	
	486653.76	3740441.06	451.20	
	486753.76	3740441.06	455.10	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	486853.76	3740441.06	459.40	Option not Selected
	486953.76	3740441.06	462.10	
	487053.76	3740441.06	465.80	
	487153.76	3740441.06	469.40	
	486053.76	3740541.06	436.40	
	486153.76	3740541.06	438.40	
	486253.76	3740541.06	439.80	
	486353.76	3740541.06	441.80	
	486453.76	3740541.06	444.50	
	486553.76	3740541.06	447.60	
	486653.76	3740541.06	450.50	
	486753.76	3740541.06	453.60	
	486853.76	3740541.06	456.50	
	486953.76	3740541.06	459.20	
	487053.76	3740541.06	463.30	
	487153.76	3740541.06	467.50	
	486053.76	3740641.06	436.00	
	486153.76	3740641.06	437.20	
	486253.76	3740641.06	439.10	
	486353.76	3740641.06	441.20	
	486453.76	3740641.06	443.50	
	486553.76	3740641.06	446.60	
	486653.76	3740641.06	449.50	
	486753.76	3740641.06	452.90	
	486853.76	3740641.06	456.20	
	486953.76	3740641.06	458.90	
	487053.76	3740641.06	460.80	
	487153.76	3740641.06	464.50	
	486053.76	3740741.06	435.30	
	486153.76	3740741.06	436.90	
	486253.76	3740741.06	438.50	
	486353.76	3740741.06	440.60	
	486453.76	3740741.06	443.10	
	486553.76	3740741.06	446.00	
	486653.76	3740741.06	448.80	
	486753.76	3740741.06	451.90	
	486853.76	3740741.06	454.70	
	486953.76	3740741.06	457.00	
	487053.76	3740741.06	459.90	
	487153.76	3740741.06	460.80	
	486053.76	3740841.06	435.00	
	486153.76	3740841.06	436.40	
	486253.76	3740841.06	438.50	
	486353.76	3740841.06	440.60	
	486453.76	3740841.06	443.10	
	486553.76	3740841.06	445.40	
	486653.76	3740841.06	447.80	
	486753.76	3740841.06	450.30	

Receptor Pathway

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	486853.76	3740841.06	452.20	Option not Selected
	486953.76	3740841.06	454.60	
	487053.76	3740841.06	456.60	
	487153.76	3740841.06	460.00	

Meteorology Pathway

Met Input Data

Surface Met Data

Filename: C:\Users\smyers\Desktop\Met Data\PERI_V9_ADJU\PERI_v9.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: C:\Users\smyers\Desktop\Met Data\PERI_V9_ADJU\PERI_v9.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 1,467.00 [ft]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2010			
Upper Air		2010			
On-Site		2010			

Data Period

Data Period to Process

Start Date: 1/1/2010 Start Hour: 1 End Date: 12/31/2016 End Hour: 24

Wind Speed Categories

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

Output Pathway

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: Stoneridge Commerce Center Construction.AD

Averaging Period	Source Group ID	High Value	File Name
1	ALL	1st	01H1GALL.PLT
Annual	ALL	N/A	AN00GALL.PLT

Results Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.18057	ug/m^3	484192.23	3741137.36	504.50	0.00	764.70	6/9/2014, 6
ANNUAL		0.04287	ug/m^3	484192.23	3742337.36	469.10	0.00	764.70	

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.16484	ug/m^3	Fut McCann	484179.65	3741167.05	496.92	0.00	764.69	2/11/2015, 8
1-HR	1ST	0.15302	ug/m^3	Fut McCann	484174.79	3741458.65	501.56	0.00	764.69	2/11/2015, 8
1-HR	1ST	0.13373	ug/m^3	Fut McCann	484155.35	3741930.07	495.97	0.00	764.69	6/29/2016, 6
1-HR	1ST	0.13652	ug/m^3	Fut McCann	484160.21	3742289.71	472.10	0.00	764.69	7/24/2016, 21
1-HR	1ST	0.13450	ug/m^3	Fut McCann	484169.93	3742746.55	472.32	0.00	764.69	9/18/2016, 20
1-HR	1ST	0.06247	ug/m^3	Middle Sch	483544.35	3743003.42	481.98	0.00	764.69	9/10/2015, 20
1-HR	1ST	0.06244	ug/m^3	Ele Sch	483475.70	3742848.22	482.52	0.00	764.69	7/19/2011, 6
1-HR	1ST	0.02103	ug/m^3	SE Comm	486224.98	3739906.11	450.76	0.00	730.61	2/4/2015, 17
1-HR	1ST	0.02024	ug/m^3	SE Comm	486213.54	3740392.13	440.95	0.00	677.66	10/29/2016, 17
1-HR	1ST	0.02188	ug/m^3	S Comm	485450.31	3739469.76	437.50	0.00	673.79	6/25/2016, 19
1-HR	1ST	0.03006	ug/m^3	W Comm	482278.28	3742264.20	460.99	0.00	764.69	6/23/2014, 6
1-HR	1ST	0.03318	ug/m^3	W Sch	482255.62	3741499.48	446.16	0.00	764.69	9/2/2014, 7
1-HR	1ST	0.02816	ug/m^3	N Sch	482822.08	3743408.45	453.17	0.00	764.69	4/5/2015, 7
1-HR	1ST	0.02147	ug/m^3	E Comm	486550.00	3741504.57	438.25	0.00	764.69	1/27/2015, 17
1-HR	1ST	0.02016	ug/m^3	E Comm	486450.71	3741032.94	441.24	0.00	441.24	10/22/2014, 17
1-HR	1ST	0.02495	ug/m^3	SW Res	482631.48	3740163.30	438.18	0.00	438.18	9/21/2016, 7
1-HR	1ST	0.04839	ug/m^3	NE Vacant	486161.19	3744297.25	452.04	0.00	764.69	9/28/2011, 7
ANNUAL		0.02897	ug/m^3	Fut McCann	484179.65	3741167.05	496.92	0.00	764.69	
ANNUAL		0.02406	ug/m^3	Fut McCann	484174.79	3741458.65	501.56	0.00	764.69	
ANNUAL		0.02355	ug/m^3	Fut McCann	484155.35	3741930.07	495.97	0.00	764.69	

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.03350	ug/m^3	Fut McCann	484160.21	3742289.71	472.10	0.00	764.69	
ANNUAL		0.03434	ug/m^3	Fut McCann	484169.93	3742746.55	472.32	0.00	764.69	
ANNUAL		0.00885	ug/m^3	Middle Sch	483544.35	3743003.42	481.98	0.00	764.69	
ANNUAL		0.00893	ug/m^3	Ele Sch	483475.70	3742848.22	482.52	0.00	764.69	
ANNUAL		0.00434	ug/m^3	SE Comm	486224.98	3739906.11	450.76	0.00	730.61	
ANNUAL		0.00482	ug/m^3	SE Comm	486213.54	3740392.13	440.95	0.00	677.66	
ANNUAL		0.00473	ug/m^3	S Comm	485450.31	3739469.76	437.50	0.00	673.79	
ANNUAL		0.00316	ug/m^3	W Comm	482278.28	3742264.20	460.99	0.00	764.69	
ANNUAL		0.00317	ug/m^3	W Sch	482255.62	3741499.48	446.16	0.00	764.69	
ANNUAL		0.00401	ug/m^3	N Sch	482822.08	3743408.45	453.17	0.00	764.69	
ANNUAL		0.00456	ug/m^3	E Comm	486550.00	3741504.57	438.25	0.00	764.69	
ANNUAL		0.00460	ug/m^3	E Comm	486450.71	3741032.94	441.24	0.00	441.24	
ANNUAL		0.00332	ug/m^3	SW Res	482631.48	3740163.30	438.18	0.00	438.18	
ANNUAL		0.00369	ug/m^3	NE Vacant	486161.19	3744297.25	452.04	0.00	764.69	

ATTACHMENT C

Project Operational Health Risk Assessment

Operational Health Risk Assessment

Stoneridge Commerce Center Specific Plan

Riverside County, California

Prepared For:

County of Riverside Planning Department
4080 Lemon Street, 12th Floor
Riverside, California

Owner Applicant:

Richland Planned Communities, Inc.
3161 Michelson Drive, Suite 425
Irvine, California

July 2020

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

CONTENTS

LIST OF TABLES

APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
ASF	Age sensitivity factor
ATCM	Air Toxic Control Measure
Basin	South Coast Air Basin
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
DOORS	Diesel Off-Road Reporting System

LIST OF ACRONYMS AND ABBREVIATIONS

DPM	Diesel Particulate Matter
EMFAC	EMission FACtor model
FAH	Fraction of time at home
FCAA	federal Clean Air Act
HAP	Hazardous Air Pollutants
HRA	Health Risk Assessment
kg	Kilogram
MSAT	Mobile Source Air Toxic
NAAQS	National Ambient Air Quality Standards
NESHAPs	National Emissions Standards for Hazardous Air Pollutants
NO_X	Oxides of Nitrogen
O_3	Ozone
OEHHA	Office of Environmental Health Hazard Assessment
PERP	Portable Equipment Registration Program
PM	Particulate matter
PM_{10}	Particulate matter less than 10 microns in diameter
Project	Stoneridge Commerce Center Specific Plan Project
REL	Reference Exposure Level
Risk Reduction Plan	Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles
SCAQMD	South Coast Air Quality Management District
SRA	Source receptor area
TACs	Toxic Air Contaminants
USEPA	U.S. Environmental Protection Agency
$\mu g/m^3$	Micrograms per cubic meter

1.0 INTRODUCTION

This report evaluates the potential health risks associated with the operation of the Stoneridge Commerce Center Specific Plan Project (Project), which includes the development of a 582.6-acre site in the western portion of unincorporated Riverside County (County), California. The purpose of this Health Risk Assessment (HRA) is to evaluate potential health risks associated with Toxic Air Contaminants (TAC) including Diesel Particulate Matter (DPM) resulting from the implementation of the Proposed Specific Plan (Project), under both the Primary Land Use Plan and Alternative Land Use Plan. This Health Risk Assessment was prepared in accordance with the requirements of the South Coast Air Quality Management District (SCAQMD) and guidance from the Office of Environmental Health Hazard Assessment (OEHHA) to determine if health risks are likely to occur from the proposed Project. Technical data is included in Appendix A.

1.1 Project Description and Location

The Project site is located in the western portion of unincorporated Riverside County, more specifically within the Lakeview/ Nuevo community. The Project site is a 582.6-acre property located south of the Ramona Expressway, north of Nuevo Road, east of Foothill Drive, and west of the future extension of Menifee Road. Under existing conditions, the Project site is vacant and undeveloped but has been disturbed in the past by agricultural activities and on-going discing for fire abatement purposes. The site is generally bound by Ramona Expressway with undeveloped land to the north, undeveloped/ agricultural land with residents beyond to the east, Nuevo Road and undeveloped/ agricultural land to the south, and undeveloped/ agricultural land to the west with Lakeside Middle School, Sierra Vista Elementary School and residents beyond.

The Project is proposing two separate land use plans for the Project site. The "Primary Land Use Plan" anticipates that the Project would be constructed with Ramona Expressway providing primary access from the north and Nuevo Road providing access from the south and would include a mix of light industrial, business park, commercial retail, open space conservation, open space conservation habitat, and major roadways. The "Alternative Land Use Plan" would accommodate the same land uses but anticipates the construction of a regional transportation facility, the "Mid-County Parkway (MCP)," a segment of which, along with an interchange, are planned to traverse the northwestern portions of the Project site. The Riverside County Transportation Commission has not secured or identified funding for the segment of the MCP which traverses the Project area, and therefore the timing of this segment of the MCP and the associated interchange is unknown at this time.

2.0 HEALTH RISK ASSESSMENT

2.1 Environmental Setting

2.1.1 Climate and Meteorology

The CARB divides the State into 15 air basins that share similar meteorological and topographical features. The Project site lies within the central portion of the South Coast Air Basin (Basin). The Basin is a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, in addition to the San Gorgonio Pass area in Riverside County. The Basin's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

Climate

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. The climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as manmade influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants throughout the Basin. These factors along with applicable regulations are discussed below.

The average annual temperature varies little throughout the Basin, averaging 75°F. However, with a less-pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have had recorded temperatures over 100°F in recent years.

Meteorology

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically nine to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the Basin.

A temperature inversion is defined as an increase in temperature with height, or to the layer within which such an increase occurs. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities.

Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Inversions are usually lower before sunrise than during the day. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone (O_3) observed during summer months in the Basin. Smog in southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.

The area in which the Project is located offers clear skies and sunshine, yet is still susceptible to air inversions. These inversions trap a layer of stagnant air near the ground, where it is then further loaded with pollutants. These inversions cause haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources.

Toxic Air Contaminants

TACs are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances. They may be emitted from a variety of common sources including gasoline stations, automobiles, dry cleaners, industrial operations, and painting operations. The current California list of TACs includes approximately 200 compounds, including particulate emissions from diesel-fueled engines.

Hazardous Air Pollutants (HAPs) is a term used by the federal Clean Air Act (FCAA) that includes a variety of pollutants generated or emitted by industrial production activities. Identified as TACs under the California Clean Air Act (CCAA), 10 have been singled out through ambient air quality data as being the most substantial health risk in California. Direct exposure to these pollutants has been shown to cause cancer, birth defects, damage to the brain and nervous system, and respiratory disorders. CARB provides emission inventories for only the larger air basins.

TACs do not have ambient air quality standards because no safe levels of TACs can be determined. Instead, TAC impacts are evaluated by calculating the health risks associated with a given exposure. The requirements of the Air Toxic "Hot Spots" Information and Assessment Act (Assembly Bill [AB] 2588) apply to facilities that use, produce, or emit toxic chemicals. Facilities subject to the toxic emission inventory requirements of the act must prepare and submit toxic emission inventory plans and reports, and periodically update those reports.

Toxic contaminants often result from fugitive emissions during fuel storage and transfer activities and from leaking valves and pipes. For example, the electronics industry, including semiconductor manufacturing, uses highly toxic chlorinated solvents in semiconductor production processes. Sources of air toxics go beyond industry, however. Automobile exhaust also contains toxic air pollutants such as benzene and 1,3-butadiene. The following are health effects related to common TACs:

Acetaldehyde

Acetaldehyde is directly emitted into the atmosphere and is also formed in the atmosphere from photochemical oxidation. Acetaldehyde is generated as exhaust from mobile sources and fuel

combustion from stationary internal combustion engines, boilers, and process heaters. Acetaldehyde is a carcinogen that can also cause chronic non-cancer toxicity in the respiratory system. Symptoms of chronic intoxication of acetaldehyde in humans resemble those of alcoholism. The primary short-term effect of inhalation exposure to acetaldehyde is irritation of the eyes, skin, and respiratory tract. At higher exposure levels, erythematic, coughing, and pulmonary edema, and necrosis may also occur.

Benzene

Approximately 84 percent of the benzene emitted in California comes from motor vehicles, including evaporative leakage and unburned fuel exhaust. Benzene is highly carcinogenic and occurs throughout California. Benzene also has non-cancer health effects. Brief inhalation exposure to high concentrations can cause central nervous system symptoms of nausea, tremors, drowsiness, dizziness, headache, intoxication, and unconsciousness.

Neurological symptoms of inhalation exposure to benzene include drowsiness, dizziness, headaches, and unconsciousness. Ingestion of large amounts of benzene may result in vomiting, dizziness, and convulsions. Exposure to liquid and vapor may irritate the skin, eyes, and upper respiratory tract. Redness and blisters may result from dermal exposure to benzene. Chronic inhalation of certain levels of benzene causes blood disorders because benzene specifically affects bone marrow, which produces blood cells. Aplastic anemia, excessive bleeding, and damage to the immune system (by changes in blood levels of antibodies and loss of white blood cells) may develop. Increased incidence of leukemia (cancer of the tissues that form white blood cells) has been observed in humans occupationally exposed to benzene.

1,3-Butadiene

The majority of 1,3-butadiene emissions comes from incomplete combustion of gasoline and diesel fuels. 1,3-butadiene has been identified as a carcinogen in California. Butadiene vapors at elevated levels cause neurological effects such as blurred vision, fatigue, headache, and vertigo. Dermal exposure to 1,3-butadiene causes a sensation of cold, followed by a burning sensation, and can lead to frostbite. Chronic exposure to 1,3-butadiene via inhalation has been shown to result in an increase in cardiovascular diseases, and increase in the occurrence of leukemia, and an increased incidence of respiratory, bladder, stomach, and lymphatic-hematopoietic cancers.

Para-Dichlorobenzene

The primary sources of para-dichlorobenzene include consumer products such as non-aerosol insect repellents and solid air fresheners. These sources contribute 99 percent of statewide para-dichlorobenzene emissions. In California, para-dichlorobenzene has been identified as a carcinogen. Acute exposure to 1,4-dichlorobenzene via inhalation in humans results in irritation to the eyes, skin, and throat. In addition, long-term inhalation exposure may affect the liver, skin, and central nervous system.

Formaldehyde

Formaldehyde is both directly emitted into the atmosphere and formed in the atmosphere as a result of photochemical oxidation. Formaldehyde is a product of incomplete combustion, and one of the primary

sources of formaldehyde is vehicular exhaust. Formaldehyde can also be found in many consumer products as an antimicrobial agent and is used in fumigants and soil disinfectants.

Acute formaldehyde inhalation exposure can result in eye, nose, and throat irritation and effects on the nasal cavity. Other effects seen from exposure to high levels of formaldehyde in humans are coughing, wheezing, chest pains, and bronchitis. Chronic inhalation exposure to formaldehyde has been associated with respiratory symptoms and eye, nose, and throat irritation. In California, formaldehyde has been identified as a carcinogen, and occupational studies have shown associations between exposure to formaldehyde and increased incidence of lung and nasopharyngeal cancer.

Methylene Chloride

Methylene chloride is a solvent used in paint stripping operations and as a blowing and cleaning agent in the manufacture of polyurethane foam and plastic. Paint removers account for the largest use of methylene chloride in California. Inhalation exposure to extremely high levels of methylene chloride can be fatal to humans. Acute inhalation exposure to high levels of methylene chloride can result in decreased visual, auditory, and psychomotor functions, but these effects are reversible once exposure ceases. Methylene chloride also irritates the nose and throat at high concentrations. The major effects from chronic inhalation exposure to methylene chloride are headaches, dizziness, nausea, and memory loss. Chronic exposure can also lead to bone marrow, hepatic, and renal toxicity. California considers methylene chloride to be carcinogenic.

Perchloroethylene

Perchloroethylene is used as a solvent, primarily in dry cleaning operations. Perchloroethylene is also used in degreasing operations, paints and coatings, adhesives, aerosols, specialty chemical production, printing inks, silicones, rug shampoos and laboratory solvents. Perchloroethylene vapors are irritating to the eyes and respiratory tract and chronic exposure can result in liver toxicity, kidney dysfunction, and neurological disorders. California identifies perchloroethylene as a carcinogen.

Diesel Particulate Matter

DPM is emitted from both mobile and stationary sources. In California, on-road diesel-fueled engines contribute approximately 24 percent of the statewide total, with an additional 71 percent attributed to other mobile sources such as construction and mining equipment, agricultural equipment, and transport refrigeration units. Stationary sources contribute about five percent of total DPM. It should be noted that CARB has developed several plans and programs to reduce diesel emissions such as the Diesel Risk Reduction Plan, the Statewide Portable Equipment Registration Program (PERP), and the Diesel Off-Road Reporting System (DOORS). The PERP and DOORS programs allow owners or operators of portable engines and certain other types of equipment can register their units in order to operate their equipment throughout California without having to obtain individual permits from local air districts.

Diesel exhaust and many individual substances contained in it (including arsenic, benzene, formaldehyde, and nickel) have the potential to contribute to mutations in cells that can lead to cancer. Long-term exposure to diesel exhaust particles poses the highest cancer risk of any TAC evaluated by OEHHA. CARB

estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

In its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Using information from OEHHA's assessment, CARB estimates that diesel particle levels measured in California's air in 2000 could cause 540 "excess" cancers in a population of one million people over a 70-year lifetime. Other researchers and scientific organizations, including the National Institute for Occupational Safety and Health, have calculated cancer risks from diesel exhaust similar to those developed by OEHHA and CARB.

Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Diesel engines are a major source of fine particulate pollution. The elderly and people with emphysema, asthma, and chronic heart and lung disease are especially sensitive to fine-particle pollution. Numerous studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Because children's lungs and respiratory systems are still developing, they are also more susceptible than healthy adults to fine particles. Exposure to fine particles is associated with increased frequency of childhood illnesses and can also reduce lung function in children. In California, diesel exhaust particles have been identified as a carcinogen.

Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis.

The nearest existing noise-sensitive land uses to the Project site are Lakeside Middle School and Sierra Vista Elementary School to the west of the northern portion of the site, with a residential development beyond. Lakeside Middle School is located closest to the Project site boundary approximately 2,000 feet (0.4 miles) to the west. It is also noted that while not currently constructed, the approved McCanna Hills development is located directly adjacent to the Project's western boundary. Once built-out, commercial and residential land uses would exist on what is currently vacant land adjacent to the Project's western boundary.

2.2 Regulatory Framework

2.2.1 Federal

Clean Air Act

The FCAA was amended in 1990 to address a large number of air pollutants that are known to cause or may reasonably be anticipated to cause adverse effects to human health or adverse environmental effects. 188 specific pollutants and chemical groups were initially identified as HAPs, and the list has been modified over time. The FCAA Amendments included new regulatory programs to control acid deposition and for the issuance of stationary source operating permits.

In 2001, the U.S. Environmental Protection Agency (USEPA) issued its first Mobile Source Air Toxics Rule, which identified 21 mobile source air toxic (MSAT) compounds as being HAPs that required regulation. A subset of six of these MSAT compounds were identified as having the greatest influence on health and included benzene, 1,3-butadiene, formaldehyde, acrolein, acetaldehyde, and DPM. More recently, the USEPA issued a second MSAT Rule in February 2007, which generally supported the findings in the first rule and provided additional recommendations of compounds having the greatest impact on health. The rule also identified several engine emission certification standards that must be implemented. Unlike the criteria pollutants, toxics do not have National Ambient Air Quality Standards (NAAQS) making evaluation of their impacts more subjective.

National Emissions Standards for Hazardous Air Pollutants (NESHAPs) were incorporated into a greatly expanded program for controlling toxic air pollutants. The provisions for attainment and maintenance of the NAAQS were substantially modified and expanded. Other revisions included provisions regarding stratospheric ozone protection, increased enforcement authority, and expanded research programs.

Section 112 of the FCAA Amendments governs the federal control program for HAPs. NESHAPs are issued to limit the release of specified HAPs from specific industrial sectors. These standards are technology-based, meaning that they represent the best available control technology an industrial sector could afford. The level of emissions controls required by NESHAPs are not based on health risk considerations because allowable releases and resulting concentrations have not been determined to be safe for the general public. The FCAA does not establish air quality standards for HAPs that define legally acceptable concentrations of these pollutants in ambient air.

2.2.2 State

California Air Resources Board

CARB's statewide comprehensive air toxics program was established in 1983 with AB 1807 the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic

effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the state's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by Senate Bill 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Mobile Source Strategy

In 2016 CARB released the update to the Mobile Source Strategy (Strategy). This demonstrates how the state will meet air quality standards, achieve GHG emission reduction targets, decrease health risks from transportation emissions, and reduce petroleum consumption over the next 15 years. This includes engine technology that is effectively 90 percent cleaner than today's current standards, with clean, renewable fuels comprising half the fuels burned.

The strategy also relies on the increased use of renewable fuels to ensure that air pollutant reductions are achieved while meeting the ongoing demand for liquid and gaseous fuels in applications where combustion technologies remain, including in heavy-duty trucks and equipment and light-duty hybrid vehicles. The estimated benefits of the Mobile Source Strategy in reducing emissions from mobile sources includes an 80 percent reduction of O_3-forming emissions (ROG and NOx), and a 45 percent reduction in DPM emissions in the Basin from current levels. Statewide, the Strategy would also result in a 45 percent reduction of GHG emissions and a 50 percent reduction in the consumption of petroleum-based fuels.

Governor's Sustainable Freight Action Plan

Under the Governor's Sustainable Freight Action Plan strategy, CARB is working with agency partners and stakeholders to implement a broad program that includes regulations, incentives, and policies designed to support the transformation to a more sustainable freight system and reduce community impacts from freight operations in California. The Governor's Sustainable Freight Action Plan identifies strategies and actions to achieve a sustainable freight transportation system that meets California's environmental, energy, mobility, safety and economic needs. The plan also identifies and initiates corridor-level freight pilot projects within the state's primary trade corridors that integrate advanced technologies, alternative fuels, freight and fuel infrastructure and local economic development opportunities. The plan seeks to improve the state freight system efficiency 25 percent by "increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030" as well as to deploy over 100,000 zero-emission freight vehicles and equipment and maximizing near-zero equipment and equipment powered by renewable energy by 2030.

Diesel Risk Reduction Plan

The identification of DPM as a TAC in 1998 led CARB to adopt the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles* (Risk Reduction Plan) in October 2000. The Risk Reduction Plan's goals included an 85 percent reduction in DPM by 2020 from the 2000 baseline (CARB 2000). The Risk Reduction Plan includes regulations to establish cleaner new diesel engines, cleaner in-use diesel engines (retrofits), and cleaner diesel fuel.

Truck and Bus Regulation Reducing Emissions from Existing Diesel Vehicles

On December 12, 2008, CARB approved the Truck and Bus Regulation to significantly reduce particulate matter (PM) and oxides of nitrogen (NO_X) emissions from existing diesel vehicles operating in California. The regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Heavier trucks must be retrofitted with PM filters beginning January 1, 2012, and older trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses would need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. Small fleets with three or fewer diesel trucks can delay compliance for heavier trucks by reporting and there are a number of extensions for low-mileage construction trucks, early PM filter retrofits, adding cleaner vehicles, and other situations. Privately and publicly owned school buses have different requirements.

Heavy-Duty Vehicle Idling Emission Reduction Program

The purpose of the CARB ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling is to reduce public exposure to diesel particulate matter and criteria pollutants by limiting the idling of diesel-fueled commercial vehicles.[1] The driver of any vehicle subject to this ATCM is prohibited from idling the vehicle's primary diesel engine for greater than five minutes at any location and is prohibited from idling a diesel-fueled auxiliary power system for more than five minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

CARB Final Regulation Order, Requirements to Reduce Idling Emissions from New and In-Use Trucks, beginning in 2008, would require that new 2008 and subsequent model-year heavy-duty diesel engines be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged.

1 The *ATCM to Limit Diesel-Fueled Commercial Motor Vehicle Idling* is codified in Title 13 of the California Code of Regulations, Chapter 10, Section 2485.

Advanced Clean Trucks: Accelerating Zero-Emission Truck Markets (Proposed)

The proposed Advanced Clean Truck Regulation is part of a holistic approach to accelerate a large-scale transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. The proposal is subject to change until the CARB Board makes a final decision, expected in 2020. The proposed regulation has two components including a manufacturer sales requirement, and a reporting requirement:

- Zero-emission truck sales: Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines would be required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b – 3 truck sales, 75 percent of class 4 – 8 straight truck sales, and 40 percent of truck tractor sales.
- Company and fleet reporting: Large employers including retailers, manufacturers, brokers and others would be required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, would be required to report about their existing fleet operations. This information would help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

Today, electric drivetrains are well suited to operating in congested urban areas for stop-and-go driving where conventional engines are least efficient. Battery-electric and fuel-cell electric trucks, buses, and 2 | Page vans already are being used by fleets that operate locally and have predictable daily use where the trucks return to base to be charged or fueled. There are more than 70 different models of zero-emission vans, trucks and buses that already are commercially available from several manufacturers. Most trucks and vans operate less than 100 miles per day and several zero-emission configurations are available to serve that need. As technology advances, zero-emission trucks will become suitable for more applications. Most major truck manufacturers have announced plans to introduce market ready zero-emission trucks in the near future.

2.2.3 Local

South Coast Air Quality Management District

The CCAA provides the SCAQMD with the authority to manage transportation activities at indirect sources and regulate stationary source emissions. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. An example would be the motor vehicles at an intersection, a mall, and on highways. As a state agency, CARB regulates motor vehicles and fuels for their emissions.

The *Air Toxics Control Plan* (March 2000, revised March 26, 2004) is a planning document designed to examine the overall direction of the SCAQMD's air toxics control program. It includes development and implementation of strategic initiatives to monitor and control air toxics emissions. Control strategies that are deemed viable and are within the SCAQMD's jurisdiction will each be brought to the SCAQMD Board for further consideration through the normal public review process. Strategies that are to be

implemented by other agencies will be developed in a cooperative effort, and the progress will be periodically reported to the Board.

The SCAQMD has conducted an in-depth analysis of the toxic air contaminants and their resulting health risks for all of Southern California. This study, the *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV,"* shows that cancer risk has decreased more than 50 percent between MATES III (2008) and MATES IV (2015).

MATES-IV is the most comprehensive dataset documenting the ambient air toxic levels and health risks associated with the Basin emissions. Therefore, MATES-IV study represents the baseline health risk for a cumulative analysis. MATES-IV estimates the average excess cancer risk level from exposure to TACs is less than 400 in one million basin-wide. These model estimates were based on monitoring data collected at 10 fixed sites within the Basin. None of the fixed monitoring sites are within the local area of the Project site. However, MATES-IV has extrapolated the excess cancer risk levels throughout the basin by modeling the specific grids. MATES-IV modeling predicted an excess cancer risk of 427 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68 percent of the total risk shown in MATES-IV.

The ongoing MATES V Study includes a fixed site monitoring program with ten stations, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize risk across the Basin. The study focuses on the carcinogenic risk from exposure to air toxics but does not estimate mortality or other health effects from particulate exposures.

The purpose of the MATES V fixed site monitoring is to characterize long-term regional air toxics levels in residential and commercial areas. To complement and enhance the fixed site monitoring, MATES V efforts will include advanced state-of-the-art monitoring technologies, low-cost sensor networks, and near real-time data and community engagement to conduct enhanced air toxics monitoring at local scales with a focus on EJ communities, especially those near refineries.

The motivation behind the enhanced monitoring efforts is to better characterize air toxics levels in highly impacted areas, to provide higher resolution air quality data, and to better understand emissions from petroleum refineries and warehouses.

2.3 Health Risk and Hazard Assessment

2.3.1 Thresholds of Significance

In order to determine whether or not a proposed project would cause a significant effect on the environment, the impact of the project must be determined by examining the types and levels of air toxics generated and the associated impacts on factors that affect air quality. While the final determination of significance thresholds is within the purview of the lead agency pursuant to the state CEQA Guidelines, the SCAQMD recommends that the following air pollution thresholds be used by lead agencies in determining whether the Proposed Project is significant. If it is determined that the Proposed Project has the potential to exceed the air pollution thresholds, the Project should be considered significant. The thresholds for air toxic emissions are as follows.

- Cancer Risk: Emit carcinogenic or toxic contaminants that exceed the maximum individual cancer risk of 10 in one million.
- Non-Cancer Risk: Emit toxic contaminants that exceed the maximum hazard quotient of one in one million.

Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of 10 persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact. The 10-in-one-million standard is a very health-protective significance threshold. A risk level of 10 in one million implies a likelihood that up to 10 persons out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. This risk would be an excess cancer that is in addition to any cancer risk borne by a person not exposed to these air toxics. To put this risk in perspective, the risk of dying from accidental drowning is 1,000 in a million, which is 100 times more than the SCAQMD's threshold of 10 in one million.

The SCAQMD has also established non-carcinogenic risk parameters for use in HRAs. Noncarcinogenic risks are quantified by calculating a "hazard index," expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A hazard index less of than one (1.0) means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures of less than 1.0 are considered less than significant.

2.3.2 Methodology

This HRA evaluates potential health risks associated with the emission of DPM resulting from the implementation of the Proposed Specific Plan under both the Primary Land Use Plan and Alternative Land Use Plan. As previously described, CARB estimates that about 70 percent of the cancer risk that the average Californian faces from breathing toxic air pollutants stems from diesel exhaust particles.

The air dispersion modeling for the HRA was performed using the USEPA AERMOD dispersion model. AERMOD is a steady-state, multiple-source, Gaussian dispersion model designed for use with emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (not a factor in this case). AERMOD requires hourly meteorological data consisting of wind vector, wind speed, temperature, stability class, and mixing height. Surface and upper air meteorological data provided by the SCAQMD for the Perris (237 ½ North D Street, Perris) air quality monitoring station was selected as being the most representative meteorology based on proximity to the Project site (approximately 3.5 miles distant) and the fact that the Perris air quality monitoring station is located in the same SCAQMD Source Receptor Area (SRA). SCAQMD SRAs are categorized based on existing ambient pollutant concentrations and meteorological conditions. The SCAQMD divides the Basin into 38 SRAs to forecast and report air quality. Both the Project site and the Perris air quality monitoring station are located in SCAQMD SRA 24, known as the Perris Valley.

23 area sources spanning varying dimensions, as provided by the Project applicant, have been placed throughout the Primary Land Use Plan. Further, emissions sources in the model include a line source (comprised of 101 line-volume sources) representing the onsite truck circulation at the Project site, and a line source (comprised of 84 line-volume sources) representing the offsite truck circulation extending approximately two miles to the west along Ramona Expressway, where there are many sensitive receptors, and one mile to the east of the Project site along the Ramona Expressway. According to Urban Crossroads (2020), under the Primary Land Use Plan 98 percent of all truck traffic would travel west on Ramona Expressway and the remainder would travel east.

Under the Alternative Land Use Plan, 23 area sources spanning varying dimensions, as provided by the Project applicant, have been placed. Further, emissions sources in the model include a line source (comprised of 95 line-volume sources) representing the onsite truck circulation at the Project site, a line source (comprised of 61 line-volume sources) representing the offsite truck circulation extending approximately two miles to the west of the Project site along the future Mid County Parkway, a line source (comprised of 84 line-volume sources) representing the offsite truck circulation extending approximately three miles to the west on Ramon Expressway, and a line source (comprised of 39 line-volume sources) representing offsite truck traffic extending approximately one mile east of the Project site along the future Mid County Parkway. According to Urban Crossroads (2020), under the Alternative Land Use Plan 94 percent of all truck traffic would travel west on the future Mid County Parkway, four percent would travel west on the Ramona Expressway, and two percent would travel east on the future Mid County Parkway.

The separated line 2W volume source was employed consistent with the recommendations of the California Air Pollution Control Officers Association (CAPCOA) Health Risk Assessments for Proposed Land Use Projects (2009) document (page 54 of Attachment 1, *Technical Modeling Guidance*), which provides guidance for modeling roads/line sources in AERMOD. This guidance is necessary since AERMOD does not have a pollutant source option directly specific to mobile sources. According to CAPCOA, the best method for modeling emissions from travelling truck vehicles in AERMOD is to use a series of multiple volume sources. 2W volume sources involves a series of volume sources to approximate a line source. Using the width of the road as the length of the side of a single volume source, the number of volume sources along the length of the road is determined by dividing the length of the road by 2W. The number of volume sources is then determined in order to replicate a mobile source of pollutants traveling a roadway within the AERMOD software. This methodology is consistent with the USEPA *AERMOD User's Guide*. AERMOD can be used to predict the concentrations of pollutants emitted from vehicles on roads. The maximum daily exhaust emissions for all diesel equipment was used to produce an emission rate in terms of grams per second per square meter. Emissions from heavy trucks were assigned a release height of 3.65 meters in order to provide a conservative analysis (i.e., using a higher release height would result in a smaller impact by allowing pollutants to disperse before they affect a receptor).

The estimated number of daily heavy-duty trucks and predicted truck trip distribution patterns for each the Primary Land Use Plan and Alternative Land Use Plan were obtained from Urban Crossroads (2020).

The model was run to obtain the peak one-hour, 24-hour and annual average concentration in micrograms per cubic meter [$\mu g/m^3$] at nearby sensitive receptors as well as locations where future sensitive receptors are approved for construction. According to the SCAQMD's Supplemental Guidelines

for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588), air dispersion modeling is required to estimate (a) annual average concentrations to calculate the Maximum Individual Cancer Risk, the maximum chronic hazard index, the zones of impact and (b) peak hourly concentrations to calculate the health impact from substances with acute non-cancer health effects. To achieve these goals, the receptor grid should extend to cover the zone of impact. To achieve these goals, the receptor grid in the model begins at the facility fence line and extends to cover the zone of impact, which is the residential community (consisting of several schools) to the east. Per SCAQMD recommendations, in order "To identify the maximum impacted receptors (i.e., peak cancer risk and peak hazard indices) a grid spacing of 100 meters or less must be used" (SCAQMD 2018). The analysis does not miss potential peak concentration levels at any sensitive receptors as the potential peak concentration levels at sensitive receptors are identified through the examination of pollutant concentration contour mapping. Where multiple concentration levels are identified within a single receptor grid, the highest concentration level identified is used for the purpose of determining the health risk within that receptor grid.

Note that the concentration estimates developed using this methodology are considered conservative and are not a specific prediction of the actual concentrations that would occur as a result of the Project at any one point in time. Actual one-hour, 24-hour and annual average and concentrations are dependent on many variables, particularly the number and type of equipment working at specific distances during time periods of adverse meteorology.

A health risk computation was performed to determine the risk of developing an excess cancer risk calculated on a 70-year lifetime basis, 30-year, and 9-year exposure scenarios. The chronic and carcinogenic health risk calculations are based on the standardized equations contained in the OEHHA Guidance Manual (2015).

Based on the OEHHA methodology, the residential inhalation cancer risk from the annual average DPM concentrations are calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor (ASF), the frequency of time spent at home, and the exposure duration divided by averaging time, to yield the excess cancer risk. These factors are discussed in more detail below. It is important to note that exposure duration is based on continual heavy truck operations at the Project site. Cancer risk must be calculated separately for specified age groups, because of age differences in sensitivity to carcinogens and age differences in intake rates (per kilogram [kg] body weight). Separate risk estimates for these age groups provide a health-protective estimate of cancer risk by accounting for greater susceptibility in early life, including both age-related sensitivity and amount of exposure.

Exposure through inhalation ($Dose_{air}$) are a function of the breathing rate, the exposure frequency, and the concentration of a substance in the air. For residential exposure, the breathing rates are determined for specific age groups, so $Dose_{air}$ is calculated for each of these age groups, third trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. To estimate cancer risk, the dose was estimated by applying the following formula to each ground-level concentration:

$$\mathbf{Dose_{air} = (C_{air} * \{BR/BW\} * A * EF * 10^{-6})}$$

Where:

$Dose_{air}$	=	dose through inhalation (mg/kg/day)
C_{air}	=	air concentration (µg/m^3) from air dispersion model
{BR/BW}	=	daily breathing rate normalized to body weight (L/kg body weight – day) (361 L\kg BW-day for 3rd Trimester, 1,090 L/kg BW-day for 0<2 years, 861 L/kg BW-day for 2<9 years, 745 L/kg BW-day for 2<16 years, 335 L/kg BW-day for 16<30 years, and 209 L/kg BW-day 16<70 years)
A	=	Inhalation absorption factor (unitless [1])
EF	=	exposure frequency (unitless), days/365 days (0.96 [approximately 350 days per year])
10^{-6}	=	conversion factor (micrograms to milligrams, liters to cubic meters)

OEHHA developed ASFs to take into account the increased sensitivity to carcinogens during early-in-life exposure. In the absence of chemical-specific data, OEHHA recommends a default ASF of 10 for the third trimester to age two years, an ASF of 3 for ages two through 15 years to account for potential increased sensitivity to carcinogens during childhood, and an ASF of one for ages 16 through 70 years.

Fraction of time at home (FAH) during the day is used to adjust exposure duration and cancer risk from a specific facility's emissions, based on the assumption that exposure to the facility's emissions are not occurring away from home. OEHHA recommends the following FAH values: from the third trimester to age <2 years, 85 percent of time is spent at home; from age two through <16 years, 72 percent of time is spent at home; from age 16 years and greater, 73 percent of time is spent at home.

To estimate the cancer risk, the dose is multiplied by the cancer potency factor, the ASF, the exposure duration divided by averaging time, and the frequency of time spent at home (for residents only):

$$\mathbf{Risk_{inh\text{-}res} = (Dose_{air} * CPH * ASF * ED/AT * FAH)}$$

Where:

$Risk_{inh\text{-}res}$	=	residential inhalation cancer risk (potential chances per million)
$Dose_{air}$	=	daily dose through inhalation (mg/kg-day)
CPF	=	inhalation cancer potency factor (mg/kg-day^{-1})
ASF	=	age sensitivity factor for a specified age group (unitless)
ED	=	exposure duration (in years) for a specified age group (0.25 years for 3rd trimester, 2 years for 0<2, 7 years for 2<9, 14 years for 2<16, 14 years for 16<30, 54 years for 16-70)
AT	=	averaging time of lifetime cancer risk (years)
FAH	=	fraction of time spent at home (unitless)

Chronic Non-Cancer Hazard

Non-cancer chronic impacts are calculated by dividing the annual average concentration by the REL for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

$$\mathbf{Hazard\ Quotient = Ci/RELi}$$

Where:

Ci = Concentration in the air of substance i (annual average concentration in µg/m^3)
RELi = Chronic noncancer Reference Exposure Level for substance i (µg/m^3)

Acute Non-Cancer Hazard

The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts. The equation is as follows:

Acute HQ = Maximum Hourly Air Concentration (µg/m^3) / Acute REL (µg/m^3)

2.3.3 Impact Analysis

Project Risk and Hazard Assessment

CARB identified DPM as a TAC in 1998. Mobile sources (including trucks, buses, automobiles, trains, ships, and farm equipment) are by far the largest source of diesel emissions. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Diesel exhaust is composed of two phases, either gas or particulate; both contribute to the risk. The gas phase is composed of many of the urban HAPs, such as acetaldehyde, acrolein, benzene, 1,3-butadiene, formaldehyde, and polycyclic aromatic hydrocarbons. The particulate phase has many different types that can be classified by size or composition. The sizes of diesel particulates of greatest health concern are fine and ultrafine particles. These particles may be composed of elemental carbon with adsorbed[2] compounds such as organics, sulfates, nitrates, metals, and other trace elements. Diesel exhaust is emitted from a broad range of on- and off-road diesel engines. As the Project would accommodate daily visits from heavy-duty diesel trucks during operations, an analysis of DPM was performed using the USEPA-approved AERMOD model.

Carcinogenic Risk and Non-Carcinogenic Hazards

Vehicle DPM emissions were estimated using emission factors for course particulate matter less than 10 microns in diameter (PM_{10}) generated with the 2017 version of the EMission FACtor model (EMFAC) developed by CARB. EMFAC 2017 is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by CARB to project changes in future emissions from on-road mobile sources. The most recent version of this model, EMFAC 2017, incorporates regional motor vehicle data, information and estimates regarding the distribution of vehicle miles traveled by speed, and number of starts per day. The most important improvement in EMFAC 2017 is the integration of the new data and methods to estimate emissions from diesel trucks and buses. The model includes the emissions benefits of the truck and bus rule and the previously adopted rules for other on-road diesel equipment.

[2]This term is specifically used for gases.

For this Project, annual average PM_{10} emission factors were generated by running EMFAC 2017 for vehicles in the Basin within Riverside County. EMFAC generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of vehicle speed, temperature, and relative humidity. The model was run for speeds traveled on and within the vicinity of the Project site. The vehicle travel speeds for each segment modeled are summarized below.

- Idling (15 minutes per truck) – onsite loading/unloading; and
- 15 miles per hour – onsite vehicle movement including driving and maneuvering; and
- 35 miles per hour – offsite vehicle movement including driving and maneuvering.

The average PM_{10} emission factors for heavy trucks were calculated based on the annual average emission factors for various exposure periods associated with assumptions for evaluating exposure over three different periods (i.e., 70-, 30-, and 9-year exposure scenarios).

Primary Land Use Plan

Based on the AERMOD outputs, the highest concentration of annual average diesel PM_{10} emission would be 0.013 µg/m^3 occurring approximately 320 feet west the western boundary of the central portion of the Project site (Universal Transverse Mercator [UTM] coordinate 484206 South 3741860 East), which is vacant land and planned for residential and/or open space. The expected annual average diesel PM_{10} emission concentrations at the most exposed existing sensitive receptors (residences located on Rider Street and Whieldon Drive) resulting from operation of the Primary Land Use Plan (3,916 daily heavy-duty truck trips) would be 0.006 µg/m^3 at the greatest.

Cancer risk calculations for residences are based on 70-, 30-, and 9-year exposure periods while schools are based on a 9-year exposure period. The calculated carcinogenic risk at the sensitive receptor as a result of the Primary Land Use Plan is depicted in Table 1.

Table 1. Primary Land Use Plan Maximum Operational Health Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
70-Year Exposure	9.81	*10*	**No**
30-Year Exposure	8.86	*10*	**No**
9-Year Exposure	6.33	*10*	**No**
Planned Future Residences to the Northwest (McCanna Hills Development)			
70-Year Exposure	5.28	*10*	**No**
30-Year Exposure	4.77	*10*	**No**
9-Year Exposure	3.41	*10*	**No**
Lakeside Middle School			
9-Year Exposure	2.43	*10*	**No**
Sierra Vista Elementary School			
9-Year Exposure	0.97	*10*	**No**
Residences on Rider Street			
70-Year Exposure	4.53	*10*	**No**
30-Year Exposure	4.09	*10*	**No**
9-Year Exposure	2.92	*10*	**No**
Residences on Whieldon Drive			
70-Year Exposure	4.53	*10*	**No**
30-Year Exposure	4.09	*10*	**No**
9-Year Exposure	2.92	*10*	**No**
Residences on Reisling Drive			
70-Year Exposure	3.02	*10*	**No**
30-Year Exposure	2.73	*10*	**No**
9-Year Exposure	1.95	*10*	**No**
Avalon Elementary			
9-Year Exposure	0.49	*10*	**No**
Residences on Walnut Street			

Table 1. Primary Land Use Plan Maximum Operational Health Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Residences on Placentia Avenue			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Residences on Foothill Drive			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Residences on Reservoir Drive			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Residences on 12th Street			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Nuview Elementary School			
9-Year Exposure	0.49	*10*	**No**
Residences on Jack Circle			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Mountain Shadows Middle School			

Table 1. Primary Land Use Plan Maximum Operational Health Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
9-Year Exposure	0.00	*10*	**No**
Planned Residences to Northeast			
70-Year Exposure	1.51	*10*	**No**
30-Year Exposure	1.36	*10*	**No**
9-Year Exposure	0.97	*10*	**No**

Source: Refer to Appendix A for Model Data Outputs.
Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

As shown, impacts related to cancer risk from heavy-duty trucks operating under the Primary Land Use Plan would not exceed the cancer risk threshold at any of the nearest existing residences, planned residences or nearest schools.

In addition to cancer risk, the significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index at a sensitive receptor associated with DPM emissions from the Primary Land Use Plan is shown in Table 2.

Table 2. Primary Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Non-Cancer Hazard**	**Index Significance Threshold**	**Exceeds SCAQMD Significance Threshold?**
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
Chronic Hazard Index	0.026	*1*	**No**
Acute Hazard Index	0.068	*1*	**No**
Planned Future Residences to the Northwest (McCanna Hills Development)			
Chronic Hazard Index	0.001	*1*	**No**
Acute Hazard Index	0.036	*1*	**No**
Lakeside Middle School			
Chronic Hazard Index	0.001	*1*	**No**
Acute Hazard Index	0.026	*1*	**No**
Sierra Vista Elementary School			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.010	*1*	**No**
Residences on Rider Street			
Chronic Hazard Index	0.001	*1*	**No**
Acute Hazard Index	0.031	*1*	**No**
Residences on Whieldon Drive			
Chronic Hazard Index	0.001	*1*	**No**
Acute Hazard Index	0.031	*1*	**No**
Residences on Reisling Drive			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.021	*1*	**No**
Avalon Elementary			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Residences on Walnut Street			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**

Table 2. Primary Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Non-Cancer Hazard**	**Index Significance Threshold**	**Exceeds SCAQMD Significance Threshold?**
Residences on Placentia Avenue			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Residences on Foothill Drive			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Residences on Reservoir Drive			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Residences on 12th Street			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Nuview Elementary School			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.000	*1*	**No**
Residences on Jack Circle			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Mountain Shadows Middle School			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.000	*1*	**No**
Planned Residences to Northeast			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.010	*1*	**No**

Source: Refer to Appendix A for Model Data Outputs.
Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

As shown, impacts related to non-cancer risk (chronic and acute hazard index) from the Primary Land Use Plan would not surpass significance thresholds at the nearest existing residences, planned residences or nearest schools.

Alternative Land Use Plan

Based on the AERMOD outputs, the highest concentration of annual average diesel PM_{10} emission would be 0.013 µg/m^3 occurring within a few feet of the northeast boundary of the Project site (Universal Transverse Mercator [UTM] coordinate 485508 South 3743056 East), which is vacant land and not planned for any future sensitive receptors. The expected annual average diesel PM_{10} emission concentrations at the most exposed existing sensitive receptors (residences located on Rider Street and Whieldon Drive) resulting from operation of the Alternative Land Use Plan (3,850 daily heavy-duty truck trips) would be 0.002 µg/m^3 at the greatest.

Cancer risk calculations for residences are based on 70-, 30-, and 9-year exposure periods while schools are based on a 9-year exposure period. The calculated carcinogenic risk at the sensitive receptor as a result of the Alternative Land Use Plan is depicted in Table 3.

Table 3. Alternative Land Use Plan Maximum Operational Health Risk at the Project Vicinity

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Significance Threshold (Risk per Million)	Exceeds SCAQMD Significance Threshold?
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
70-Year Exposure	9.81	*10*	**No**
30-Year Exposure	8.86	*10*	**No**
9-Year Exposure	6.33	*10*	**No**
Planned Future Residences to the Northwest (McCanna Hills Development)			
70-Year Exposure	5.28	*10*	**No**
30-Year Exposure	4.77	*10*	**No**
9-Year Exposure	3.41	*10*	**No**
Lakeside Middle School			
9-Year Exposure	0.97	*10*	**No**
Sierra Vista Elementary School			
9-Year Exposure	0.97	*10*	**No**
Residences on Rider Street			
70-Year Exposure	1.51	*10*	**No**
30-Year Exposure	1.36	*10*	**No**

Table 3. Alternative Land Use Plan Maximum Operational Health Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
9-Year Exposure	0.97	*10*	**No**
Residences on Whieldon Drive			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Residences on Reisling Drive			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Avalon Elementary			
9-Year Exposure	0.49	*10*	**No**
Residences on Walnut Street			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Residences on Placentia Avenue			
70-Year Exposure	3.02	*10*	**No**
30-Year Exposure	2.73	*10*	**No**
9-Year Exposure	1.95	*10*	**No**
Residences on Foothill Drive			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Residences on Reservoir Drive			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**

Table 3. Alternative Land Use Plan Maximum Operational Health Risk at the Project Vicinity			
Exposure Scenario	**Maximum Cancer Risk (Risk per Million)**	**Significance Threshold (Risk per Million)**	**Exceeds SCAQMD Significance Threshold?**
9-Year Exposure	0.49	*10*	**No**
Residences on 12th Street			
70-Year Exposure	0.75	*10*	**No**
30-Year Exposure	0.68	*10*	**No**
9-Year Exposure	0.49	*10*	**No**
Nuview Elementary School			
9-Year Exposure	0.00	*10*	**No**
Residences on Jack Circle			
70-Year Exposure	0.00	*10*	**No**
30-Year Exposure	0.00	*10*	**No**
9-Year Exposure	0.00	*10*	**No**
Mountain Shadows Middle School			
9-Year Exposure	0.00	*10*	**No**
Planned Residences to Northeast			
70-Year Exposure	1.51	*10*	**No**
30-Year Exposure	1.36	*10*	**No**
9-Year Exposure	0.97	*10*	**No**

Source: Refer to Appendix A for Model Data Outputs.
Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

As shown, impacts related to cancer risk from heavy-duty trucks operating under the Alternative Land Use Plan would not exceed cancer risk thresholds at the nearest existing residences, planned residences or nearest schools.

In addition to cancer risk, the significance thresholds for TAC exposure requires an evaluation of non-cancer risk stated in terms of a hazard index. Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The potential for acute non-cancer hazards is evaluated by comparing the maximum short-term exposure level to an acute REL. RELs are designed to protect sensitive individuals within the population. The calculation of acute non-cancer impacts is similar to the procedure for chronic non-cancer impacts.

An acute or chronic hazard index of 1.0 is considered individually significant. The hazard index is calculated by dividing the acute or chronic exposure by the reference exposure level. The highest maximum chronic and acute hazard index at a sensitive receptor associated with DPM emissions from the Alternative Land Use Plan is shown in Table 4.

Table 4. Alternative Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity

Exposure Scenario	Maximum Non-Cancer Hazard	Index Significance Threshold	Exceeds SCAQMD Significance Threshold?
Highest Concentration Planned McCanna Hills Development to West (Residences and/or Open Space)			
Chronic Hazard Index	0.026	*1*	**No**
Acute Hazard Index	0.068	*1*	**No**
Planned Future Residences to the Northwest (McCanna Hills Development)			
Chronic Hazard Index	0.001	*1*	**No**
Acute Hazard Index	0.036	*1*	**No**
Lakeside Middle School			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.010	*1*	**No**
Sierra Vista Elementary School			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.010	*1*	**No**
Residences on Rider Street			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.010	*1*	**No**
Residences on Whieldon Drive			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Residences on Reisling Drive			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Avalon Elementary			
Chronic Hazard Index	0.000	*1*	**No**

Table 4. Alternative Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity			
Exposure Scenario	**Maximum Non-Cancer Hazard**	**Index Significance Threshold**	**Exceeds SCAQMD Significance Threshold?**
Acute Hazard Index	0.005	*1*	**No**
Residences on Walnut Street			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Residences on Placentia Avenue			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.021	*1*	**No**
Residences on Foothill Drive			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Residences on Reservoir Drive			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Residences on 12th Street			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.005	*1*	**No**
Nuview Elementary School			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.000	*1*	**No**
Residences on Jack Circle			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.000	*1*	**No**
Mountain Shadows Middle School			
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.000	*1*	**No**
Planned Residences to Northeast			

Table 4. Alternative Land Use Plan Maximum Operational Non-Cancer Risk at the Project Vicinity

Exposure Scenario	Maximum Non-Cancer Hazard	Index Significance Threshold	Exceeds SCAQMD Significance Threshold?
Chronic Hazard Index	0.000	*1*	**No**
Acute Hazard Index	0.010	*1*	**No**

Source: Refer to Appendix A for Model Data Outputs.
Notes: The elementary schools are only analyzed for nine years of exposure as students are not expected to attend school beyond those years.

As shown, impacts related to non-cancer risk (chronic and acute hazard index) from the Alternative Land Use Plan would not surpass significance thresholds at the nearest existing residences, planned residences or nearest schools.

3.0 REFERENCES

CAPCOA. 2009. *Health Risk Assessments for Proposed Land Use Projects*.

CARB. 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*.

OEHHA. 2015. *Guidance Manual for Preparation of Health Risk Assessments. Risk Assessment Guidelines. Air, Community, and Environmental Research Branch Office of Environmental Health Hazard Assessment*. California Environmental Protection Agency. February. Available online at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

SCAQMD. 2018. *AB 2588 and Rule 1402 Supplemental Guidelines (Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act*).

_____. 2015. *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV*. Final Report. May. Available online at: https://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15.pdf?sfvrsn=7.

_____. 2008. *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES III*. Available online at: https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iii.

_____. 2004. *Draft Addendum to the Air Toxics Control Plan (March 2000)*. March. Available online at: https://www.aqmd.gov/home/air-quality/clean-air-plans/clean-communities-plan/air-toxics-control-plan

_____. 2000. *An Air Toxics Control Plan for the Next Ten Years. Final Draft*. March. Available online at: https://www.aqmd.gov/docs/default-source/clean-air-plans/air-toxics-control-plan/air-toxics-control-plan.pdf?sfvrsn=2

Urban Crossroads. 2020. *Stoneridge Commerce Center Specific Plan (SP No. 239, A1) Traffic Impact Analysis*.

APPENDIX A

Health Risk Calculations and AERMOD Outputs

Stoneridge Commerce Center
DPM Emission Rates
Operations
Primary Land Use Plan

Stoneridge Commerce Center Specific Plan

DPM Emissions Calculations

Primary Land Use Plan

On-Site Truck Movement	Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Project Trucks	15	0.004752	3916	1.4	2.61E+01	3.02E-04

Off-Site Truck Movement - West on Ramona Ex	Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Project Trucks	35	0.003666	3838	2.8	3.94E+01	4.56E-04

Off-Site Truck Movement -East on Ramona Ex	Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Project Trucks	35	0.003666	78	1.0	2.86E-01	3.31E-06

On-Site Truck Idle Emissions	Emission Factor (g/veh/day)	Idling Time (min)	Idling Time (hrs/day)	Daily Trucks	Release Height Above Ground (m)	g/day	g/sec
Project Trucks	0.012647	15	1.04E-02	1958	3.65	2.58E-01	2.99E-06

On-Site TRU Emissions	Emission Factor (g/veh/day)	Idling Time (min)	Idling Time (hrs/day)	Daily Trucks	Release Height Above Ground (m)	g/day	g/sec
Project Trucks	0.2805	15	1.04E-02	630	3.65	1.84E+00	2.13E-05

Sources:

EMFAC2017. PM10 Emission Factors are derived from the Year 2030 Heavy-Duty Truck Fleet Mix and represent the weighted average of heavy-heavy duty trucks and medium-heavy duty trucks

TRU Emission Factors are derived from CARB's "Off-road Diesel Emission Factors"

Health Risk Calculations at Planned McCanna Hills Development

1 Hour Avg Concentration:	0.148
24 Hour Avg Concentration:	0.048
Annual Avg Concentration:	0.013

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = $(Cair*(BR/BW)*A*EF*10^{-6})$	4.50014E-06	1.35877E-05	1.07E-05	9.29E-06	4.17603E-06	2.605E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.50272E-07	3.62985E-06	2.55E-06	4.41E-06	6.706700E-07	1.614E-06

		Risk	in one million
Cancer Risk:	70-year exposure	9.81E-06	**9.81**
	30-year exposure	8.86E-06	**8.86**
	9-year exposure	6.33E-06	**6.33**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.013	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.60E-03**

C_i	1.30E-02	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **6.84E-02**

Max Hourly	1.30E-02
Acute REL (Acrolein)	0.19

Health Risk Calculations at Future McCanna Hills Residences

1 Hour Avg Concentration:	0.064
24 Hour Avg Concentration:	0.019
Annual Avg Concentration:	0.007

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	2.42315E-06	7.31644E-06	5.78E-06	5E-06	2.24863E-06	1.403E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	8.09159E-08	1.95453E-06	1.37E-06	2.38E-06	3.611300E-07	8.69E-07

		Risk	in one million
Cancer Risk:	70-year exposure	5.28E-06	**5.28**
	30-year exposure	4.77E-06	**4.77**
	9-year exposure	3.41E-06	**3.41**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.007	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **1.40E-03**

C_i	7.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **3.68E-02**

Max Hourly	7.00E-03
Acute REL (Acrolein)	0.19

Health Risk Calculations at Lakeside Middle School

Risk Calculations

1 Hour Avg Concentration:	0.034
24 Hour Avg Concentration:	0.010
Annual Avg Concentration:	0.005

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = $(Cair*(BR/BW)*A*EF*10^{-6})$	1.73082E-06	5.22603E-06	4.13E-06	3.57E-06	1.60616E-06	1.00205E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	5.77971E-08	1.3961E-06	9.81E-07	1.7E-06	2.579500E-07	6.2073E-07

		Risk	in one million
Cancer Risk	9-year exposure	2.43E-06	**2.43**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.005	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **1.00E-03**

C_i	5.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **2.63E-02**

Max Hourly	5.00E-03
Acute REL (Acrolein)	0.19

Health Risk Calculations at Sierra Vista Elementary

Risk Calculations

1 Hour Avg Concentration:	0.031
24 Hour Avg Concentration:	0.007
Annual Avg Concentration:	0.002

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = $(Cair*(BR/BW)*A*EF*10^{-6})$	6.92329E-07	2.09041E-06	1.65E-06	1.43E-06	6.42466E-07	4.0082E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	2.31188E-08	5.58438E-07	3.92E-07	6.79E-07	1.031800E-07	2.4829E-07

		Risk	in one million
Cancer Risk:	9-year exposure	9.74E-07	**0.97**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.002	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **4.00E-04**

C_i	2.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **1.05E-02**

Max Hourly	2.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Rider Street

Risk Calculations

1 Hour Avg Concentration:	0.031
24 Hour Avg Concentration:	0.011
Annual Avg Concentration:	0.006

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	2.07699E-06	6.27123E-06	4.95E-06	4.286E-06	1.9274E-06	1.202E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	6.93565E-08	1.67532E-06	1.18E-06	2.037E-06	3.095400E-07	7.449E-07

		Risk	in one million
Cancer Risk:	70-year exposure	4.53E-06	**4.53**
	30-year exposure	4.09E-06	**4.09**
	9-year exposure	2.92E-06	**2.92**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.006	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **1.20E-03**

C_i	6.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **3.16E-02**

Max Hourly	6.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Whieldon Drive

Risk Calculations

1 Hour Avg Concentration:	0.026
24 Hour Avg Concentration:	0.011
Annual Avg Concentration:	0.006

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	2.07699E-06	6.27123E-06	4.95E-06	4.29E-06	1.9274E-06	1.202E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	6.93565E-08	1.67532E-06	1.18E-06	2.04E-06	3.095400E-07	7.449E-07

		Risk	in one million
Cancer Risk:	70-year exposure	4.53E-06	**4.53**
	30-year exposure	4.09E-06	**4.09**
	9-year exposure	2.92E-06	**2.92**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.006	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **1.20E-03**

C_i	6.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **3.16E-02**

Max Hourly	6.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Reisling Drive

Risk Calculations

1 Hour Avg Concentration:	0.017
24 Hour Avg Concentration:	0.007
Annual Avg Concentration:	0.004

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	1.38466E-06	4.18082E-06	3.3E-06	2.8575E-06	1.28493E-06	8.0164E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	4.62377E-08	1.11688E-06	7.85E-07	1.3579E-06	2.063600E-07	4.9658E-07

		Risk	in one million
Cancer Risk:	70-year exposure	3.02E-06	**3.02**
	30-year exposure	2.73E-06	**2.73**
	9-year exposure	1.95E-06	**1.95**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.004	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **8.00E-04**

C_i	4.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **2.11E-02**

Max Hourly	4.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Avalon Elementary

Risk Calculations

1 Hour Avg Concentration:	0.018
24 Hour Avg Concentration:	0.005
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = $(Cair*(BR/BW)*A*EF*10^{-6})$	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Walnut Street

Risk Calculations

1 Hour Avg Concentration:	0.016
24 Hour Avg Concentration:	0.004
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.14384E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.39475E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-5}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Placentia Avenue

Risk Calculations

1 Hour Avg Concentration:	0.014
24 Hour Avg Concentration:	0.002
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.004E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.241E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Foothill Drive

Risk Calculations

1 Hour Avg Concentration:	0.029
24 Hour Avg Concentration:	0.004
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Reservoir Street

Risk Calculations

1 Hour Avg Concentration:	0.016
24 Hour Avg Concentration:	0.003
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-5}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on 12th Street

Risk Calculations

1 Hour Avg Concentration:	0.015
24 Hour Avg Concentration:	0.003
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Cancer Risk Calculations at Nuview Elementary School

Risk Calculations

1 Hour Avg Concentration:	0.012
24 Hour Avg Concentration:	0.001
Annual Avg Concentration:	0.000

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	0	0.00000E+00	0	0	0	0
Risk = DOSEair * CPF * ASF * ED/AT * FAH	0	0	0	0	0.000000E+00	0

		Risk	in one million
Cancer Risk:	9-year exposure	0.00E+00	**0.00**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **0.00E+00**

C_i	0.00E+00	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **0.00E+00**

Max Hourly	0.00E+00
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Jack Circle

Risk Calculations

1 Hour Avg Concentration:	0.015
24 Hour Avg Concentration:	0.003
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Cancer Risk Calculations at Mt. Shadows Middle School

Risk Calculations

1 Hour Avg Concentration:	0.011
24 Hour Avg Concentration:	0.001
Annual Avg Concentration:	0.000

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	0	0.00000E+00	0	0	0	0
Risk = DOSEair * CPF * ASF * ED/AT * FAH	0	0	0	0	0.000000E+00	0

		Risk	in one million
Cancer Risk:	9-year exposure	0.00E+00	**0.00**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **0.00E+00**

C_i	0.00E+00	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **0.00E+00**

Max Hourly	0.00E+00
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Planned Future Residences to Northeast

Risk Calculations

1 Hour Avg Concentration:	0.083
24 Hour Avg Concentration:	0.018
Annual Avg Concentration:	0.002

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	6.92329E-07	2.09041E-06	1.65E-06	1.4288E-06	6.42466E-07	4.0082E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	2.31188E-08	5.58438E-07	3.92E-07	6.7895E-07	1.031800E-07	2.4829E-07

		Risk	in one million
Cancer Risk:	70-year exposure	1.51E-06	**1.51**
	30-year exposure	1.36E-06	**1.36**
	9-year exposure	9.74E-07	**0.97**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.002	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **4.00E-04**

C_i	2.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

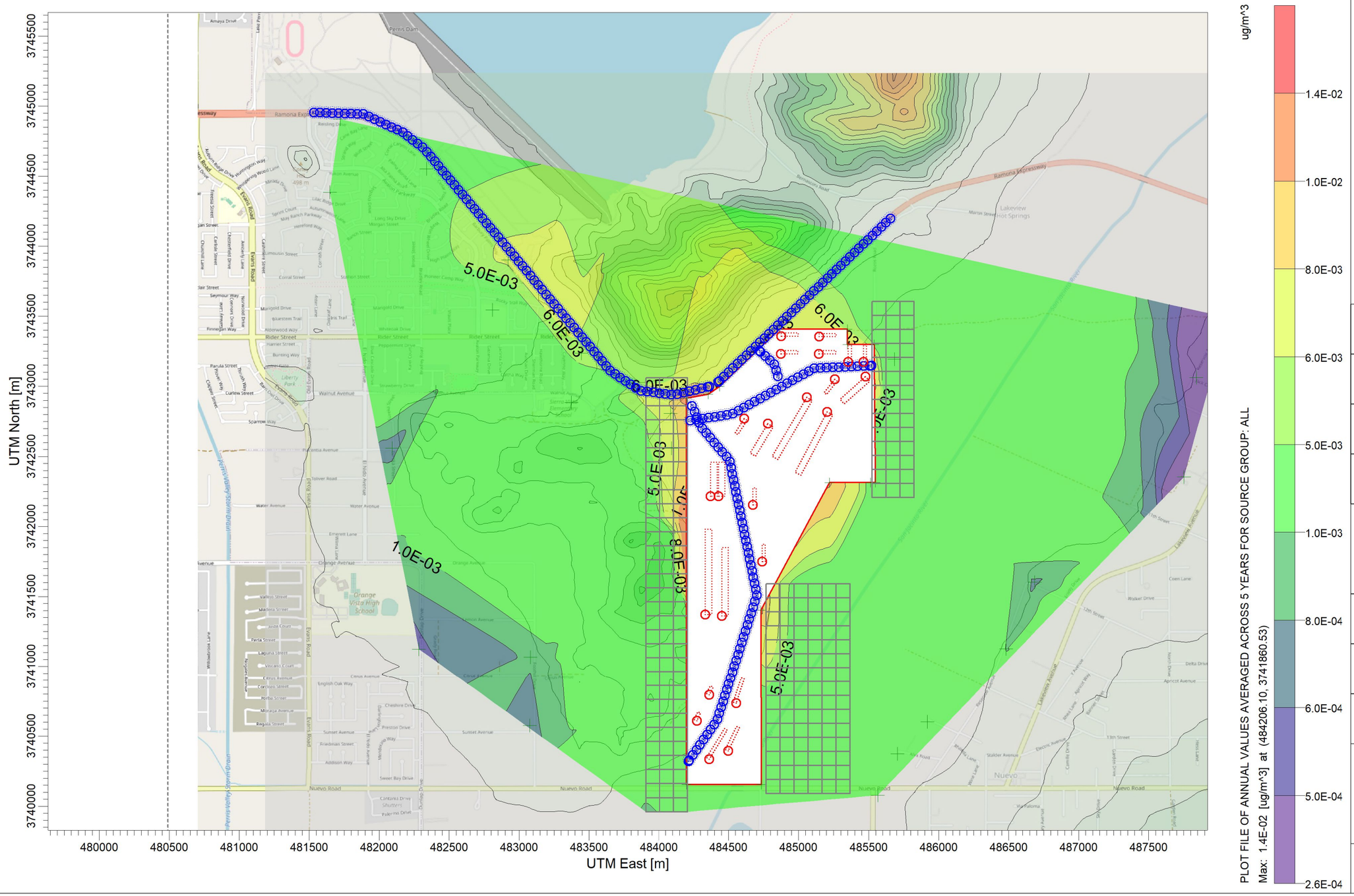
Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **1.05E-02**

Max Hourly	2.00E-03
Acute REL (Acrolein)	0.19

PROJECT TITLE:

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri



COMMENTS:

SOURCES:

28

RECEPTORS:

337

OUTPUT TYPE:

Concentration

MAX:

1.4E-02 ug/m^3

COMPANY NAME:

MODELER:

DATE:

8/11/2020

SCALE: 1:28,105

0 0.5 km

PROJECT NO.:

Control Pathway

Dispersion Options

Titles

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

Dispersion Options

☑ Regulatory Default ☐ Non-Default Options

Dispersion Coefficient

Urban

Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours

1	2	3	4	6	8	12	24
☑	☐	☐	☐	☐	☐	☐	☑

☐ Month ☐ Period ☑ Annual

Exponential Decay

Default half-life of 4 hours will be used

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: Stoneridge Commerce Center PLUP Operations.err

Source Pathway - Source Inputs

AERMOD

Source Pathway - Source Inputs

AERMOD

Area Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Length of X Side [m]	Length of Y Side [m]	Orientation Angle from North [deg]	Initial Vertical Dim. [m]
AREA	AREA1	484874.75	3743357.95	455.55	3.68	1.60E-9	121.92	22.86	0.00	
AREA	AREA2	484871.98	3743233.21	453.42	3.68	1.60E-9	121.96	22.86	0.00	
AREA	AREA3	485146.39	3743355.17	448.46	3.68	1.60E-9	121.92	22.86	0.00	
AREA	AREA4	485143.62	3743233.21	446.37	3.68	1.60E-9	121.92	22.86	0.00	
AREA	AREA5	485354.28	3743175.01	440.37	3.68	1.60E-9	22.86	121.92	0.00	
AREA	AREA6	485462.38	3743175.01	437.97	3.68	1.60E-9	22.86	121.92	0.00	
AREA	AREA7	485478.26	3743070.68	436.65	3.68	6.20E-9	243.84	45.72	138.54	
AREA	AREA8	485257.33	3743051.10	441.72	3.68	1.60E-9	121.92	22.86	128.29	
AREA	AREA9	485204.16	3742816.98	438.13	3.68	1.26E-8	487.68	45.72	118.11	
AREA	AREA10	484779.77	3742734.89	447.16	3.68	6.20E-9	243.84	45.72	121.12	
AREA	AREA11	484612.12	3742771.42	453.97	3.68	1.60E-9	121.92	22.86	122.20	
AREA	AREA12	485057.95	3742922.41	442.20	3.68	1.26E-8	487.68	45.72	120.28	
AREA	AREA13	484738.93	3741750.29	442.12	3.68	1.60E-9	22.86	121.92	0.00	

Source Pathway - Source Inputs

AERMOD

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Length of X Side [m]	Length of Y Side [m]	Orientation Angle from North [deg]	Initial Vertical Dim. [m]
AREA	AREA16	484673.63	3742153.97	447.05	3.68	1.60E-9	22.86	121.92	0.00	
AREA	AREA18	484451.88	3741361.54	460.07	3.68	1.26E-8	45.72	487.68	0.00	
AREA	AREA19	484272.53	3740608.25	450.48	3.68	8.00E-10	60.96	22.86	-63.43	
AREA	AREA20	484360.57	3740794.13	456.66	3.68	8.00E-10	60.96	22.86	-61.19	
AREA	AREA21	484361.91	3740335.70	435.19	3.68	3.10E-9	243.84	22.86	-58.30	
AREA	AREA22	484497.02	3740395.22	434.20	3.68	2.30E-9	182.88	22.86	-64.09	
AREA	AREA23	484552.97	3740735.43	438.24	3.68	2.30E-9	182.88	22.86	-71.57	
AREA	AREA17	484333.27	3741371.59	471.10	3.68	1.57E-8	45.72	609.60	0.00	
AREA	AREA14	484428.16	3742215.00	458.25	3.66	6.29E-9	45.72	243.84	0.00	
AREA	AREA15	484371.32	3742215.00	461.49	3.66	6.29E-9	45.72	243.84	0.00	

Source Pathway - Source Inputs

Line Volume Sources

Source Type: LINE VOLUME

Source: SLINE1 (Offsite Ramona West)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00033		484359.95	3742998.85	473.10	3.65
			484109.27	3742939.17	484.61	3.65
			483864.56	3742969.01	492.38	3.65
			483649.69	3743112.26	487.12	3.65
			482318.69	3744699.90	448.49	3.65
			482169.47	3744813.31	448.00	3.65
			481888.95	3744944.62	447.14	3.65
			481506.96	3744956.55	445.73	3.65

Source Type: LINE VOLUME

Source: SLINE2 (Offsite - Ramona east)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	3.31E-6		484426.39	3743032.22	470.67	3.65
			485680.11	3744223.69	469.93	3.65

Source Type: LINE VOLUME

Source: SLINE3 (Onsite -Orange Ave)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00009		485520.06	3743147.81	436.51	3.65
			485111.05	3743130.02	445.88	3.65
			484524.20	3742801.04	458.26	3.65
			484221.89	3742756.58	470.53	3.65

Source Pathway - Source Inputs

Source Type: LINE VOLUME
Source: SLINE4 (Onsite - Street A)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00002		484719.82	3743254.51	460.31	3.65
			484826.51	3743156.70	453.41	3.65
			484862.08	3743041.11	449.58	3.65

Source Type: LINE VOLUME
Source: SLINE5 (Onsite - Antelope Road)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00019		484212.99	3740320.28	437.37	0.00
			484417.50	3740613.71	443.42	0.00
			484702.03	3741511.76	443.62	0.00
			484506.42	3742472.05	454.52	0.00
			484301.91	3742712.12	465.76	0.00
			484221.89	3742898.84	476.30	0.00

Source Pathway - Source Inputs

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE2	L0001570	484434.42	3743039.85	470.38	3.65	8.49E-8	22.15		20.60	2.37
	L0001571	484466.53	3743070.36	469.35	3.65	8.49E-8	22.15		20.60	2.37
	L0001572	484498.64	3743100.88	468.55	3.65	8.49E-8	22.15		20.60	2.37
	L0001573	484530.76	3743131.40	467.78	3.65	8.49E-8	22.15		20.60	2.37
	L0001574	484562.87	3743161.92	466.83	3.65	8.49E-8	22.15		20.60	2.37
	L0001575	484594.98	3743192.43	465.69	3.65	8.49E-8	22.15		20.60	2.37
	L0001576	484627.09	3743222.95	464.50	3.65	8.49E-8	22.15		20.60	2.37
	L0001577	484659.20	3743253.47	463.41	3.65	8.49E-8	22.15		20.60	2.37
	L0001578	484691.32	3743283.99	462.55	3.65	8.49E-8	22.15		20.60	2.37
	L0001579	484723.43	3743314.50	461.58	3.65	8.49E-8	22.15		20.60	2.37
	L0001580	484755.54	3743345.02	460.69	3.65	8.49E-8	22.15		20.60	2.37
	L0001581	484787.65	3743375.54	460.08	3.65	8.49E-8	22.15		20.60	2.37
	L0001582	484819.76	3743406.06	459.75	3.65	8.49E-8	22.15		20.60	2.37
	L0001583	484851.87	3743436.58	459.72	3.65	8.49E-8	22.15		20.60	2.37
	L0001584	484883.99	3743467.09	459.83	3.65	8.49E-8	22.15		20.60	2.37
	L0001585	484916.10	3743497.61	460.07	3.65	8.49E-8	22.15		20.60	2.37
	L0001586	484948.21	3743528.13	460.29	3.65	8.49E-8	22.15		20.60	2.37
	L0001587	484980.32	3743558.65	460.55	3.65	8.49E-8	22.15		20.60	2.37
	L0001588	485012.43	3743589.16	460.74	3.65	8.49E-8	22.15		20.60	2.37
	L0001589	485044.54	3743619.68	461.18	3.65	8.49E-8	22.15		20.60	2.37
	L0001590	485076.66	3743650.20	461.96	3.65	8.49E-8	22.15		20.60	2.37
	L0001591	485108.77	3743680.72	462.70	3.65	8.49E-8	22.15		20.60	2.37
	L0001592	485140.88	3743711.23	463.52	3.65	8.49E-8	22.15		20.60	2.37
	L0001593	485172.99	3743741.75	464.37	3.65	8.49E-8	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE2	L0001594	485205.10	3743772.27	465.29	3.65	8.49E-8	22.15		20.60	2.37
	L0001595	485237.22	3743802.79	465.97	3.65	8.49E-8	22.15		20.60	2.37
	L0001596	485269.33	3743833.30	466.38	3.65	8.49E-8	22.15		20.60	2.37
	L0001597	485301.44	3743863.82	466.61	3.65	8.49E-8	22.15		20.60	2.37
	L0001598	485333.55	3743894.34	466.88	3.65	8.49E-8	22.15		20.60	2.37
	L0001599	485365.66	3743924.86	467.17	3.65	8.49E-8	22.15		20.60	2.37
	L0001600	485397.77	3743955.37	467.42	3.65	8.49E-8	22.15		20.60	2.37
	L0001601	485429.89	3743985.89	467.64	3.65	8.49E-8	22.15		20.60	2.37
	L0001602	485462.00	3744016.41	467.95	3.65	8.49E-8	22.15		20.60	2.37
	L0001603	485494.11	3744046.93	468.25	3.65	8.49E-8	22.15		20.60	2.37
	L0001604	485526.22	3744077.44	468.50	3.65	8.49E-8	22.15		20.60	2.37
	L0001605	485558.33	3744107.96	468.77	3.65	8.49E-8	22.15		20.60	2.37
	L0001606	485590.45	3744138.48	469.04	3.65	8.49E-8	22.15		20.60	2.37
	L0001607	485622.56	3744169.00	469.35	3.65	8.49E-8	22.15		20.60	2.37
	L0001608	485654.67	3744199.51	469.68	3.65	8.49E-8	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE3	L0001609	485508.99	3743147.33	436.69	3.65	2.69E-6	22.15		20.60	2.37
	L0001610	485464.74	3743145.40	437.57	3.65	2.69E-6	22.15		20.60	2.37
	L0001611	485420.48	3743143.48	438.49	3.65	2.69E-6	22.15		20.60	2.37
	L0001612	485376.22	3743141.55	439.40	3.65	2.69E-6	22.15		20.60	2.37
	L0001613	485331.96	3743139.63	440.31	3.65	2.69E-6	22.15		20.60	2.37
	L0001614	485287.70	3743137.71	441.27	3.65	2.69E-6	22.15		20.60	2.37
	L0001615	485243.44	3743135.78	442.31	3.65	2.69E-6	22.15		20.60	2.37
	L0001616	485199.19	3743133.86	443.43	3.65	2.69E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE3	L0001617	485154.93	3743131.93	444.65	3.65	2.69E-6	22.15		20.60	2.37
	L0001618	485110.72	3743129.84	445.94	3.65	2.69E-6	22.15		20.60	2.37
	L0001619	485072.08	3743108.18	446.50	3.65	2.69E-6	22.15		20.60	2.37
	L0001620	485033.43	3743086.52	446.66	3.65	2.69E-6	22.15		20.60	2.37
	L0001621	484994.79	3743064.85	446.82	3.65	2.69E-6	22.15		20.60	2.37
	L0001622	484956.15	3743043.19	447.03	3.65	2.69E-6	22.15		20.60	2.37
	L0001623	484917.51	3743021.53	447.54	3.65	2.69E-6	22.15		20.60	2.37
	L0001624	484878.87	3742999.86	448.32	3.65	2.69E-6	22.15		20.60	2.37
	L0001625	484840.22	3742978.20	449.66	3.65	2.69E-6	22.15		20.60	2.37
	L0001626	484801.58	3742956.54	451.10	3.65	2.69E-6	22.15		20.60	2.37
	L0001627	484762.94	3742934.87	452.19	3.65	2.69E-6	22.15		20.60	2.37
	L0001628	484724.30	3742913.21	452.71	3.65	2.69E-6	22.15		20.60	2.37
	L0001629	484685.66	3742891.55	453.14	3.65	2.69E-6	22.15		20.60	2.37
	L0001630	484647.01	3742869.89	453.93	3.65	2.69E-6	22.15		20.60	2.37
	L0001631	484608.37	3742848.22	454.73	3.65	2.69E-6	22.15		20.60	2.37
	L0001632	484569.73	3742826.56	456.01	3.65	2.69E-6	22.15		20.60	2.37
	L0001633	484531.09	3742804.90	457.78	3.65	2.69E-6	22.15		20.60	2.37
	L0001634	484488.18	3742795.74	460.11	3.65	2.69E-6	22.15		20.60	2.37
	L0001635	484444.35	3742789.29	462.38	3.65	2.69E-6	22.15		20.60	2.37
	L0001636	484400.53	3742782.85	464.23	3.65	2.69E-6	22.15		20.60	2.37
	L0001637	484356.70	3742776.40	465.86	3.65	2.69E-6	22.15		20.60	2.37
	L0001638	484312.87	3742769.96	467.79	3.65	2.69E-6	22.15		20.60	2.37
	L0001639	484269.04	3742763.51	469.47	3.65	2.69E-6	22.15		20.60	2.37
	L0001640	484225.21	3742757.07	470.78	3.65	2.69E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE4	L0001641	484727.98	3743247.02	459.22	3.65	3.67E-6	22.15		20.60	2.37
	L0001642	484760.64	3743217.09	457.11	3.65	3.67E-6	22.15		20.60	2.37
	L0001643	484793.29	3743187.15	455.11	3.65	3.67E-6	22.15		20.60	2.37
	L0001644	484825.95	3743157.22	453.28	3.65	3.67E-6	22.15		20.60	2.37
	L0001645	484839.32	3743115.09	451.90	3.65	3.67E-6	22.15		20.60	2.37
	L0001646	484852.34	3743072.75	450.45	3.65	3.67E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0001647	484219.33	3740329.37	437.59	0.00	3.06E-6	22.15		20.60	2.37
	L0001648	484244.66	3740365.71	438.64	0.00	3.06E-6	22.15		20.60	2.37
	L0001649	484269.99	3740402.06	439.69	0.00	3.06E-6	22.15		20.60	2.37
	L0001650	484295.32	3740438.40	440.80	0.00	3.06E-6	22.15		20.60	2.37
	L0001651	484320.65	3740474.74	441.99	0.00	3.06E-6	22.15		20.60	2.37
	L0001652	484345.98	3740511.09	442.91	0.00	3.06E-6	22.15		20.60	2.37
	L0001653	484371.31	3740547.43	443.03	0.00	3.06E-6	22.15		20.60	2.37
	L0001654	484396.64	3740583.77	443.25	0.00	3.06E-6	22.15		20.60	2.37
	L0001655	484419.86	3740621.16	443.51	0.00	3.06E-6	22.15		20.60	2.37
	L0001656	484433.24	3740663.39	444.27	0.00	3.06E-6	22.15		20.60	2.37
	L0001657	484446.62	3740705.62	444.28	0.00	3.06E-6	22.15		20.60	2.37
	L0001658	484460.00	3740747.85	443.92	0.00	3.06E-6	22.15		20.60	2.37
	L0001659	484473.38	3740790.08	445.09	0.00	3.06E-6	22.15		20.60	2.37
	L0001660	484486.76	3740832.31	446.04	0.00	3.06E-6	22.15		20.60	2.37
	L0001661	484500.14	3740874.54	446.84	0.00	3.06E-6	22.15		20.60	2.37
	L0001662	484513.52	3740916.77	448.01	0.00	3.06E-6	22.15		20.60	2.37
	L0001663	484526.90	3740959.01	447.64	0.00	3.06E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0001664	484540.28	3741001.24	448.51	0.00	3.06E-6	22.15		20.60	2.37
	L0001665	484553.66	3741043.47	448.62	0.00	3.06E-6	22.15		20.60	2.37
	L0001666	484567.04	3741085.70	449.85	0.00	3.06E-6	22.15		20.60	2.37
	L0001667	484580.42	3741127.93	449.94	0.00	3.06E-6	22.15		20.60	2.37
	L0001668	484593.80	3741170.16	449.08	0.00	3.06E-6	22.15		20.60	2.37
	L0001669	484607.18	3741212.39	449.38	0.00	3.06E-6	22.15		20.60	2.37
	L0001670	484620.56	3741254.62	449.55	0.00	3.06E-6	22.15		20.60	2.37
	L0001671	484633.94	3741296.85	448.53	0.00	3.06E-6	22.15		20.60	2.37
	L0001672	484647.32	3741339.09	447.81	0.00	3.06E-6	22.15		20.60	2.37
	L0001673	484660.70	3741381.32	446.54	0.00	3.06E-6	22.15		20.60	2.37
	L0001674	484674.08	3741423.55	445.84	0.00	3.06E-6	22.15		20.60	2.37
	L0001675	484687.47	3741465.78	444.83	0.00	3.06E-6	22.15		20.60	2.37
	L0001676	484700.85	3741508.01	443.89	0.00	3.06E-6	22.15		20.60	2.37
	L0001677	484693.97	3741551.31	444.07	0.00	3.06E-6	22.15		20.60	2.37
	L0001678	484685.13	3741594.72	444.27	0.00	3.06E-6	22.15		20.60	2.37
	L0001679	484676.29	3741638.13	444.56	0.00	3.06E-6	22.15		20.60	2.37
	L0001680	484667.45	3741681.54	444.87	0.00	3.06E-6	22.15		20.60	2.37
	L0001681	484658.60	3741724.95	445.14	0.00	3.06E-6	22.15		20.60	2.37
	L0001682	484649.76	3741768.36	445.81	0.00	3.06E-6	22.15		20.60	2.37
	L0001683	484640.92	3741811.76	446.39	0.00	3.06E-6	22.15		20.60	2.37
	L0001684	484632.08	3741855.17	447.03	0.00	3.06E-6	22.15		20.60	2.37
	L0001685	484623.23	3741898.58	447.37	0.00	3.06E-6	22.15		20.60	2.37
	L0001686	484614.39	3741941.99	447.88	0.00	3.06E-6	22.15		20.60	2.37
	L0001687	484605.55	3741985.40	448.50	0.00	3.06E-6	22.15		20.60	2.37
	L0001688	484596.71	3742028.81	449.25	0.00	3.06E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0001689	484587.86	3742072.22	449.84	0.00	3.06E-6	22.15		20.60	2.37
	L0001690	484579.02	3742115.62	450.63	0.00	3.06E-6	22.15		20.60	2.37
	L0001691	484570.18	3742159.03	451.35	0.00	3.06E-6	22.15		20.60	2.37
	L0001692	484561.34	3742202.44	451.68	0.00	3.06E-6	22.15		20.60	2.37
	L0001693	484552.49	3742245.85	451.97	0.00	3.06E-6	22.15		20.60	2.37
	L0001694	484543.65	3742289.26	452.43	0.00	3.06E-6	22.15		20.60	2.37
	L0001695	484534.81	3742332.67	452.72	0.00	3.06E-6	22.15		20.60	2.37
	L0001696	484525.97	3742376.08	453.48	0.00	3.06E-6	22.15		20.60	2.37
	L0001697	484517.12	3742419.48	454.11	0.00	3.06E-6	22.15		20.60	2.37
	L0001698	484508.28	3742462.89	454.46	0.00	3.06E-6	22.15		20.60	2.37
	L0001699	484483.75	3742498.66	455.38	0.00	3.06E-6	22.15		20.60	2.37
	L0001700	484455.02	3742532.38	456.64	0.00	3.06E-6	22.15		20.60	2.37
	L0001701	484426.29	3742566.10	458.08	0.00	3.06E-6	22.15		20.60	2.37
	L0001702	484397.57	3742599.83	459.35	0.00	3.06E-6	22.15		20.60	2.37
	L0001703	484368.84	3742633.55	460.56	0.00	3.06E-6	22.15		20.60	2.37
	L0001704	484340.11	3742667.27	462.53	0.00	3.06E-6	22.15		20.60	2.37
	L0001705	484311.39	3742701.00	464.99	0.00	3.06E-6	22.15		20.60	2.37
	L0001706	484290.22	3742739.41	467.52	0.00	3.06E-6	22.15		20.60	2.37
	L0001707	484272.77	3742780.13	470.01	0.00	3.06E-6	22.15		20.60	2.37
	L0001708	484255.31	3742820.84	471.90	0.00	3.06E-6	22.15		20.60	2.37
	L0001709	484237.86	3742861.56	473.80	0.00	3.06E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0001710	484349.18	3742996.29	473.33	3.65	3.88E-6	22.15		20.60	2.37
	L0001711	484306.08	3742986.03	475.37	3.65	3.88E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0001712	484262.99	3742975.77	477.85	3.65	3.88E-6	22.15		20.60	2.37
	L0001713	484219.89	3742965.50	480.24	3.65	3.88E-6	22.15		20.60	2.37
	L0001714	484176.80	3742955.24	482.08	3.65	3.88E-6	22.15		20.60	2.37
	L0001715	484133.70	3742944.98	483.57	3.65	3.88E-6	22.15		20.60	2.37
	L0001716	484090.22	3742941.49	485.36	3.65	3.88E-6	22.15		20.60	2.37
	L0001717	484046.25	3742946.85	487.30	3.65	3.88E-6	22.15		20.60	2.37
	L0001718	484002.28	3742952.21	489.32	3.65	3.88E-6	22.15		20.60	2.37
	L0001719	483958.30	3742957.58	490.58	3.65	3.88E-6	22.15		20.60	2.37
	L0001720	483914.33	3742962.94	491.43	3.65	3.88E-6	22.15		20.60	2.37
	L0001721	483870.35	3742968.30	492.07	3.65	3.88E-6	22.15		20.60	2.37
	L0001722	483832.56	3742990.34	492.33	3.65	3.88E-6	22.15		20.60	2.37
	L0001723	483795.70	3743014.92	492.43	3.65	3.88E-6	22.15		20.60	2.37
	L0001724	483758.84	3743039.49	492.08	3.65	3.88E-6	22.15		20.60	2.37
	L0001725	483721.98	3743064.06	491.27	3.65	3.88E-6	22.15		20.60	2.37
	L0001726	483685.12	3743088.64	489.08	3.65	3.88E-6	22.15		20.60	2.37
	L0001727	483648.58	3743113.57	487.00	3.65	3.88E-6	22.15		20.60	2.37
	L0001728	483620.12	3743147.52	484.88	3.65	3.88E-6	22.15		20.60	2.37
	L0001729	483591.66	3743181.47	482.50	3.65	3.88E-6	22.15		20.60	2.37
	L0001730	483563.20	3743215.42	480.06	3.65	3.88E-6	22.15		20.60	2.37
	L0001731	483534.74	3743249.37	477.69	3.65	3.88E-6	22.15		20.60	2.37
	L0001732	483506.28	3743283.32	475.36	3.65	3.88E-6	22.15		20.60	2.37
	L0001733	483477.82	3743317.26	473.34	3.65	3.88E-6	22.15		20.60	2.37
	L0001734	483449.36	3743351.21	471.72	3.65	3.88E-6	22.15		20.60	2.37
	L0001735	483420.90	3743385.16	470.31	3.65	3.88E-6	22.15		20.60	2.37
	L0001736	483392.44	3743419.11	469.20	3.65	3.88E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0001737	483363.98	3743453.06	468.21	3.65	3.88E-6	22.15		20.60	2.37
	L0001738	483335.52	3743487.01	467.19	3.65	3.88E-6	22.15		20.60	2.37
	L0001739	483307.06	3743520.95	466.20	3.65	3.88E-6	22.15		20.60	2.37
	L0001740	483278.60	3743554.90	465.21	3.65	3.88E-6	22.15		20.60	2.37
	L0001741	483250.14	3743588.85	464.27	3.65	3.88E-6	22.15		20.60	2.37
	L0001742	483221.68	3743622.80	463.30	3.65	3.88E-6	22.15		20.60	2.37
	L0001743	483193.22	3743656.75	462.31	3.65	3.88E-6	22.15		20.60	2.37
	L0001744	483164.75	3743690.70	461.35	3.65	3.88E-6	22.15		20.60	2.37
	L0001745	483136.29	3743724.64	460.24	3.65	3.88E-6	22.15		20.60	2.37
	L0001746	483107.83	3743758.59	458.96	3.65	3.88E-6	22.15		20.60	2.37
	L0001747	483079.37	3743792.54	457.68	3.65	3.88E-6	22.15		20.60	2.37
	L0001748	483050.91	3743826.49	456.33	3.65	3.88E-6	22.15		20.60	2.37
	L0001749	483022.45	3743860.44	454.96	3.65	3.88E-6	22.15		20.60	2.37
	L0001750	482993.99	3743894.39	453.65	3.65	3.88E-6	22.15		20.60	2.37
	L0001751	482965.53	3743928.33	452.52	3.65	3.88E-6	22.15		20.60	2.37
	L0001752	482937.07	3743962.28	451.67	3.65	3.88E-6	22.15		20.60	2.37
	L0001753	482908.61	3743996.23	451.09	3.65	3.88E-6	22.15		20.60	2.37
	L0001754	482880.15	3744030.18	450.82	3.65	3.88E-6	22.15		20.60	2.37
	L0001755	482851.69	3744064.13	450.69	3.65	3.88E-6	22.15		20.60	2.37
	L0001756	482823.23	3744098.08	450.55	3.65	3.88E-6	22.15		20.60	2.37
	L0001757	482794.77	3744132.02	450.43	3.65	3.88E-6	22.15		20.60	2.37
	L0001758	482766.31	3744165.97	450.31	3.65	3.88E-6	22.15		20.60	2.37
	L0001759	482737.85	3744199.92	450.21	3.65	3.88E-6	22.15		20.60	2.37
	L0001760	482709.39	3744233.87	450.08	3.65	3.88E-6	22.15		20.60	2.37
	L0001761	482680.93	3744267.82	449.98	3.65	3.88E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0001762	482652.47	3744301.77	449.86	3.65	3.88E-6	22.15		20.60	2.37
	L0001763	482624.01	3744335.71	449.75	3.65	3.88E-6	22.15		20.60	2.37
	L0001764	482595.55	3744369.66	449.61	3.65	3.88E-6	22.15		20.60	2.37
	L0001765	482567.08	3744403.61	449.50	3.65	3.88E-6	22.15		20.60	2.37
	L0001766	482538.62	3744437.56	449.37	3.65	3.88E-6	22.15		20.60	2.37
	L0001767	482510.16	3744471.51	449.26	3.65	3.88E-6	22.15		20.60	2.37
	L0001768	482481.70	3744505.46	449.13	3.65	3.88E-6	22.15		20.60	2.37
	L0001769	482453.24	3744539.40	449.03	3.65	3.88E-6	22.15		20.60	2.37
	L0001770	482424.78	3744573.35	448.90	3.65	3.88E-6	22.15		20.60	2.37
	L0001771	482396.32	3744607.30	448.80	3.65	3.88E-6	22.15		20.60	2.37
	L0001772	482367.86	3744641.25	448.77	3.65	3.88E-6	22.15		20.60	2.37
	L0001773	482339.40	3744675.20	448.68	3.65	3.88E-6	22.15		20.60	2.37
	L0001774	482309.09	3744707.20	448.50	3.65	3.88E-6	22.15		20.60	2.37
	L0001775	482273.82	3744734.01	448.40	3.65	3.88E-6	22.15		20.60	2.37
	L0001776	482238.55	3744760.81	448.24	3.65	3.88E-6	22.15		20.60	2.37
	L0001777	482203.28	3744787.62	448.13	3.65	3.88E-6	22.15		20.60	2.37
	L0001778	482167.80	3744814.09	448.07	3.65	3.88E-6	22.15		20.60	2.37
	L0001779	482127.68	3744832.87	447.86	3.65	3.88E-6	22.15		20.60	2.37
	L0001780	482087.56	3744851.65	447.65	3.65	3.88E-6	22.15		20.60	2.37
	L0001781	482047.44	3744870.43	447.52	3.65	3.88E-6	22.15		20.60	2.37
	L0001782	482007.32	3744889.21	447.50	3.65	3.88E-6	22.15		20.60	2.37
	L0001783	481967.19	3744907.99	447.49	3.65	3.88E-6	22.15		20.60	2.37
	L0001784	481927.07	3744926.77	447.26	3.65	3.88E-6	22.15		20.60	2.37
	L0001785	481886.74	3744944.68	447.25	3.65	3.88E-6	22.15		20.60	2.37
	L0001786	481842.46	3744946.07	447.02	3.65	3.88E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0001787	481798.19	3744947.45	446.92	3.65	3.88E-6	22.15		20.60	2.37
	L0001788	481753.91	3744948.84	446.81	3.65	3.88E-6	22.15		20.60	2.37
	L0001789	481709.63	3744950.22	446.61	3.65	3.88E-6	22.15		20.60	2.37
	L0001790	481665.35	3744951.60	446.42	3.65	3.88E-6	22.15		20.60	2.37
	L0001791	481621.07	3744952.99	446.16	3.65	3.88E-6	22.15		20.60	2.37
	L0001792	481576.79	3744954.37	445.88	3.65	3.88E-6	22.15		20.60	2.37
	L0001793	481532.52	3744955.75	445.66	3.65	3.88E-6	22.15		20.60	2.37

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Receptor Pathway

Receptor Networks

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

Uniform Cartesian Grid

Receptor Network ID	Grid Origin X Coordinate [m]	Grid Origin Y Coordinate [m]	No. of X-Axis Receptors	No. of Y-Axis Receptors	Spacing for X-Axis [m]	Spacing for Y-Axis [m]
UCART1	483906.10	3739960.53	4	32	100.00	100.00
UCART2	485524.53	3742206.41	4	15	100.00	100.00
UCART3	484767.99	3740089.41	7	16	100.00	100.00

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	484091.43	3742557.73		471.61	
2	483445.55	3743236.87		475.70	
3	483373.48	3742884.83		479.57	
4	483334.67	3743397.65		463.73	
5	482921.65	3743902.15		450.97	
6	482338.44	3744552.56		449.10	
7	481720.48	3744906.65		448.76	
8	481647.63	3744385.89		443.32	
9	482809.27	3743547.06		452.82	
10	482404.05	3742961.89		456.71	
11	482093.27	3742559.02		454.65	
12	483081.08	3741065.77		457.34	
13	482283.94	3741123.86		444.26	
14	483075.07	3740575.07		451.19	
15	485565.67	3740078.39		435.32	
16	485706.50	3740373.80		434.08	
17	485920.11	3740601.54		434.70	
18	486482.14	3741125.34		441.00	
19	486686.97	3741601.84		440.75	
20	487752.17	3742354.42		444.18	
21	487841.90	3743062.13		440.46	
22	488066.22	3743491.97		442.19	
23	485684.63	3743194.60		433.69	
24	484084.40	3742805.08		480.36	

Receptor Pathway

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	484200.22	3742916.26	FENCEPRI	479.19	
2	484200.22	3740154.09	FENCEPRI	433.40	
3	484735.58	3740154.09	FENCEPRI	431.59	
4	484730.35	3741401.91	FENCEPRI	442.87	
5	485219.99	3742313.64	FENCEPRI	434.02	
6	485512.10	3742313.64	FENCEPRI	432.72	
7	485548.61	3742313.64	FENCEPRI	432.75	
8	485539.48	3743299.49	FENCEPRI	437.92	
9	485347.79	3743299.49	FENCEPRI	445.66	
10	485347.79	3743409.03	FENCEPRI	445.30	
11	484863.99	3743409.03	FENCEPRI	459.26	
12	484434.96	3742998.26	FENCEPRI	466.26	
13	484352.81	3742943.49	FENCEPRI	470.06	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	UCART1	Receptors generated from Uniform Cartesian Grid
3	UCART2	Receptors generated from Uniform Cartesian Grid
4	UCART3	Receptors generated from Uniform Cartesian Grid
5	UCART4	Receptors generated from Uniform Cartesian Grid
6	UCART5	Receptors generated from Uniform Cartesian Grid
7	UCART6	Receptors generated from Uniform Cartesian Grid
8	UCART7	Receptors generated from Uniform Cartesian Grid

Receptor Pathway

Terrain Elevations and Flagpole Heights for Network Grids

Uniform Cartesian Grid

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483906.10	3739960.53	433.70	Option not Selected
	484006.10	3739960.53	432.60	
	484106.10	3739960.53	432.00	
	484206.10	3739960.53	432.00	
	483906.10	3740060.53	434.80	
	484006.10	3740060.53	433.50	
	484106.10	3740060.53	432.50	
	484206.10	3740060.53	432.20	
	483906.10	3740160.53	436.70	
	484006.10	3740160.53	435.60	
	484106.10	3740160.53	434.40	
	484206.10	3740160.53	433.40	
	483906.10	3740260.53	439.60	
	484006.10	3740260.53	438.70	
	484106.10	3740260.53	437.20	
	484206.10	3740260.53	435.50	
	483906.10	3740360.53	444.40	
	484006.10	3740360.53	443.90	
	484106.10	3740360.53	440.90	
	484206.10	3740360.53	439.00	
	483906.10	3740460.53	461.40	
	484006.10	3740460.53	450.20	
	484106.10	3740460.53	445.30	
	484206.10	3740460.53	443.90	
	483906.10	3740560.53	470.10	
	484006.10	3740560.53	464.90	
	484106.10	3740560.53	451.70	
	484206.10	3740560.53	449.90	
	483906.10	3740660.53	491.60	
	484006.10	3740660.53	488.00	
	484106.10	3740660.53	462.40	
	484206.10	3740660.53	456.60	
	483906.10	3740760.53	500.80	
	484006.10	3740760.53	495.10	
	484106.10	3740760.53	471.20	
	484206.10	3740760.53	460.90	
	483906.10	3740860.53	489.60	
	484006.10	3740860.53	489.40	
	484106.10	3740860.53	475.80	
	484206.10	3740860.53	472.20	
	483906.10	3740960.53	488.80	
	484006.10	3740960.53	489.90	
	484106.10	3740960.53	485.40	
	484206.10	3740960.53	488.70	
	483906.10	3741060.53	493.80	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	484006.10	3741060.53	493.10	Option not Selected
	484106.10	3741060.53	495.30	
	484206.10	3741060.53	511.30	
	483906.10	3741160.53	501.90	
	484006.10	3741160.53	499.20	
	484106.10	3741160.53	494.60	
	484206.10	3741160.53	495.80	
	483906.10	3741260.53	511.30	
	484006.10	3741260.53	508.50	
	484106.10	3741260.53	500.90	
	484206.10	3741260.53	501.00	
	483906.10	3741360.53	525.00	
	484006.10	3741360.53	516.20	
	484106.10	3741360.53	516.70	
	484206.10	3741360.53	492.00	
	483906.10	3741460.53	553.70	
	484006.10	3741460.53	531.20	
	484106.10	3741460.53	525.70	
	484206.10	3741460.53	497.40	
	483906.10	3741560.53	575.70	
	484006.10	3741560.53	561.00	
	484106.10	3741560.53	521.60	
	484206.10	3741560.53	485.80	
	483906.10	3741660.53	551.40	
	484006.10	3741660.53	561.00	
	484106.10	3741660.53	511.30	
	484206.10	3741660.53	483.60	
	483906.10	3741760.53	533.90	
	484006.10	3741760.53	563.20	
	484106.10	3741760.53	522.20	
	484206.10	3741760.53	482.40	
	483906.10	3741860.53	538.30	
	484006.10	3741860.53	559.10	
	484106.10	3741860.53	522.70	
	484206.10	3741860.53	481.40	
	483906.10	3741960.53	551.60	
	484006.10	3741960.53	524.20	
	484106.10	3741960.53	514.10	
	484206.10	3741960.53	481.00	
	483906.10	3742060.53	504.10	
	484006.10	3742060.53	494.00	
	484106.10	3742060.53	485.80	
	484206.10	3742060.53	475.60	
	483906.10	3742160.53	495.20	
	484006.10	3742160.53	487.50	
	484106.10	3742160.53	479.90	
	484206.10	3742160.53	472.30	
	483906.10	3742260.53	504.90	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	484006.10	3742260.53	484.90	Option not Selected
	484106.10	3742260.53	476.90	
	484206.10	3742260.53	470.90	
	483906.10	3742360.53	487.60	
	484006.10	3742360.53	480.40	
	484106.10	3742360.53	473.30	
	484206.10	3742360.53	468.10	
	483906.10	3742460.53	497.80	
	484006.10	3742460.53	482.40	
	484106.10	3742460.53	473.50	
	484206.10	3742460.53	467.20	
	483906.10	3742560.53	483.60	
	484006.10	3742560.53	477.10	
	484106.10	3742560.53	470.90	
	484206.10	3742560.53	466.60	
	483906.10	3742660.53	482.90	
	484006.10	3742660.53	477.10	
	484106.10	3742660.53	471.90	
	484206.10	3742660.53	467.40	
	483906.10	3742760.53	487.00	
	484006.10	3742760.53	481.90	
	484106.10	3742760.53	476.60	
	484206.10	3742760.53	471.70	
	483906.10	3742860.53	492.90	
	484006.10	3742860.53	487.30	
	484106.10	3742860.53	480.00	
	484206.10	3742860.53	475.50	
	483906.10	3742960.53	491.60	
	484006.10	3742960.53	490.30	
	484106.10	3742960.53	487.00	
	484206.10	3742960.53	480.90	
	483906.10	3743060.53	503.10	
	484006.10	3743060.53	501.90	
	484106.10	3743060.53	495.70	
	484206.10	3743060.53	487.30	

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	485524.53	3742206.41	432.60	Option not Selected
	485624.53	3742206.41	432.50	
	485724.53	3742206.41	432.60	
	485824.53	3742206.41	432.50	
	485524.53	3742306.41	432.70	
	485624.53	3742306.41	432.60	
	485724.53	3742306.41	432.60	
	485824.53	3742306.41	432.50	
	485524.53	3742406.41	432.70	
	485624.53	3742406.41	432.60	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	485724.53	3742406.41	432.50	Option not Selected
	485824.53	3742406.41	432.60	
	485524.53	3742506.41	432.80	
	485624.53	3742506.41	432.60	
	485724.53	3742506.41	432.70	
	485824.53	3742506.41	432.60	
	485524.53	3742606.41	433.00	
	485624.53	3742606.41	432.60	
	485724.53	3742606.41	432.50	
	485824.53	3742606.41	432.60	
	485524.53	3742706.41	433.30	
	485624.53	3742706.41	432.80	
	485724.53	3742706.41	432.60	
	485824.53	3742706.41	432.80	
	485524.53	3742806.41	434.00	
	485624.53	3742806.41	432.90	
	485724.53	3742806.41	432.60	
	485824.53	3742806.41	432.60	
	485524.53	3742906.41	435.10	
	485624.53	3742906.41	433.30	
	485724.53	3742906.41	432.70	
	485824.53	3742906.41	432.80	
	485524.53	3743006.41	436.00	
	485624.53	3743006.41	433.90	
	485724.53	3743006.41	433.00	
	485824.53	3743006.41	432.90	
	485524.53	3743106.41	436.20	
	485624.53	3743106.41	434.40	
	485724.53	3743106.41	433.20	
	485824.53	3743106.41	432.80	
	485524.53	3743206.41	437.00	
	485624.53	3743206.41	434.70	
	485724.53	3743206.41	433.30	
	485824.53	3743206.41	432.90	
	485524.53	3743306.41	438.40	
	485624.53	3743306.41	436.10	
	485724.53	3743306.41	434.40	
	485824.53	3743306.41	433.10	
	485524.53	3743406.41	440.60	
	485624.53	3743406.41	438.70	
	485724.53	3743406.41	436.40	
	485824.53	3743406.41	434.10	
	485524.53	3743506.41	442.30	
	485624.53	3743506.41	439.20	
	485724.53	3743506.41	436.50	
	485824.53	3743506.41	434.70	
	485524.53	3743606.41	445.30	
	485624.53	3743606.41	442.30	

Receptor Pathway

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	485724.53	3743606.41	439.20	Option not Selected
	485824.53	3743606.41	436.80	

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	484767.99	3740089.41	432.10	Option not Selected
	484867.99	3740089.41	432.20	
	484967.99	3740089.41	432.10	
	485067.99	3740089.41	432.10	
	485167.99	3740089.41	432.40	
	485267.99	3740089.41	432.70	
	485367.99	3740089.41	433.10	
	484767.99	3740189.41	432.00	
	484867.99	3740189.41	432.10	
	484967.99	3740189.41	432.10	
	485067.99	3740189.41	432.10	
	485167.99	3740189.41	431.90	
	485267.99	3740189.41	433.50	
	485367.99	3740189.41	432.60	
	484767.99	3740289.41	432.30	
	484867.99	3740289.41	431.80	
	484967.99	3740289.41	432.20	
	485067.99	3740289.41	432.20	
	485167.99	3740289.41	432.10	
	485267.99	3740289.41	432.30	
	485367.99	3740289.41	432.40	
	484767.99	3740389.41	432.10	
	484867.99	3740389.41	431.80	
	484967.99	3740389.41	432.30	
	485067.99	3740389.41	432.30	
	485167.99	3740389.41	432.40	
	485267.99	3740389.41	432.30	
	485367.99	3740389.41	432.50	
	484767.99	3740489.41	431.00	
	484867.99	3740489.41	432.10	
	484967.99	3740489.41	432.20	
	485067.99	3740489.41	432.30	
	485167.99	3740489.41	432.30	
	485267.99	3740489.41	432.40	
	485367.99	3740489.41	432.40	
	484767.99	3740589.41	432.20	
	484867.99	3740589.41	432.10	
	484967.99	3740589.41	432.10	
	485067.99	3740589.41	432.30	
	485167.99	3740589.41	432.30	
	485267.99	3740589.41	432.40	
	485367.99	3740589.41	432.40	
	484767.99	3740689.41	432.40	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	484867.99	3740689.41	433.00	Option not Selected
	484967.99	3740689.41	432.10	
	485067.99	3740689.41	432.10	
	485167.99	3740689.41	432.20	
	485267.99	3740689.41	432.40	
	485367.99	3740689.41	432.40	
	484767.99	3740789.41	432.90	
	484867.99	3740789.41	432.20	
	484967.99	3740789.41	431.10	
	485067.99	3740789.41	432.10	
	485167.99	3740789.41	432.10	
	485267.99	3740789.41	432.20	
	485367.99	3740789.41	432.60	
	484767.99	3740889.41	433.90	
	484867.99	3740889.41	432.30	
	484967.99	3740889.41	432.30	
	485067.99	3740889.41	432.30	
	485167.99	3740889.41	432.10	
	485267.99	3740889.41	432.10	
	485367.99	3740889.41	432.60	
	484767.99	3740989.41	436.10	
	484867.99	3740989.41	433.00	
	484967.99	3740989.41	432.40	
	485067.99	3740989.41	433.20	
	485167.99	3740989.41	432.30	
	485267.99	3740989.41	432.30	
	485367.99	3740989.41	432.40	
	484767.99	3741089.41	438.50	
	484867.99	3741089.41	434.00	
	484967.99	3741089.41	432.50	
	485067.99	3741089.41	432.20	
	485167.99	3741089.41	431.20	
	485267.99	3741089.41	432.30	
	485367.99	3741089.41	432.30	
	484767.99	3741189.41	439.20	
	484867.99	3741189.41	434.60	
	484967.99	3741189.41	432.70	
	485067.99	3741189.41	432.30	
	485167.99	3741189.41	432.30	
	485267.99	3741189.41	432.30	
	485367.99	3741189.41	432.30	
	484767.99	3741289.41	440.40	
	484867.99	3741289.41	435.50	
	484967.99	3741289.41	433.10	
	485067.99	3741289.41	432.30	
	485167.99	3741289.41	432.40	
	485267.99	3741289.41	433.10	
	485367.99	3741289.41	432.40	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	484767.99	3741389.41	441.10	Option not Selected
	484867.99	3741389.41	436.40	
	484967.99	3741389.41	433.40	
	485067.99	3741389.41	432.50	
	485167.99	3741389.41	432.00	
	485267.99	3741389.41	432.30	
	485367.99	3741389.41	431.40	
	484767.99	3741489.41	440.80	
	484867.99	3741489.41	437.00	
	484967.99	3741489.41	434.00	
	485067.99	3741489.41	432.80	
	485167.99	3741489.41	432.40	
	485267.99	3741489.41	432.30	
	485367.99	3741489.41	432.30	
	484767.99	3741589.41	440.70	
	484867.99	3741589.41	437.30	
	484967.99	3741589.41	434.70	
	485067.99	3741589.41	433.30	
	485167.99	3741589.41	432.70	
	485267.99	3741589.41	432.40	
	485367.99	3741589.41	432.30	

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: C:\Users\smyers\Desktop\Met Data\PERI_V9_ADJU\PERI_v9.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: C:\Users\smyers\Desktop\Met Data\PERI_V9_ADJU\PERI_v9.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 1,467.00 [ft]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2010			
Upper Air		2010			
On-Site		2010			

Data Period

Data Period to Process

Start Date: 1/1/2010 Start Hour: 1 End Date: 12/31/2016 End Hour: 24

Wind Speed Categories

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

Output Pathway

AERMOD

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No
24	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: STONERIDGE COMMERCE CENTER PLUP OPERATIONS.AD

Averaging Period	Source Group ID	High Value	File Name
1	ALL	1st	01H1GALL.PLT
24	ALL	1st	24H1GALL.PLT
Annual	ALL	N/A	AN00GALL.PLT

Results Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.14869	ug/m^3	485524.53	3743106.41	436.20	0.00	806.70	6/21/2015, 6
24-HR	1ST	0.04809	ug/m^3	484206.10	3741960.53	481.00	0.00	764.70	3/14/2016, 24
ANNUAL		0.01377	ug/m^3	484206.10	3741860.53	481.40	0.00	764.70	

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.06440	ug/m^3	Futre ResW	484091.43	3742557.73	471.61	0.00	806.75	2/15/2015, 8
1-HR	1ST	0.03467	ug/m^3	Lakesd Mid	483445.55	3743236.87	475.70	0.00	806.75	5/16/2014, 6
1-HR	1ST	0.03163	ug/m^3	Sierra Ele	483373.48	3742884.83	479.57	0.00	764.69	6/24/2015, 6
1-HR	1ST	0.03189	ug/m^3	Rider Res	483334.67	3743397.65	463.73	0.00	806.75	5/16/2014, 6
1-HR	1ST	0.02694	ug/m^3	Whield Res	482921.65	3743902.15	450.97	0.00	806.75	2/14/2014, 8
1-HR	1ST	0.01870	ug/m^3	TresP Res	482338.44	3744552.56	449.10	0.00	806.75	6/16/2015, 6
1-HR	1ST	0.01732	ug/m^3	Reisl Res	481720.48	3744906.65	448.76	0.00	764.69	6/24/2015, 6
1-HR	1ST	0.01098	ug/m^3	AbbeyP Res	481647.63	3744385.89	443.32	0.00	764.69	4/5/2015, 7
1-HR	1ST	0.01824	ug/m^3	Avalon Ele	482809.27	3743547.06	452.82	0.00	806.75	6/24/2015, 6
1-HR	1ST	0.01691	ug/m^3	Walnut Res	482404.05	3742961.89	456.71	0.00	764.69	6/5/2016, 6
1-HR	1ST	0.01454	ug/m^3	Placent Re	482093.27	3742559.02	454.65	0.00	764.69	6/17/2015, 6
1-HR	1ST	0.02923	ug/m^3	Foothi Res	483081.08	3741065.77	457.34	0.00	764.69	6/20/2016, 6
1-HR	1ST	0.01637	ug/m^3	Dunlap Res	482283.94	3741123.86	444.26	0.00	764.69	2/11/2016, 8
1-HR	1ST	0.03124	ug/m^3	Sunset Res	483075.07	3740575.07	451.19	0.00	577.99	10/3/2014, 7
1-HR	1ST	0.02116	ug/m^3	Menife Res	485565.67	3740078.39	435.32	0.00	435.32	9/24/2010, 7
1-HR	1ST	0.02209	ug/m^3	Avla Res	485706.50	3740373.80	434.08	0.00	434.08	10/2/2011, 7
1-HR	1ST	0.02101	ug/m^3	G Vall Res	485920.11	3740601.54	434.70	0.00	434.70	12/8/2014, 8
1-HR	1ST	0.01602	ug/m^3	Reserv Res	486482.14	3741125.34	441.00	0.00	441.00	10/2/2011, 7
1-HR	1ST	0.01543	ug/m^3	12th Res	486686.97	3741601.84	440.75	0.00	440.75	12/8/2014, 8
1-HR	1ST	0.01266	ug/m^3	Nuview Ele	487752.17	3742354.42	444.18	0.00	806.75	4/4/2014, 7

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.01457	ug/m^3	Jack C Res	487841.90	3743062.13	440.46	0.00	806.75	6/3/2016, 6
1-HR	1ST	0.01181	ug/m^3	M Shad Mid	488066.22	3743491.97	442.19	0.00	806.75	7/1/2016, 6
1-HR	1ST	0.08311	ug/m^3	Futr ResNE	485684.63	3743194.60	433.69	0.00	806.75	10/15/2015, 7
1-HR	1ST	0.05778	ug/m^3	Futr ResNW	484084.40	3742805.08	480.36	0.00	806.75	3/26/2011, 7
24-HR	1ST	0.01913	ug/m^3	Futre ResW	484091.43	3742557.73	471.61	0.00	806.75	12/18/2010, 24
24-HR	1ST	0.01049	ug/m^3	Lakesd Mid	483445.55	3743236.87	475.70	0.00	806.75	3/14/2016, 24
24-HR	1ST	0.00736	ug/m^3	Sierra Ele	483373.48	3742884.83	479.57	0.00	764.69	7/31/2016, 24
24-HR	1ST	0.01117	ug/m^3	Rider Res	483334.67	3743397.65	463.73	0.00	806.75	3/14/2016, 24
24-HR	1ST	0.01135	ug/m^3	Whield Res	482921.65	3743902.15	450.97	0.00	806.75	3/14/2016, 24
24-HR	1ST	0.00827	ug/m^3	TresP Res	482338.44	3744552.56	449.10	0.00	806.75	3/14/2016, 24
24-HR	1ST	0.00781	ug/m^3	Reisl Res	481720.48	3744906.65	448.76	0.00	764.69	3/14/2016, 24
24-HR	1ST	0.00303	ug/m^3	AbbeyP Res	481647.63	3744385.89	443.32	0.00	764.69	4/10/2015, 24
24-HR	1ST	0.00513	ug/m^3	Avalon Ele	482809.27	3743547.06	452.82	0.00	806.75	4/10/2015, 24
24-HR	1ST	0.00435	ug/m^3	Walnut Res	482404.05	3742961.89	456.71	0.00	764.69	4/4/2014, 24
24-HR	1ST	0.00264	ug/m^3	Placent Re	482093.27	3742559.02	454.65	0.00	764.69	4/4/2014, 24
24-HR	1ST	0.00454	ug/m^3	Foothi Res	483081.08	3741065.77	457.34	0.00	764.69	1/2/2011, 24
24-HR	1ST	0.00286	ug/m^3	Dunlap Res	482283.94	3741123.86	444.26	0.00	764.69	1/2/2011, 24
24-HR	1ST	0.00372	ug/m^3	Sunset Res	483075.07	3740575.07	451.19	0.00	577.99	12/22/2016, 24
24-HR	1ST	0.00494	ug/m^3	Menife Res	485565.67	3740078.39	435.32	0.00	435.32	10/17/2015, 24
24-HR	1ST	0.00531	ug/m^3	Avla Res	485706.50	3740373.80	434.08	0.00	434.08	11/12/2014, 24
24-HR	1ST	0.00529	ug/m^3	G Vall Res	485920.11	3740601.54	434.70	0.00	434.70	11/12/2014, 24

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
24-HR	1ST	0.00388	ug/m^3	Reserv Res	486482.14	3741125.34	441.00	0.00	441.00	11/12/2014, 24
24-HR	1ST	0.00307	ug/m^3	12th Res	486686.97	3741601.84	440.75	0.00	440.75	11/12/2014, 24
24-HR	1ST	0.00172	ug/m^3	Nuview Ele	487752.17	3742354.42	444.18	0.00	806.75	1/9/2015, 24
24-HR	1ST	0.00144	ug/m^3	Jack C Res	487841.90	3743062.13	440.46	0.00	806.75	1/27/2016, 24
24-HR	1ST	0.00146	ug/m^3	M Shad Mid	488066.22	3743491.97	442.19	0.00	806.75	1/19/2014, 24
24-HR	1ST	0.01339	ug/m^3	Futr ResNE	485684.63	3743194.60	433.69	0.00	806.75	1/21/2014, 24
24-HR	1ST	0.01801	ug/m^3	Futr ResNW	484084.40	3742805.08	480.36	0.00	806.75	12/18/2010, 24
ANNUAL		0.00694	ug/m^3	Futre ResW	484091.43	3742557.73	471.61	0.00	806.75	
ANNUAL		0.00567	ug/m^3	Lakesd Mid	483445.55	3743236.87	475.70	0.00	806.75	
ANNUAL		0.00257	ug/m^3	Sierra Ele	483373.48	3742884.83	479.57	0.00	764.69	
ANNUAL		0.00615	ug/m^3	Rider Res	483334.67	3743397.65	463.73	0.00	806.75	
ANNUAL		0.00635	ug/m^3	Whield Res	482921.65	3743902.15	450.97	0.00	806.75	
ANNUAL		0.00438	ug/m^3	TresP Res	482338.44	3744552.56	449.10	0.00	806.75	
ANNUAL		0.00429	ug/m^3	Reisl Res	481720.48	3744906.65	448.76	0.00	764.69	
ANNUAL		0.00098	ug/m^3	AbbeyP Res	481647.63	3744385.89	443.32	0.00	764.69	
ANNUAL		0.00196	ug/m^3	Avalon Ele	482809.27	3743547.06	452.82	0.00	806.75	
ANNUAL		0.00097	ug/m^3	Walnut Res	482404.05	3742961.89	456.71	0.00	764.69	
ANNUAL		0.00068	ug/m^3	Placent Re	482093.27	3742559.02	454.65	0.00	764.69	
ANNUAL		0.00083	ug/m^3	Foothi Res	483081.08	3741065.77	457.34	0.00	764.69	
ANNUAL		0.00052	ug/m^3	Dunlap Res	482283.94	3741123.86	444.26	0.00	764.69	
ANNUAL		0.00069	ug/m^3	Sunset Res	483075.07	3740575.07	451.19	0.00	577.99	

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.00157	ug/m^3	Menife Res	485565.67	3740078.39	435.32	0.00	435.32	
ANNUAL		0.00159	ug/m^3	Avla Res	485706.50	3740373.80	434.08	0.00	434.08	
ANNUAL		0.00146	ug/m^3	G Vall Res	485920.11	3740601.54	434.70	0.00	434.70	
ANNUAL		0.00099	ug/m^3	Reserv Res	486482.14	3741125.34	441.00	0.00	441.00	
ANNUAL		0.00076	ug/m^3	12th Res	486686.97	3741601.84	440.75	0.00	440.75	
ANNUAL		0.00031	ug/m^3	Nuview Ele	487752.17	3742354.42	444.18	0.00	806.75	
ANNUAL		0.00029	ug/m^3	Jack C Res	487841.90	3743062.13	440.46	0.00	806.75	
ANNUAL		0.00026	ug/m^3	M Shad Mid	488066.22	3743491.97	442.19	0.00	806.75	
ANNUAL		0.00286	ug/m^3	Futr ResNE	485684.63	3743194.60	433.69	0.00	806.75	
ANNUAL		0.00724	ug/m^3	Futr ResNW	484084.40	3742805.08	480.36	0.00	806.75	

Stoneridge Commerce Center Specific Plan
DPM Emissions Calculations
Alternative Land Use Plan

Stoneridge Commerce Center
DPM Emission Rates
Operations
Alternative Land Use Plan

On-Site Truck Movement	Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Project Trucks	15	0.004752	3850	1.2	2.20E+01	2.54E-04

Off-Site Truck Movement - West on Ramona Ex	Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Project Trucks	35	0.003666	154	2.0	1.13E+00	1.31E-05

Off-Site Truck Movement -East on Mid County	Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Project Trucks	35	0.003666	77	1.0	2.82E-01	3.27E-06

Off-Site Truck Movement - West on Mid County	Avg Speed (mph)	Emission Factor (g/mi)	Daily Truck Trips (round trips)	length (mi)	g/day	g/sec
Project Trucks	35	0.003666	3619	2	2.65E+01	3.07E-04

On-Site Vehicle Idle Emissions	Emission Factor (g/veh/day)	Idling Time (min)	Idling Time (hrs/day)	Daily Trucks	Release Height Above Ground (m)	g/day	g/sec
Project Trucks	0.012647	15	1.04E-02	1925	3.65	2.54E-01	2.94E-06

On-Site TRU Emissions	Emission Factor (g/TRU/day)	Idling Time (min)	Idling Time (hrs/day)	Daily Trucks	Release Height Above Ground (m)	g/day	g/sec
Project Trucks	0.2805	15	1.04E-02	630	3.65	1.84E+00	2.13E-05

Sources:

EMFAC2017. PM10 Emission Factors are derived from the Year 2030 Heavy-Duty Truck Fleet Mix

TRU Emission Factors are derived from CARB's "Off-road Diesel Emission Factors"

Health Risk Calculations at Planned McCanna Hills Development

1 Hour Avg Concentration:	0.218
24 Hour Avg Concentration:	0.043
Annual Avg Concentration:	0.013

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = $(Cair*(BR/BW)*A*EF*10^{-6})$	4.50014E-06	1.35877E-05	1.07E-05	9.29E-06	4.17603E-06	2.605E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.50272E-07	3.62985E-06	2.55E-06	4.41E-06	6.706700E-07	1.614E-06

		Risk	in one million
Cancer Risk:	70-year exposure	9.81E-06	**9.81**
	30-year exposure	8.86E-06	**8.86**
	9-year exposure	6.33E-06	**6.33**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.013	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.60E-03**

C_i	1.30E-02	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **6.84E-02**

Max Hourly	1.30E-02
Acute REL (Acrolein)	0.19

Health Risk Calculations at Future McCanna Hills Residences

1 Hour Avg Concentration:	0.067
24 Hour Avg Concentration:	0.021
Annual Avg Concentration:	0.007

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = $(Cair*(BR/BW)*A*EF*10^{-6})$	2.42315E-06	7.31644E-06	5.78E-06	5E-06	2.24863E-06	1.403E-06
Risk = DOSEair * CPF * ASF * ED/AT * FAH	8.09159E-08	1.95453E-06	1.37E-06	2.38E-06	3.611300E-07	8.69E-07

		Risk	in one million
Cancer Risk:	70-year exposure	5.28E-06	**5.28**
	30-year exposure	4.77E-06	**4.77**
	9-year exposure	3.41E-06	**3.41**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.007	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **1.40E-03**

C_i	7.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **3.68E-02**

Max Hourly	7.00E-03
Acute REL (Acrolein)	0.19

Health Risk Calculations at Lakeside Middle School

Risk Calculations

1 Hour Avg Concentration:	0.028
24 Hour Avg Concentration:	0.007
Annual Avg Concentration:	0.002

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = $(Cair*(BR/BW)*A*EF*10^{-6})$	6.92329E-07	2.09041E-06	1.65E-06	1.43E-06	6.42466E-07	4.00822E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	2.31188E-08	5.58438E-07	3.92E-07	6.79E-07	1.031800E-07	2.48292E-07

		Risk	in one million
Cancer Risk	9-year exposure	9.74E-07	**0.97**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.002	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **4.00E-04**

C_i	2.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **1.05E-02**

Max Hourly	2.00E-03
Acute REL (Acrolein)	0.19

Health Risk Calculations at Sierra Vista Elementary

Risk Calculations

1 Hour Avg Concentration:	0.032
24 Hour Avg Concentration:	0.007
Annual Avg Concentration:	0.002

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = $(Cair*(BR/BW)*A*EF*10^{-6})$	6.92329E-07	2.09041E-06	1.65E-06	1.43E-06	6.42466E-07	4.0082E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	2.31188E-08	5.58438E-07	3.92E-07	6.79E-07	1.031800E-07	2.4829E-07

		Risk	in one million
Cancer Risk:	9-year exposure	9.74E-07	**0.97**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.002	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **4.00E-04**

C_i	2.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **1.05E-02**

Max Hourly	2.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Rider Street

Risk Calculations

1 Hour Avg Concentration:	0.024
24 Hour Avg Concentration:	0.006
Annual Avg Concentration:	0.002

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	6.92329E-07	2.09041E-06	1.65E-06	1.429E-06	6.42466E-07	4.008E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	2.31188E-08	5.58438E-07	3.92E-07	6.79E-07	1.031800E-07	2.483E-07

		Risk	in one million
Cancer Risk:	70-year exposure	1.51E-06	**1.51**
	30-year exposure	1.36E-06	**1.36**
	9-year exposure	9.74E-07	**0.97**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.002	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **4.00E-04**

C_i	2.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **1.05E-02**

Max Hourly	2.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Whieldon Drive

Risk Calculations

1 Hour Avg Concentration:	0.017
24 Hour Avg Concentration:	0.005
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.14E-07	3.21233E-07	2.004E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.39E-07	5.159000E-08	1.241E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-5}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Reisling Drive

Risk Calculations

1 Hour Avg Concentration:	0.009
24 Hour Avg Concentration:	0.002
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Avalon Elementary

Risk Calculations

1 Hour Avg Concentration:	0.017
24 Hour Avg Concentration:	0.004
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Walnut Street

Risk Calculations

1 Hour Avg Concentration:	0.018
24 Hour Avg Concentration:	0.005
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.14384E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.39475E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-5}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Placentia Avenue

Risk Calculations

1 Hour Avg Concentration:	0.023
24 Hour Avg Concentration:	0.007
Annual Avg Concentration:	0.004

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	1.38466E-06	4.18082E-06	3.3E-06	2.8575E-06	1.28493E-06	8.016E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	4.62377E-08	1.11688E-06	7.85E-07	1.3579E-06	2.063600E-07	4.966E-07

		Risk	in one million
Cancer Risk:	70-year exposure	3.02E-06	**3.02**
	30-year exposure	2.73E-06	**2.73**
	9-year exposure	1.95E-06	**1.95**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.004	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **8.00E-04**

C_i	4.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **2.11E-02**

Max Hourly	4.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Foothill Drive

Risk Calculations

1 Hour Avg Concentration:	0.029
24 Hour Avg Concentration:	0.004
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Reservoir Street

Risk Calculations

1 Hour Avg Concentration:	0.016
24 Hour Avg Concentration:	0.003
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-5}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on 12th Street

Risk Calculations

1 Hour Avg Concentration:	0.015
24 Hour Avg Concentration:	0.002
Annual Avg Concentration:	0.001

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	3.46164E-07	1.04521E-06	8.26E-07	7.1438E-07	3.21233E-07	2.0041E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	1.15594E-08	2.79219E-07	1.96E-07	3.3948E-07	5.159000E-08	1.2415E-07

		Risk	in one million
Cancer Risk:	70-year exposure	7.54E-07	**0.75**
	30-year exposure	6.82E-07	**0.68**
	9-year exposure	4.87E-07	**0.49**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.001	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **2.00E-04**

C_i	1.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **5.26E-03**

Max Hourly	1.00E-03
Acute REL (Acrolein)	0.19

Cancer Risk Calculations at Nuview Elementary School

Risk Calculations

1 Hour Avg Concentration:	0.014
24 Hour Avg Concentration:	0.001
Annual Avg Concentration:	0.000

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	0	0.00000E+00	0	0	0	0
Risk = DOSEair * CPF * ASF * ED/AT * FAH	0	0	0	0	0.000000E+00	0

		Risk	in one million
Cancer Risk:	9-year exposure	0.00E+00	**0.00**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **0.00E+00**

C_i	0.00E+00	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **0.00E+00**

Max Hourly	0.00E+00
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Residences on Jack Circle

Risk Calculations

1 Hour Avg Concentration:	0.014
24 Hour Avg Concentration:	0.001
Annual Avg Concentration:	0.000

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	0	0.00000E+00	0	0	0	0
Risk = DOSEair * CPF * ASF * ED/AT * FAH	0	0	0	0	0.000000E+00	0

		Risk	in one million
Cancer Risk:	70-year exposure	0.00E+00	**0.00**
	30-year exposure	0.00E+00	**0.00**
	9-year exposure	0.00E+00	**0.00**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **0.00E+00**

C_i	0.00E+00	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **0.00E+00**

Max Hourly	0.00E+00
Acute REL (Acrolein)	0.19

Cancer Risk Calculations at Mt. Shadows Middle School

Risk Calculations

1 Hour Avg Concentration:	0.011
24 Hour Avg Concentration:	0.001
Annual Avg Concentration:	0.000

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	0	0.00000E+00	0	0	0	0
Risk = DOSEair * CPF * ASF * ED/AT * FAH	0	0	0	0	0.000000E+00	0

		Risk	in one million
Cancer Risk:	9-year exposure	0.00E+00	**0.00**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **0.00E+00**

C_i	0.00E+00	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **0.00E+00**

Max Hourly	0.00E+00
Acute REL (Acrolein)	0.19

Highest Health Risk Calculations at Planned Future Residences to Northeast

Risk Calculations

1 Hour Avg Concentration:	0.082
24 Hour Avg Concentration:	0.013
Annual Avg Concentration:	0.002

Cancer Risk

	3rd trimester	0<2 years	2<9 years	2<16 years	16<30 years	16<70 years
DOSEair = (Cair*(BR/BW)*A*EF*10^{-6})	6.92329E-07	2.09041E-06	1.65E-06	1.4288E-06	6.42466E-07	4.0082E-07
Risk = DOSEair * CPF * ASF * ED/AT * FAH	2.31188E-08	5.58438E-07	3.92E-07	6.7895E-07	1.031800E-07	2.4829E-07

		Risk	in one million
Cancer Risk:	70-year exposure	1.51E-06	**1.51**
	30-year exposure	1.36E-06	**1.36**
	9-year exposure	9.74E-07	**0.97**
Threshold:			10 in one million

	DOSEair		mg/kg-d	Dose through inhalation
	CPF	1.1	$(mg/kg/day)^{-1}$	Cancer Potency Factor for DPM
BR/BW	BR/BW (3rd trimester)	361	L/kg bodyweight-day	Daily Breathing rate normalized to body weight
	BR/BW (0 < 2 years)	1,090		
	BR/BW (2 < 9 years)	861		
	BR/BW (2 < 16 years)	745		
	BR/BW (16 < 30 years	335		
	BR/BW (16 < 70 years	209		
	10^{-6}	1.00E-06		Micrograms to milligrams conversions, liters to cubic meters conversion
	Cair	0.002	ug/m^3	Concentration in air (ug/m^3), modeled annual average concentration
	A	1		Inhalation absorption factor
	EF	0.96	days/year	Exposure frequency (days/year)
ED	ED (3rd trimester)	0.25	years	Exposure duration (years)
	ED (0 < 2 years)	2		
	ED (2 < 9 years)	7		
	ED (2 < 16, 16 < 30 ye	14		
	ED (16 - 70 years)	54		
	AT	70	years	Averaging time period over which exposure is averaged
ASF	ASF (3rd trimester - 2 y	10		Age Sensitivity Factor
	ASF (2 - 16 years)	3		
	ASF (16 - 70 years)	1		
FAH	FAH (3rd trimester - 2 y	0.85		Fraction of time spent at home (unitless)
	FAH (2 - 16 years)	0.72		
	FAH (16 - 70 years)	0.73		

Chronic Noncancer Hazard

Threshold: 1

Hazard Quotient = C_i/REL_i

HQ = **4.00E-04**

C_i	2.00E-03	Concentration (annual average)
REL_i	5	Reference Exposure Level

Acute NonCancer Hazard

Threshold: 1

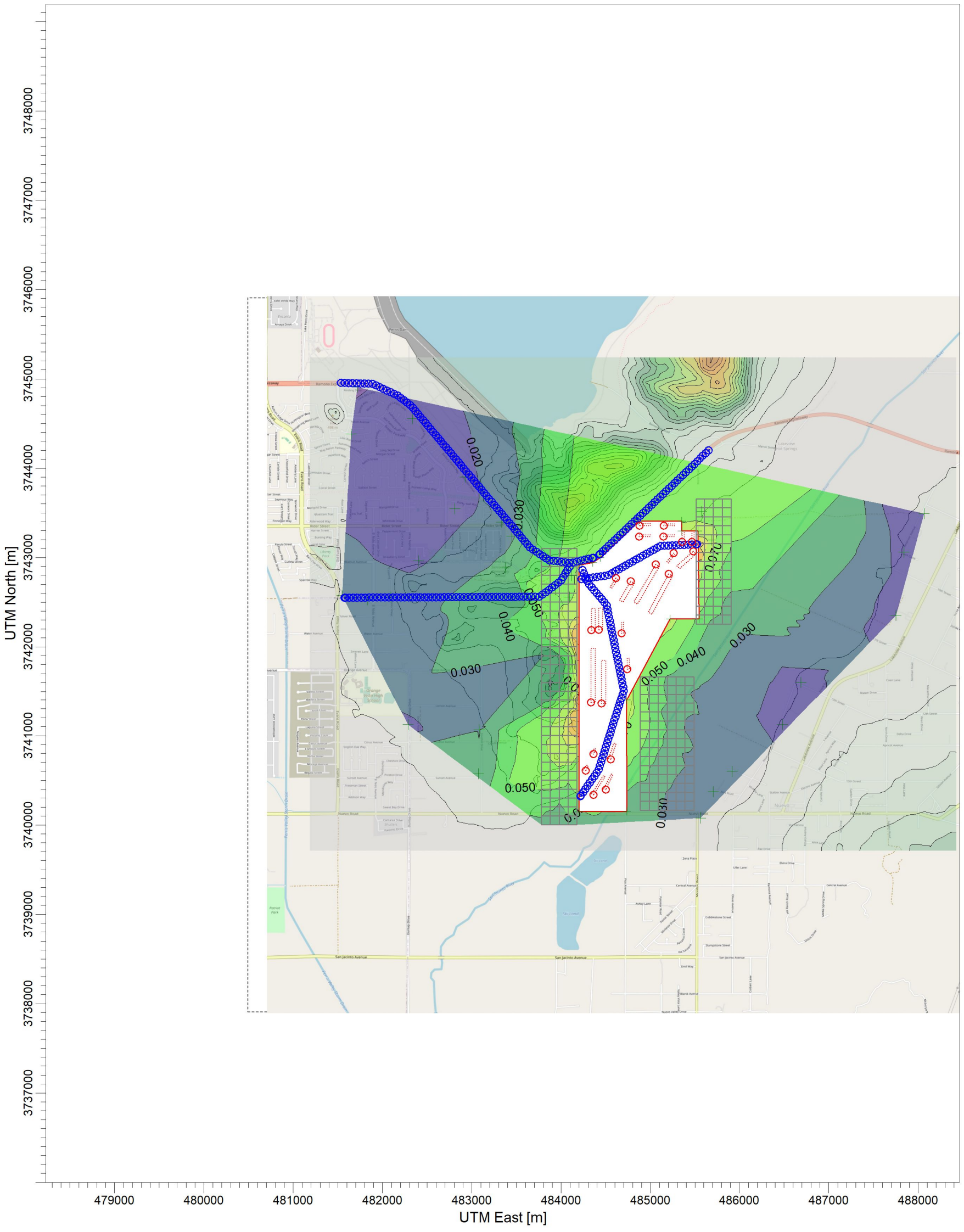
Acute HQ = Maximum Hourly Concentration/Acute REL

Acute HQ = **1.05E-02**

Max Hourly	2.00E-03
Acute REL (Acrolein)	0.19

PROJECT TITLE:

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri



PLOT FILE OF HIGH 1ST HIGH 1-HR VALUES FOR SOURCE GROUP: ALL

ug/m^3

Max: 0.218 [ug/m^3] at (485508.95, 3743056.38)

0.009 0.010 0.020 0.030 0.040 0.050 0.070 0.090 0.100 0.200 0.218

COMMENTS:	SOURCES: **28**	COMPANY NAME:	
	RECEPTORS: **387**	MODELER:	
	OUTPUT TYPE: **Concentration**	SCALE: 1:46,499 (0 — 1 km)	
	MAX: **0.218 ug/m^3**	DATE: **8/11/2020**	PROJECT NO.:

Control Pathway

Dispersion Options

Titles

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

Dispersion Options

☑ Regulatory Default ☐ Non-Default Options

Dispersion Coefficient

Urban

Population:
Name (Optional):
Roughness Length:

Output Type

☑ Concentration
☐ Total Deposition (Dry & Wet)
☐ Dry Deposition
☐ Wet Deposition

Plume Depletion

☐ Dry Removal
☐ Wet Removal

Output Warnings

☐ No Output Warnings
☐ Non-fatal Warnings for Non-sequential Met Data

Pollutant / Averaging Time / Terrain Options

Pollutant Type

PM10

Averaging Time Options

Hours

1	2	3	4	6	8	12	24
☑	☐	☐	☐	☐	☐	☐	☑

☐ Month ☐ Period ☑ Annual

Exponential Decay

Half-life of 4 hrs will be used

Terrain Height Options

☐ Flat ☑ Elevated

SO: Meters
RE: Meters
TG: Meters

Flagpole Receptors

☐ Yes ☑ No

Default Height = 0.00 m

Control Pathway

Optional Files

Re-Start File	Init File	Multi-Year Analyses	Event Input File	Error Listing File
☐	☐	☐	☐	■

Detailed Error Listing File

Filename: Stoneridge Commerce Center ALUP Operations II.err

Source Pathway - Source Inputs

AERMOD

Source Pathway - Source Inputs

Area Sources

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Length of X Side [m]	Length of Y Side [m]	Orientation Angle from North [deg]	Initial Vertical Dim. [m]
AREA	AREA1	484874.75	3743357.95	455.55	3.68	1.60E-9	121.92	22.86	0.00	
AREA	AREA2	484871.98	3743233.21	453.42	3.68	1.60E-9	121.96	22.86	0.00	
AREA	AREA3	485146.39	3743355.17	448.46	3.68	1.60E-9	121.92	22.86	0.00	
AREA	AREA4	485143.62	3743233.21	446.37	3.68	1.60E-9	121.92	22.86	0.00	
AREA	AREA5	485354.28	3743175.01	440.37	3.68	1.60E-9	22.86	121.92	0.00	
AREA	AREA6	485462.38	3743175.01	437.97	3.68	1.60E-9	22.86	121.92	0.00	
AREA	AREA7	485478.26	3743070.68	436.65	3.68	6.20E-9	243.84	45.72	138.54	
AREA	AREA8	485257.33	3743051.10	441.72	3.68	1.60E-9	121.92	22.86	128.29	
AREA	AREA9	485204.16	3742816.98	438.13	3.68	1.26E-8	487.68	45.72	118.11	
AREA	AREA10	484779.77	3742734.89	447.16	3.68	6.20E-9	243.84	45.72	121.12	
AREA	AREA11	484612.12	3742771.42	453.97	3.68	1.60E-9	121.92	22.86	122.20	
AREA	AREA12	485057.95	3742922.41	442.20	3.68	1.26E-8	487.68	45.72	120.28	
AREA	AREA13	484738.93	3741750.29	442.12	3.68	1.60E-9	22.86	121.92	0.00	

Source Pathway - Source Inputs

AERMOD

Source Type	Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation (Optional)	Release Height [m]	Emission Rate [g/ (s-m^2)]	Length of X Side [m]	Length of Y Side [m]	Orientation Angle from North [deg]	Initial Vertical Dim. [m]
AREA	AREA16	484673.63	3742153.97	447.05	3.68	1.60E-9	22.86	121.92	0.00	
AREA	AREA18	484451.88	3741361.54	460.07	3.68	1.26E-8	45.72	487.68	0.00	
AREA	AREA19	484272.53	3740608.25	450.48	3.68	8.00E-10	60.96	22.86	-63.43	
AREA	AREA20	484360.57	3740794.13	456.66	3.68	8.00E-10	60.96	22.86	-61.19	
AREA	AREA21	484361.91	3740335.70	435.19	3.68	3.10E-9	243.84	22.86	-58.30	
AREA	AREA22	484497.02	3740395.22	434.20	3.68	2.30E-9	182.88	22.86	-64.09	
AREA	AREA23	484552.97	3740735.43	438.24	3.68	2.30E-9	182.88	22.86	-71.57	
AREA	AREA17	484333.27	3741371.59	471.10	3.68	1.57E-8	45.72	609.60	0.00	
AREA	AREA14	484417.80	3742190.75	459.16	3.66	6.29E-9	45.72	243.84	0.00	
AREA	AREA15	484335.44	3742187.91	463.95	3.66	6.29E-9	45.72	243.84	0.00	

Source Pathway - Source Inputs

Line Volume Sources

Source Type: LINE VOLUME

Source: SLINE1 (Offsite Ramona West)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00001		484359.95	3742998.85	473.10	3.65
			484109.27	3742939.17	484.61	3.65
			483864.56	3742969.01	492.38	3.65
			483649.69	3743112.26	487.12	3.65
			482318.69	3744699.90	448.49	3.65
			482169.47	3744813.31	448.00	3.65
			481888.95	3744944.62	447.14	3.65
			481506.96	3744956.55	445.73	3.65

Source Type: LINE VOLUME

Source: SLINE2 (Offsite - MCP east)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	3.27E-6		484426.39	3743032.22	470.67	3.65
			485680.11	3744223.69	469.93	3.65

Source Type: LINE VOLUME

Source: SLINE3 (Onsite -Orange Ave)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00008		485520.06	3743147.81	436.51	3.65
			485111.05	3743130.02	445.88	3.65
			484524.20	3742801.04	458.26	3.65
			484221.89	3742756.58	470.53	3.65

Source Pathway - Source Inputs

Source Type: LINE VOLUME
Source: SLINE5 (Onsite - Antelope Road)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00018		484212.99	3740320.28	437.37	0.00
			484417.50	3740613.71	443.42	0.00
			484702.03	3741511.76	443.62	0.00
			484506.42	3742472.05	454.52	0.00
			484301.91	3742712.12	465.76	0.00
			484221.89	3742898.84	476.30	0.00

Source Type: LINE VOLUME
Source: SLINE6 (Offsite MCP West)

Length of Side [m]	Emission Rate [g/ s]	Building Height [m]	X Coordinate for Points [m]	Y Coordinate for points [m]	Base Elevation [m]	Release Height [m]
22.15	0.00031		481572.31	3742550.51	440.66	3.65
			483760.50	3742560.88	489.89	3.65
			483999.02	3742742.37	480.78	3.65
			484097.54	3742908.30	482.62	3.65

Source Pathway - Source Inputs

Volume Sources Generated from Line Sources

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE3	L0001939	485508.99	3743147.33	436.69	3.65	2.44E-6	22.15		20.60	2.37
	L0001940	485464.74	3743145.40	437.57	3.65	2.44E-6	22.15		20.60	2.37
	L0001941	485420.48	3743143.48	438.49	3.65	2.44E-6	22.15		20.60	2.37
	L0001942	485376.22	3743141.55	439.40	3.65	2.44E-6	22.15		20.60	2.37
	L0001943	485331.96	3743139.63	440.31	3.65	2.44E-6	22.15		20.60	2.37
	L0001944	485287.70	3743137.71	441.27	3.65	2.44E-6	22.15		20.60	2.37
	L0001945	485243.44	3743135.78	442.31	3.65	2.44E-6	22.15		20.60	2.37
	L0001946	485199.19	3743133.86	443.43	3.65	2.44E-6	22.15		20.60	2.37
	L0001947	485154.93	3743131.93	444.65	3.65	2.44E-6	22.15		20.60	2.37
	L0001948	485110.72	3743129.84	445.94	3.65	2.44E-6	22.15		20.60	2.37
	L0001949	485072.08	3743108.18	446.50	3.65	2.44E-6	22.15		20.60	2.37
	L0001950	485033.43	3743086.52	446.66	3.65	2.44E-6	22.15		20.60	2.37
	L0001951	484994.79	3743064.85	446.82	3.65	2.44E-6	22.15		20.60	2.37
	L0001952	484956.15	3743043.19	447.03	3.65	2.44E-6	22.15		20.60	2.37
	L0001953	484917.51	3743021.53	447.54	3.65	2.44E-6	22.15		20.60	2.37
	L0001954	484878.87	3742999.86	448.32	3.65	2.44E-6	22.15		20.60	2.37
	L0001955	484840.22	3742978.20	449.66	3.65	2.44E-6	22.15		20.60	2.37
	L0001956	484801.58	3742956.54	451.10	3.65	2.44E-6	22.15		20.60	2.37
	L0001957	484762.94	3742934.87	452.19	3.65	2.44E-6	22.15		20.60	2.37
	L0001958	484724.30	3742913.21	452.71	3.65	2.44E-6	22.15		20.60	2.37
	L0001959	484685.66	3742891.55	453.14	3.65	2.44E-6	22.15		20.60	2.37
	L0001960	484647.01	3742869.89	453.93	3.65	2.44E-6	22.15		20.60	2.37
	L0001961	484608.37	3742848.22	454.73	3.65	2.44E-6	22.15		20.60	2.37
	L0001962	484569.73	3742826.56	456.01	3.65	2.44E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE3	L0001963	484531.09	3742804.90	457.78	3.65	2.44E-6	22.15		20.60	2.37
	L0001964	484488.18	3742795.74	460.11	3.65	2.44E-6	22.15		20.60	2.37
	L0001965	484444.35	3742789.29	462.38	3.65	2.44E-6	22.15		20.60	2.37
	L0001966	484400.53	3742782.85	464.23	3.65	2.44E-6	22.15		20.60	2.37
	L0001967	484356.70	3742776.40	465.86	3.65	2.44E-6	22.15		20.60	2.37
	L0001968	484312.87	3742769.96	467.79	3.65	2.44E-6	22.15		20.60	2.37
	L0001969	484269.04	3742763.51	469.47	3.65	2.44E-6	22.15		20.60	2.37
	L0001970	484225.21	3742757.07	470.78	3.65	2.44E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0001971	484219.33	3740329.37	437.59	0.00	2.78E-6	22.15		20.60	2.37
	L0001972	484244.66	3740365.71	438.64	0.00	2.78E-6	22.15		20.60	2.37
	L0001973	484269.99	3740402.06	439.69	0.00	2.78E-6	22.15		20.60	2.37
	L0001974	484295.32	3740438.40	440.80	0.00	2.78E-6	22.15		20.60	2.37
	L0001975	484320.65	3740474.74	441.99	0.00	2.78E-6	22.15		20.60	2.37
	L0001976	484345.98	3740511.09	442.91	0.00	2.78E-6	22.15		20.60	2.37
	L0001977	484371.31	3740547.43	443.03	0.00	2.78E-6	22.15		20.60	2.37
	L0001978	484396.64	3740583.77	443.25	0.00	2.78E-6	22.15		20.60	2.37
	L0001979	484419.86	3740621.16	443.51	0.00	2.78E-6	22.15		20.60	2.37
	L0001980	484433.24	3740663.39	444.27	0.00	2.78E-6	22.15		20.60	2.37
	L0001981	484446.62	3740705.62	444.28	0.00	2.78E-6	22.15		20.60	2.37
	L0001982	484460.00	3740747.85	443.92	0.00	2.78E-6	22.15		20.60	2.37
	L0001983	484473.38	3740790.08	445.09	0.00	2.78E-6	22.15		20.60	2.37
	L0001984	484486.76	3740832.31	446.04	0.00	2.78E-6	22.15		20.60	2.37
	L0001985	484500.14	3740874.54	446.84	0.00	2.78E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0001986	484513.52	3740916.77	448.01	0.00	2.78E-6	22.15		20.60	2.37
	L0001987	484526.90	3740959.01	447.64	0.00	2.78E-6	22.15		20.60	2.37
	L0001988	484540.28	3741001.24	448.51	0.00	2.78E-6	22.15		20.60	2.37
	L0001989	484553.66	3741043.47	448.62	0.00	2.78E-6	22.15		20.60	2.37
	L0001990	484567.04	3741085.70	449.85	0.00	2.78E-6	22.15		20.60	2.37
	L0001991	484580.42	3741127.93	449.94	0.00	2.78E-6	22.15		20.60	2.37
	L0001992	484593.80	3741170.16	449.08	0.00	2.78E-6	22.15		20.60	2.37
	L0001993	484607.18	3741212.39	449.38	0.00	2.78E-6	22.15		20.60	2.37
	L0001994	484620.56	3741254.62	449.55	0.00	2.78E-6	22.15		20.60	2.37
	L0001995	484633.94	3741296.85	448.53	0.00	2.78E-6	22.15		20.60	2.37
	L0001996	484647.32	3741339.09	447.81	0.00	2.78E-6	22.15		20.60	2.37
	L0001997	484660.70	3741381.32	446.54	0.00	2.78E-6	22.15		20.60	2.37
	L0001998	484674.08	3741423.55	445.84	0.00	2.78E-6	22.15		20.60	2.37
	L0001999	484687.47	3741465.78	444.83	0.00	2.78E-6	22.15		20.60	2.37
	L0002000	484700.85	3741508.01	443.89	0.00	2.78E-6	22.15		20.60	2.37
	L0002001	484693.97	3741551.31	444.07	0.00	2.78E-6	22.15		20.60	2.37
	L0002002	484685.13	3741594.72	444.27	0.00	2.78E-6	22.15		20.60	2.37
	L0002003	484676.29	3741638.13	444.56	0.00	2.78E-6	22.15		20.60	2.37
	L0002004	484667.45	3741681.54	444.87	0.00	2.78E-6	22.15		20.60	2.37
	L0002005	484658.60	3741724.95	445.14	0.00	2.78E-6	22.15		20.60	2.37
	L0002006	484649.76	3741768.36	445.81	0.00	2.78E-6	22.15		20.60	2.37
	L0002007	484640.92	3741811.76	446.39	0.00	2.78E-6	22.15		20.60	2.37
	L0002008	484632.08	3741855.17	447.03	0.00	2.78E-6	22.15		20.60	2.37
	L0002009	484623.23	3741898.58	447.37	0.00	2.78E-6	22.15		20.60	2.37
	L0002010	484614.39	3741941.99	447.88	0.00	2.78E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE5	L0002011	484605.55	3741985.40	448.50	0.00	2.78E-6	22.15		20.60	2.37
	L0002012	484596.71	3742028.81	449.25	0.00	2.78E-6	22.15		20.60	2.37
	L0002013	484587.86	3742072.22	449.84	0.00	2.78E-6	22.15		20.60	2.37
	L0002014	484579.02	3742115.62	450.63	0.00	2.78E-6	22.15		20.60	2.37
	L0002015	484570.18	3742159.03	451.35	0.00	2.78E-6	22.15		20.60	2.37
	L0002016	484561.34	3742202.44	451.68	0.00	2.78E-6	22.15		20.60	2.37
	L0002017	484552.49	3742245.85	451.97	0.00	2.78E-6	22.15		20.60	2.37
	L0002018	484543.65	3742289.26	452.43	0.00	2.78E-6	22.15		20.60	2.37
	L0002019	484534.81	3742332.67	452.72	0.00	2.78E-6	22.15		20.60	2.37
	L0002020	484525.97	3742376.08	453.48	0.00	2.78E-6	22.15		20.60	2.37
	L0002021	484517.12	3742419.48	454.11	0.00	2.78E-6	22.15		20.60	2.37
	L0002022	484508.28	3742462.89	454.46	0.00	2.78E-6	22.15		20.60	2.37
	L0002023	484483.75	3742498.66	455.38	0.00	2.78E-6	22.15		20.60	2.37
	L0002024	484455.02	3742532.38	456.64	0.00	2.78E-6	22.15		20.60	2.37
	L0002025	484426.29	3742566.10	458.08	0.00	2.78E-6	22.15		20.60	2.37
	L0002026	484397.57	3742599.83	459.35	0.00	2.78E-6	22.15		20.60	2.37
	L0002027	484368.84	3742633.55	460.56	0.00	2.78E-6	22.15		20.60	2.37
	L0002028	484340.11	3742667.27	462.53	0.00	2.78E-6	22.15		20.60	2.37
	L0002029	484311.39	3742701.00	464.99	0.00	2.78E-6	22.15		20.60	2.37
	L0002030	484290.22	3742739.41	467.52	0.00	2.78E-6	22.15		20.60	2.37
	L0002031	484272.77	3742780.13	470.01	0.00	2.78E-6	22.15		20.60	2.37
	L0002032	484255.31	3742820.84	471.90	0.00	2.78E-6	22.15		20.60	2.37
	L0002033	484237.86	3742861.56	473.80	0.00	2.78E-6	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE2	L0002034	484434.42	3743039.85	470.38	3.65	8.38E-8	22.15		20.60	2.37
	L0002035	484466.53	3743070.36	469.35	3.65	8.38E-8	22.15		20.60	2.37
	L0002036	484498.64	3743100.88	468.55	3.65	8.38E-8	22.15		20.60	2.37
	L0002037	484530.76	3743131.40	467.78	3.65	8.38E-8	22.15		20.60	2.37
	L0002038	484562.87	3743161.92	466.83	3.65	8.38E-8	22.15		20.60	2.37
	L0002039	484594.98	3743192.43	465.69	3.65	8.38E-8	22.15		20.60	2.37
	L0002040	484627.09	3743222.95	464.50	3.65	8.38E-8	22.15		20.60	2.37
	L0002041	484659.20	3743253.47	463.41	3.65	8.38E-8	22.15		20.60	2.37
	L0002042	484691.32	3743283.99	462.55	3.65	8.38E-8	22.15		20.60	2.37
	L0002043	484723.43	3743314.50	461.58	3.65	8.38E-8	22.15		20.60	2.37
	L0002044	484755.54	3743345.02	460.69	3.65	8.38E-8	22.15		20.60	2.37
	L0002045	484787.65	3743375.54	460.08	3.65	8.38E-8	22.15		20.60	2.37
	L0002046	484819.76	3743406.06	459.75	3.65	8.38E-8	22.15		20.60	2.37
	L0002047	484851.87	3743436.58	459.72	3.65	8.38E-8	22.15		20.60	2.37
	L0002048	484883.99	3743467.09	459.83	3.65	8.38E-8	22.15		20.60	2.37
	L0002049	484916.10	3743497.61	460.07	3.65	8.38E-8	22.15		20.60	2.37
	L0002050	484948.21	3743528.13	460.29	3.65	8.38E-8	22.15		20.60	2.37
	L0002051	484980.32	3743558.65	460.55	3.65	8.38E-8	22.15		20.60	2.37
	L0002052	485012.43	3743589.16	460.74	3.65	8.38E-8	22.15		20.60	2.37
	L0002053	485044.54	3743619.68	461.18	3.65	8.38E-8	22.15		20.60	2.37
	L0002054	485076.66	3743650.20	461.96	3.65	8.38E-8	22.15		20.60	2.37
	L0002055	485108.77	3743680.72	462.70	3.65	8.38E-8	22.15		20.60	2.37
	L0002056	485140.88	3743711.23	463.52	3.65	8.38E-8	22.15		20.60	2.37
	L0002057	485172.99	3743741.75	464.37	3.65	8.38E-8	22.15		20.60	2.37
	L0002058	485205.10	3743772.27	465.29	3.65	8.38E-8	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE2	L0002059	485237.22	3743802.79	465.97	3.65	8.38E-8	22.15		20.60	2.37
	L0002060	485269.33	3743833.30	466.38	3.65	8.38E-8	22.15		20.60	2.37
	L0002061	485301.44	3743863.82	466.61	3.65	8.38E-8	22.15		20.60	2.37
	L0002062	485333.55	3743894.34	466.88	3.65	8.38E-8	22.15		20.60	2.37
	L0002063	485365.66	3743924.86	467.17	3.65	8.38E-8	22.15		20.60	2.37
	L0002064	485397.77	3743955.37	467.42	3.65	8.38E-8	22.15		20.60	2.37
	L0002065	485429.89	3743985.89	467.64	3.65	8.38E-8	22.15		20.60	2.37
	L0002066	485462.00	3744016.41	467.95	3.65	8.38E-8	22.15		20.60	2.37
	L0002067	485494.11	3744046.93	468.25	3.65	8.38E-8	22.15		20.60	2.37
	L0002068	485526.22	3744077.44	468.50	3.65	8.38E-8	22.15		20.60	2.37
	L0002069	485558.33	3744107.96	468.77	3.65	8.38E-8	22.15		20.60	2.37
	L0002070	485590.45	3744138.48	469.04	3.65	8.38E-8	22.15		20.60	2.37
	L0002071	485622.56	3744169.00	469.35	3.65	8.38E-8	22.15		20.60	2.37
	L0002072	485654.67	3744199.51	469.68	3.65	8.38E-8	22.15		20.60	2.37

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0002073	484349.18	3742996.29	473.33	3.65	1.56E-7	22.15		20.60	2.37
	L0002074	484306.08	3742986.03	475.37	3.65	1.56E-7	22.15		20.60	2.37
	L0002075	484262.99	3742975.77	477.85	3.65	1.56E-7	22.15		20.60	2.37
	L0002076	484219.89	3742965.50	480.24	3.65	1.56E-7	22.15		20.60	2.37
	L0002077	484176.80	3742955.24	482.08	3.65	1.56E-7	22.15		20.60	2.37
	L0002078	484133.70	3742944.98	483.57	3.65	1.56E-7	22.15		20.60	2.37
	L0002079	484090.22	3742941.49	485.36	3.65	1.56E-7	22.15		20.60	2.37
	L0002080	484046.25	3742946.85	487.30	3.65	1.56E-7	22.15		20.60	2.37
	L0002081	484002.28	3742952.21	489.32	3.65	1.56E-7	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0002082	483958.30	3742957.58	490.58	3.65	1.56E-7	22.15		20.60	2.37
	L0002083	483914.33	3742962.94	491.43	3.65	1.56E-7	22.15		20.60	2.37
	L0002084	483870.35	3742968.30	492.07	3.65	1.56E-7	22.15		20.60	2.37
	L0002085	483832.56	3742990.34	492.33	3.65	1.56E-7	22.15		20.60	2.37
	L0002086	483795.70	3743014.92	492.43	3.65	1.56E-7	22.15		20.60	2.37
	L0002087	483758.84	3743039.49	492.08	3.65	1.56E-7	22.15		20.60	2.37
	L0002088	483721.98	3743064.06	491.27	3.65	1.56E-7	22.15		20.60	2.37
	L0002089	483685.12	3743088.64	489.08	3.65	1.56E-7	22.15		20.60	2.37
	L0002090	483648.58	3743113.57	487.00	3.65	1.56E-7	22.15		20.60	2.37
	L0002091	483620.12	3743147.52	484.88	3.65	1.56E-7	22.15		20.60	2.37
	L0002092	483591.66	3743181.47	482.50	3.65	1.56E-7	22.15		20.60	2.37
	L0002093	483563.20	3743215.42	480.06	3.65	1.56E-7	22.15		20.60	2.37
	L0002094	483534.74	3743249.37	477.69	3.65	1.56E-7	22.15		20.60	2.37
	L0002095	483506.28	3743283.32	475.36	3.65	1.56E-7	22.15		20.60	2.37
	L0002096	483477.82	3743317.26	473.34	3.65	1.56E-7	22.15		20.60	2.37
	L0002097	483449.36	3743351.21	471.72	3.65	1.56E-7	22.15		20.60	2.37
	L0002098	483420.90	3743385.16	470.31	3.65	1.56E-7	22.15		20.60	2.37
	L0002099	483392.44	3743419.11	469.20	3.65	1.56E-7	22.15		20.60	2.37
	L0002100	483363.98	3743453.06	468.21	3.65	1.56E-7	22.15		20.60	2.37
	L0002101	483335.52	3743487.01	467.19	3.65	1.56E-7	22.15		20.60	2.37
	L0002102	483307.06	3743520.95	466.20	3.65	1.56E-7	22.15		20.60	2.37
	L0002103	483278.60	3743554.90	465.21	3.65	1.56E-7	22.15		20.60	2.37
	L0002104	483250.14	3743588.85	464.27	3.65	1.56E-7	22.15		20.60	2.37
	L0002105	483221.68	3743622.80	463.30	3.65	1.56E-7	22.15		20.60	2.37
	L0002106	483193.22	3743656.75	462.31	3.65	1.56E-7	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0002107	483164.75	3743690.70	461.35	3.65	1.56E-7	22.15		20.60	2.37
	L0002108	483136.29	3743724.64	460.24	3.65	1.56E-7	22.15		20.60	2.37
	L0002109	483107.83	3743758.59	458.96	3.65	1.56E-7	22.15		20.60	2.37
	L0002110	483079.37	3743792.54	457.68	3.65	1.56E-7	22.15		20.60	2.37
	L0002111	483050.91	3743826.49	456.33	3.65	1.56E-7	22.15		20.60	2.37
	L0002112	483022.45	3743860.44	454.96	3.65	1.56E-7	22.15		20.60	2.37
	L0002113	482993.99	3743894.39	453.65	3.65	1.56E-7	22.15		20.60	2.37
	L0002114	482965.53	3743928.33	452.52	3.65	1.56E-7	22.15		20.60	2.37
	L0002115	482937.07	3743962.28	451.67	3.65	1.56E-7	22.15		20.60	2.37
	L0002116	482908.61	3743996.23	451.09	3.65	1.56E-7	22.15		20.60	2.37
	L0002117	482880.15	3744030.18	450.82	3.65	1.56E-7	22.15		20.60	2.37
	L0002118	482851.69	3744064.13	450.69	3.65	1.56E-7	22.15		20.60	2.37
	L0002119	482823.23	3744098.08	450.55	3.65	1.56E-7	22.15		20.60	2.37
	L0002120	482794.77	3744132.02	450.43	3.65	1.56E-7	22.15		20.60	2.37
	L0002121	482766.31	3744165.97	450.31	3.65	1.56E-7	22.15		20.60	2.37
	L0002122	482737.85	3744199.92	450.21	3.65	1.56E-7	22.15		20.60	2.37
	L0002123	482709.39	3744233.87	450.08	3.65	1.56E-7	22.15		20.60	2.37
	L0002124	482680.93	3744267.82	449.98	3.65	1.56E-7	22.15		20.60	2.37
	L0002125	482652.47	3744301.77	449.86	3.65	1.56E-7	22.15		20.60	2.37
	L0002126	482624.01	3744335.71	449.75	3.65	1.56E-7	22.15		20.60	2.37
	L0002127	482595.55	3744369.66	449.61	3.65	1.56E-7	22.15		20.60	2.37
	L0002128	482567.08	3744403.61	449.50	3.65	1.56E-7	22.15		20.60	2.37
	L0002129	482538.62	3744437.56	449.37	3.65	1.56E-7	22.15		20.60	2.37
	L0002130	482510.16	3744471.51	449.26	3.65	1.56E-7	22.15		20.60	2.37
	L0002131	482481.70	3744505.46	449.13	3.65	1.56E-7	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE1	L0002132	482453.24	3744539.40	449.03	3.65	1.56E-7	22.15		20.60	2.37
	L0002133	482424.78	3744573.35	448.90	3.65	1.56E-7	22.15		20.60	2.37
	L0002134	482396.32	3744607.30	448.80	3.65	1.56E-7	22.15		20.60	2.37
	L0002135	482367.86	3744641.25	448.77	3.65	1.56E-7	22.15		20.60	2.37
	L0002136	482339.40	3744675.20	448.68	3.65	1.56E-7	22.15		20.60	2.37
	L0002137	482309.09	3744707.20	448.50	3.65	1.56E-7	22.15		20.60	2.37
	L0002138	482273.82	3744734.01	448.40	3.65	1.56E-7	22.15		20.60	2.37
	L0002139	482238.55	3744760.81	448.24	3.65	1.56E-7	22.15		20.60	2.37
	L0002140	482203.28	3744787.62	448.13	3.65	1.56E-7	22.15		20.60	2.37
	L0002141	482167.80	3744814.09	448.07	3.65	1.56E-7	22.15		20.60	2.37
	L0002142	482127.68	3744832.87	447.86	3.65	1.56E-7	22.15		20.60	2.37
	L0002143	482087.56	3744851.65	447.65	3.65	1.56E-7	22.15		20.60	2.37
	L0002144	482047.44	3744870.43	447.52	3.65	1.56E-7	22.15		20.60	2.37
	L0002145	482007.32	3744889.21	447.50	3.65	1.56E-7	22.15		20.60	2.37
	L0002146	481967.19	3744907.99	447.49	3.65	1.56E-7	22.15		20.60	2.37
	L0002147	481927.07	3744926.77	447.26	3.65	1.56E-7	22.15		20.60	2.37
	L0002148	481886.74	3744944.68	447.25	3.65	1.56E-7	22.15		20.60	2.37
	L0002149	481842.46	3744946.07	447.02	3.65	1.56E-7	22.15		20.60	2.37
	L0002150	481798.19	3744947.45	446.92	3.65	1.56E-7	22.15		20.60	2.37
	L0002151	481753.91	3744948.84	446.81	3.65	1.56E-7	22.15		20.60	2.37
	L0002152	481709.63	3744950.22	446.61	3.65	1.56E-7	22.15		20.60	2.37
	L0002153	481665.35	3744951.60	446.42	3.65	1.56E-7	22.15		20.60	2.37
	L0002154	481621.07	3744952.99	446.16	3.65	1.56E-7	22.15		20.60	2.37
	L0002155	481576.79	3744954.37	445.88	3.65	1.56E-7	22.15		20.60	2.37
	L0002156	481532.52	3744955.75	445.66	3.65	1.56E-7	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE6	L0002157	481583.38	3742550.56	440.78	3.65	5.03E-6	22.15		20.60	2.37
	L0002158	481627.68	3742550.77	441.34	3.65	5.03E-6	22.15		20.60	2.37
	L0002159	481671.98	3742550.98	442.06	3.65	5.03E-6	22.15		20.60	2.37
	L0002160	481716.28	3742551.19	442.70	3.65	5.03E-6	22.15		20.60	2.37
	L0002161	481760.58	3742551.40	443.50	3.65	5.03E-6	22.15		20.60	2.37
	L0002162	481804.88	3742551.61	444.36	3.65	5.03E-6	22.15		20.60	2.37
	L0002163	481849.18	3742551.82	445.38	3.65	5.03E-6	22.15		20.60	2.37
	L0002164	481893.48	3742552.03	446.41	3.65	5.03E-6	22.15		20.60	2.37
	L0002165	481937.78	3742552.24	447.33	3.65	5.03E-6	22.15		20.60	2.37
	L0002166	481982.08	3742552.45	448.69	3.65	5.03E-6	22.15		20.60	2.37
	L0002167	482026.38	3742552.66	450.52	3.65	5.03E-6	22.15		20.60	2.37
	L0002168	482070.67	3742552.87	452.83	3.65	5.03E-6	22.15		20.60	2.37
	L0002169	482114.97	3742553.08	456.99	3.65	5.03E-6	22.15		20.60	2.37
	L0002170	482159.27	3742553.29	460.31	3.65	5.03E-6	22.15		20.60	2.37
	L0002171	482203.57	3742553.50	464.35	3.65	5.03E-6	22.15		20.60	2.37
	L0002172	482247.87	3742553.71	469.02	3.65	5.03E-6	22.15		20.60	2.37
	L0002173	482292.17	3742553.92	478.52	3.65	5.03E-6	22.15		20.60	2.37
	L0002174	482336.47	3742554.13	486.78	3.65	5.03E-6	22.15		20.60	2.37
	L0002175	482380.77	3742554.34	483.89	3.65	5.03E-6	22.15		20.60	2.37
	L0002176	482425.07	3742554.55	481.89	3.65	5.03E-6	22.15		20.60	2.37
	L0002177	482469.37	3742554.76	481.39	3.65	5.03E-6	22.15		20.60	2.37
	L0002178	482513.67	3742554.97	482.11	3.65	5.03E-6	22.15		20.60	2.37
	L0002179	482557.97	3742555.18	486.67	3.65	5.03E-6	22.15		20.60	2.37
	L0002180	482602.27	3742555.39	490.84	3.65	5.03E-6	22.15		20.60	2.37
	L0002181	482646.57	3742555.60	492.11	3.65	5.03E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE6	L0002182	482690.87	3742555.81	491.74	3.65	5.03E-6	22.15		20.60	2.37
	L0002183	482735.17	3742556.02	493.13	3.65	5.03E-6	22.15		20.60	2.37
	L0002184	482779.47	3742556.23	492.94	3.65	5.03E-6	22.15		20.60	2.37
	L0002185	482823.77	3742556.44	491.20	3.65	5.03E-6	22.15		20.60	2.37
	L0002186	482868.07	3742556.65	496.64	3.65	5.03E-6	22.15		20.60	2.37
	L0002187	482912.37	3742556.86	499.66	3.65	5.03E-6	22.15		20.60	2.37
	L0002188	482956.66	3742557.07	501.21	3.65	5.03E-6	22.15		20.60	2.37
	L0002189	483000.96	3742557.28	500.81	3.65	5.03E-6	22.15		20.60	2.37
	L0002190	483045.26	3742557.49	505.17	3.65	5.03E-6	22.15		20.60	2.37
	L0002191	483089.56	3742557.70	514.20	3.65	5.03E-6	22.15		20.60	2.37
	L0002192	483133.86	3742557.91	521.62	3.65	5.03E-6	22.15		20.60	2.37
	L0002193	483178.16	3742558.12	536.89	3.65	5.03E-6	22.15		20.60	2.37
	L0002194	483222.46	3742558.33	537.56	3.65	5.03E-6	22.15		20.60	2.37
	L0002195	483266.76	3742558.54	533.79	3.65	5.03E-6	22.15		20.60	2.37
	L0002196	483311.06	3742558.75	539.69	3.65	5.03E-6	22.15		20.60	2.37
	L0002197	483355.36	3742558.96	545.46	3.65	5.03E-6	22.15		20.60	2.37
	L0002198	483399.66	3742559.17	546.85	3.65	5.03E-6	22.15		20.60	2.37
	L0002199	483443.96	3742559.38	553.04	3.65	5.03E-6	22.15		20.60	2.37
	L0002200	483488.26	3742559.59	548.87	3.65	5.03E-6	22.15		20.60	2.37
	L0002201	483532.56	3742559.80	540.92	3.65	5.03E-6	22.15		20.60	2.37
	L0002202	483576.86	3742560.01	538.07	3.65	5.03E-6	22.15		20.60	2.37
	L0002203	483621.16	3742560.22	525.83	3.65	5.03E-6	22.15		20.60	2.37
	L0002204	483665.46	3742560.43	508.52	3.65	5.03E-6	22.15		20.60	2.37
	L0002205	483709.76	3742560.64	495.88	3.65	5.03E-6	22.15		20.60	2.37
	L0002206	483754.06	3742560.85	490.79	3.65	5.03E-6	22.15		20.60	2.37

Source Pathway - Source Inputs

AERMOD

Line Source ID	Volume Source ID	X Coordinate [m]	Y Coordinate [m]	Base Elevation [m]	Release Height [m[	Emission Rate [g/s]	Length of Side [m]	Building Height [m]	Initial Lateral Dimencion [m]	Initial Vertical Dimencion [m]
SLINE6	L0002207	483790.63	3742583.80	488.31	3.65	5.03E-6	22.15		20.60	2.37
	L0002208	483825.88	3742610.63	485.95	3.65	5.03E-6	22.15		20.60	2.37
	L0002209	483861.14	3742637.45	484.50	3.65	5.03E-6	22.15		20.60	2.37
	L0002210	483896.39	3742664.28	483.94	3.65	5.03E-6	22.15		20.60	2.37
	L0002211	483931.65	3742691.10	483.15	3.65	5.03E-6	22.15		20.60	2.37
	L0002212	483966.90	3742717.93	481.65	3.65	5.03E-6	22.15		20.60	2.37
	L0002213	484001.03	3742745.75	481.07	3.65	5.03E-6	22.15		20.60	2.37
	L0002214	484023.65	3742783.85	484.86	3.65	5.03E-6	22.15		20.60	2.37
	L0002215	484046.27	3742821.94	484.07	3.65	5.03E-6	22.15		20.60	2.37
	L0002216	484068.88	3742860.03	482.00	3.65	5.03E-6	22.15		20.60	2.37
	L0002217	484091.50	3742898.12	482.28	3.65	5.03E-6	22.15		20.60	2.37

Source Pathway

Building Downwash Information

Option not in use

Emission Rate Units for Output

For Concentration

Unit Factor:	1E6
Emission Unit Label:	GRAMS/SEC
Concentration Unit Label:	MICROGRAMS/M**3

Receptor Pathway

Receptor Networks

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

Uniform Cartesian Grid

Receptor Network ID	Grid Origin X Coordinate [m]	Grid Origin Y Coordinate [m]	No. of X-Axis Receptors	No. of Y-Axis Receptors	Spacing for X-Axis [m]	Spacing for Y-Axis [m]
UCART1	483777.12	3740002.12	5	32	100.00	100.00
UCART2	485508.95	3742256.38	5	15	100.00	100.00
UCART3	484885.59	3740165.87	7	16	100.00	100.00

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	484091.43	3742557.73		471.61	
2	483445.55	3743236.87		475.70	
3	483373.48	3742884.83		479.57	
4	483334.67	3743397.65		463.73	
5	482921.65	3743902.15		450.97	
6	482338.44	3744552.56		449.10	
7	481720.48	3744906.65		448.76	
8	481647.63	3744385.89		443.32	
9	482809.27	3743547.06		452.82	
10	482404.05	3742961.89		456.71	
11	482093.27	3742559.02		454.65	
12	483081.08	3741065.77		457.34	
13	482283.94	3741123.86		444.26	
14	483075.07	3740575.07		451.19	
15	485565.67	3740078.39		435.32	
16	485706.50	3740373.80		434.08	
17	485920.11	3740601.54		434.70	
18	486482.14	3741125.34		441.00	
19	486686.97	3741601.84		440.75	
20	487752.17	3742354.42		444.18	
21	487841.90	3743062.13		440.46	
22	488066.22	3743491.97		442.19	
23	485684.63	3743194.60		433.69	
24	481546.43	3742577.78		440.28	

25	481827.39	3742524.53		444.71	
26	485576.64	3743515.31		441.06	
27	484116.76	3742798.51		477.87	

Plant Boundary Receptors

Cartesian Plant Boundary

Primary

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	484200.22	3742916.26	FENCEPRI	479.19	
2	484200.22	3740154.09	FENCEPRI	433.40	
3	484735.58	3740154.09	FENCEPRI	431.59	
4	484730.35	3741401.91	FENCEPRI	442.87	
5	485219.99	3742313.64	FENCEPRI	434.02	
6	485512.10	3742313.64	FENCEPRI	432.72	
7	485548.61	3742313.64	FENCEPRI	432.75	
8	485539.48	3743299.49	FENCEPRI	437.92	
9	485347.79	3743299.49	FENCEPRI	445.66	
10	485347.79	3743409.03	FENCEPRI	445.30	
11	484863.99	3743409.03	FENCEPRI	459.26	
12	484434.96	3742998.26	FENCEPRI	466.26	
13	484352.81	3742943.49	FENCEPRI	470.06	

Receptor Groups

Record Number	Group ID	Group Description
1	FENCEPRI	Cartesian plant boundary Primary Receptors
2	UCART1	Receptors generated from Uniform Cartesian Grid
3	UCART2	Receptors generated from Uniform Cartesian Grid
4	UCART3	Receptors generated from Uniform Cartesian Grid
5	UCART4	Receptors generated from Uniform Cartesian Grid
6	UCART5	Receptors generated from Uniform Cartesian Grid
7	UCART6	Receptors generated from Uniform Cartesian Grid
8	UCART7	Receptors generated from Uniform Cartesian Grid

Receptor Pathway

Terrain Elevations and Flagpole Heights for Network Grids

Uniform Cartesian Grid

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483777.12	3740002.12	436.20	Option not Selected
	483877.12	3740002.12	434.60	
	483977.12	3740002.12	433.20	
	484077.12	3740002.12	432.30	
	484177.12	3740002.12	432.10	
	483777.12	3740102.12	437.60	
	483877.12	3740102.12	435.90	
	483977.12	3740102.12	434.80	
	484077.12	3740102.12	433.40	
	484177.12	3740102.12	432.50	
	483777.12	3740202.12	439.10	
	483877.12	3740202.12	438.00	
	483977.12	3740202.12	437.10	
	484077.12	3740202.12	435.70	
	484177.12	3740202.12	434.40	
	483777.12	3740302.12	443.50	
	483877.12	3740302.12	442.00	
	483977.12	3740302.12	440.80	
	484077.12	3740302.12	439.30	
	484177.12	3740302.12	437.30	
	483777.12	3740402.12	456.40	
	483877.12	3740402.12	448.80	
	483977.12	3740402.12	447.30	
	484077.12	3740402.12	443.50	
	484177.12	3740402.12	441.40	
	483777.12	3740502.12	475.70	
	483877.12	3740502.12	469.80	
	483977.12	3740502.12	455.00	
	484077.12	3740502.12	448.70	
	484177.12	3740502.12	446.70	
	483777.12	3740602.12	481.40	
	483877.12	3740602.12	478.50	
	483977.12	3740602.12	474.20	
	484077.12	3740602.12	457.90	
	484177.12	3740602.12	453.50	
	483777.12	3740702.12	481.20	
	483877.12	3740702.12	490.90	
	483977.12	3740702.12	492.20	
	484077.12	3740702.12	477.40	
	484177.12	3740702.12	460.70	
	483777.12	3740802.12	481.10	
	483877.12	3740802.12	496.40	
	483977.12	3740802.12	494.50	
	484077.12	3740802.12	478.70	
	484177.12	3740802.12	469.60	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483777.12	3740902.12	483.00	Option not Selected
	483877.12	3740902.12	485.40	
	483977.12	3740902.12	489.40	
	484077.12	3740902.12	481.30	
	484177.12	3740902.12	482.30	
	483777.12	3741002.12	487.30	
	483877.12	3741002.12	490.30	
	483977.12	3741002.12	492.60	
	484077.12	3741002.12	485.30	
	484177.12	3741002.12	495.80	
	483777.12	3741102.12	493.50	
	483877.12	3741102.12	496.70	
	483977.12	3741102.12	495.40	
	484077.12	3741102.12	495.70	
	484177.12	3741102.12	507.30	
	483777.12	3741202.12	501.80	
	483877.12	3741202.12	504.40	
	483977.12	3741202.12	504.30	
	484077.12	3741202.12	498.50	
	484177.12	3741202.12	487.80	
	483777.12	3741302.12	516.00	
	483877.12	3741302.12	516.20	
	483977.12	3741302.12	513.90	
	484077.12	3741302.12	506.70	
	484177.12	3741302.12	509.90	
	483777.12	3741402.12	537.70	
	483877.12	3741402.12	543.00	
	483977.12	3741402.12	523.30	
	484077.12	3741402.12	528.20	
	484177.12	3741402.12	496.30	
	483777.12	3741502.12	528.60	
	483877.12	3741502.12	568.20	
	483977.12	3741502.12	546.80	
	484077.12	3741502.12	531.60	
	484177.12	3741502.12	506.50	
	483777.12	3741602.12	522.20	
	483877.12	3741602.12	565.20	
	483977.12	3741602.12	569.40	
	484077.12	3741602.12	533.10	
	484177.12	3741602.12	495.10	
	483777.12	3741702.12	516.10	
	483877.12	3741702.12	530.10	
	483977.12	3741702.12	562.90	
	484077.12	3741702.12	523.80	
	484177.12	3741702.12	487.20	
	483777.12	3741802.12	527.90	
	483877.12	3741802.12	529.30	
	483977.12	3741802.12	561.20	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	484077.12	3741802.12	540.90	Option not Selected
	484177.12	3741802.12	487.40	
	483777.12	3741902.12	572.90	
	483877.12	3741902.12	554.70	
	483977.12	3741902.12	543.10	
	484077.12	3741902.12	539.20	
	484177.12	3741902.12	487.60	
	483777.12	3742002.12	523.60	
	483877.12	3742002.12	529.30	
	483977.12	3742002.12	523.80	
	484077.12	3742002.12	497.20	
	484177.12	3742002.12	484.00	
	483777.12	3742102.12	506.70	
	483877.12	3742102.12	500.80	
	483977.12	3742102.12	492.10	
	484077.12	3742102.12	483.30	
	484177.12	3742102.12	475.60	
	483777.12	3742202.12	510.70	
	483877.12	3742202.12	506.20	
	483977.12	3742202.12	492.70	
	484077.12	3742202.12	481.40	
	484177.12	3742202.12	474.60	
	483777.12	3742302.12	503.80	
	483877.12	3742302.12	494.30	
	483977.12	3742302.12	485.50	
	484077.12	3742302.12	477.60	
	484177.12	3742302.12	470.70	
	483777.12	3742402.12	501.10	
	483877.12	3742402.12	488.10	
	483977.12	3742402.12	481.50	
	484077.12	3742402.12	475.20	
	484177.12	3742402.12	469.90	
	483777.12	3742502.12	490.50	
	483877.12	3742502.12	496.60	
	483977.12	3742502.12	483.90	
	484077.12	3742502.12	473.70	
	484177.12	3742502.12	468.30	
	483777.12	3742602.12	489.40	
	483877.12	3742602.12	482.20	
	483977.12	3742602.12	477.50	
	484077.12	3742602.12	472.30	
	484177.12	3742602.12	467.80	
	483777.12	3742702.12	492.60	
	483877.12	3742702.12	487.10	
	483977.12	3742702.12	480.10	
	484077.12	3742702.12	474.70	
	484177.12	3742702.12	469.90	
	483777.12	3742802.12	500.20	

Receptor Pathway

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART1	483877.12	3742802.12	489.20	Option not Selected
	483977.12	3742802.12	485.60	
	484077.12	3742802.12	481.10	
	484177.12	3742802.12	475.40	
	483777.12	3742902.12	518.80	
	483877.12	3742902.12	503.20	
	483977.12	3742902.12	489.20	
	484077.12	3742902.12	483.30	
	484177.12	3742902.12	479.40	
	483777.12	3743002.12	492.40	
	483877.12	3743002.12	497.40	
	483977.12	3743002.12	495.70	
	484077.12	3743002.12	492.00	
	484177.12	3743002.12	486.00	
	483777.12	3743102.12	501.00	
	483877.12	3743102.12	509.10	
	483977.12	3743102.12	509.40	
	484077.12	3743102.12	504.20	
	484177.12	3743102.12	493.70	

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	485508.95	3742256.38	432.50	Option not Selected
	485608.95	3742256.38	432.50	
	485708.95	3742256.38	432.60	
	485808.95	3742256.38	432.50	
	485908.95	3742256.38	433.30	
	485508.95	3742356.38	432.60	
	485608.95	3742356.38	432.50	
	485708.95	3742356.38	432.40	
	485808.95	3742356.38	432.60	
	485908.95	3742356.38	432.50	
	485508.95	3742456.38	432.80	
	485608.95	3742456.38	432.50	
	485708.95	3742456.38	432.60	
	485808.95	3742456.38	432.60	
	485908.95	3742456.38	432.50	
	485508.95	3742556.38	432.90	
	485608.95	3742556.38	432.60	
	485708.95	3742556.38	432.60	
	485808.95	3742556.38	432.60	
	485908.95	3742556.38	432.60	
	485508.95	3742656.38	433.20	
	485608.95	3742656.38	432.70	
	485708.95	3742656.38	432.60	
	485808.95	3742656.38	432.70	
	485908.95	3742656.38	432.70	
	485508.95	3742756.38	433.70	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	485608.95	3742756.38	432.80	Option not Selected
	485708.95	3742756.38	432.60	
	485808.95	3742756.38	432.50	
	485908.95	3742756.38	432.60	
	485508.95	3742856.38	434.90	
	485608.95	3742856.38	433.20	
	485708.95	3742856.38	432.70	
	485808.95	3742856.38	432.70	
	485908.95	3742856.38	432.80	
	485508.95	3742956.38	435.90	
	485608.95	3742956.38	433.90	
	485708.95	3742956.38	432.90	
	485808.95	3742956.38	432.80	
	485908.95	3742956.38	432.60	
	485508.95	3743056.38	436.10	
	485608.95	3743056.38	434.40	
	485708.95	3743056.38	433.20	
	485808.95	3743056.38	432.80	
	485908.95	3743056.38	432.70	
	485508.95	3743156.38	436.80	
	485608.95	3743156.38	434.60	
	485708.95	3743156.38	433.30	
	485808.95	3743156.38	432.90	
	485908.95	3743156.38	432.80	
	485508.95	3743256.38	437.90	
	485608.95	3743256.38	435.60	
	485708.95	3743256.38	433.70	
	485808.95	3743256.38	433.00	
	485908.95	3743256.38	432.80	
	485508.95	3743356.38	439.90	
	485608.95	3743356.38	437.40	
	485708.95	3743356.38	435.80	
	485808.95	3743356.38	433.50	
	485908.95	3743356.38	433.10	
	485508.95	3743456.38	442.00	
	485608.95	3743456.38	439.40	
	485708.95	3743456.38	437.00	
	485808.95	3743456.38	434.80	
	485908.95	3743456.38	433.80	
	485508.95	3743556.38	444.10	
	485608.95	3743556.38	441.00	
	485708.95	3743556.38	438.10	
	485808.95	3743556.38	435.70	
	485908.95	3743556.38	435.10	
	485508.95	3743656.38	447.40	
	485608.95	3743656.38	444.40	
	485708.95	3743656.38	441.30	
	485808.95	3743656.38	438.70	

Receptor Pathway

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART2	485908.95	3743656.38	438.40	Option not Selected

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	484885.59	3740165.87	432.10	Option not Selected
	484985.59	3740165.87	432.10	
	485085.59	3740165.87	432.30	
	485185.59	3740165.87	432.30	
	485285.59	3740165.87	434.90	
	485385.59	3740165.87	432.80	
	485485.59	3740165.87	433.60	
	484885.59	3740265.87	432.10	
	484985.59	3740265.87	432.20	
	485085.59	3740265.87	432.20	
	485185.59	3740265.87	432.20	
	485285.59	3740265.87	432.50	
	485385.59	3740265.87	432.50	
	485485.59	3740265.87	432.80	
	484885.59	3740365.87	432.10	
	484985.59	3740365.87	432.20	
	485085.59	3740365.87	432.30	
	485185.59	3740365.87	432.30	
	485285.59	3740365.87	432.30	
	485385.59	3740365.87	432.40	
	485485.59	3740365.87	432.70	
	484885.59	3740465.87	432.20	
	484985.59	3740465.87	432.20	
	485085.59	3740465.87	432.30	
	485185.59	3740465.87	432.30	
	485285.59	3740465.87	432.40	
	485385.59	3740465.87	432.50	
	485485.59	3740465.87	432.70	
	484885.59	3740565.87	432.00	
	484985.59	3740565.87	432.20	
	485085.59	3740565.87	432.30	
	485185.59	3740565.87	432.30	
	485285.59	3740565.87	432.40	
	485385.59	3740565.87	432.40	
	485485.59	3740565.87	433.80	
	484885.59	3740665.87	430.90	
	484985.59	3740665.87	432.00	
	485085.59	3740665.87	432.20	
	485185.59	3740665.87	432.20	
	485285.59	3740665.87	432.50	
	485385.59	3740665.87	432.40	
	485485.59	3740665.87	432.80	
	484885.59	3740765.87	432.20	
	484985.59	3740765.87	432.20	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	485085.59	3740765.87	432.00	Option not Selected
	485185.59	3740765.87	432.10	
	485285.59	3740765.87	432.40	
	485385.59	3740765.87	432.50	
	485485.59	3740765.87	432.40	
	484885.59	3740865.87	432.30	
	484985.59	3740865.87	433.10	
	485085.59	3740865.87	432.10	
	485185.59	3740865.87	432.00	
	485285.59	3740865.87	432.20	
	485385.59	3740865.87	432.60	
	485485.59	3740865.87	432.60	
	484885.59	3740965.87	432.50	
	484985.59	3740965.87	432.20	
	485085.59	3740965.87	431.10	
	485185.59	3740965.87	432.20	
	485285.59	3740965.87	432.30	
	485385.59	3740965.87	432.50	
	485485.59	3740965.87	432.50	
	484885.59	3741065.87	433.30	
	484985.59	3741065.87	432.40	
	485085.59	3741065.87	432.30	
	485185.59	3741065.87	432.30	
	485285.59	3741065.87	432.30	
	485385.59	3741065.87	432.30	
	485485.59	3741065.87	432.50	
	484885.59	3741165.87	434.00	
	484985.59	3741165.87	432.50	
	485085.59	3741165.87	432.30	
	485185.59	3741165.87	433.30	
	485285.59	3741165.87	432.30	
	485385.59	3741165.87	432.40	
	485485.59	3741165.87	432.50	
	484885.59	3741265.87	434.60	
	484985.59	3741265.87	433.00	
	485085.59	3741265.87	432.40	
	485185.59	3741265.87	432.30	
	485285.59	3741265.87	431.30	
	485385.59	3741265.87	432.40	
	485485.59	3741265.87	432.50	
	484885.59	3741365.87	435.50	
	484985.59	3741365.87	433.20	
	485085.59	3741365.87	432.40	
	485185.59	3741365.87	432.50	
	485285.59	3741365.87	432.40	
	485385.59	3741365.87	432.50	
	485485.59	3741365.87	432.50	
	484885.59	3741465.87	436.30	

Receptor Pathway

AERMOD

Receptor Network ID	Location: X-Coordinate [m]	Location: Y-Coordinate [m]	Terrain Elevations (Optional)	Flagpole Heights (Optional)
UCART3	484985.59	3741465.87	433.60	Option not Selected
	485085.59	3741465.87	432.80	
	485185.59	3741465.87	432.40	
	485285.59	3741465.87	431.90	
	485385.59	3741465.87	433.50	
	485485.59	3741465.87	432.40	
	484885.59	3741565.87	436.70	
	484985.59	3741565.87	434.10	
	485085.59	3741565.87	433.00	
	485185.59	3741565.87	432.50	
	485285.59	3741565.87	432.30	
	485385.59	3741565.87	432.30	
	485485.59	3741565.87	431.40	
	484885.59	3741665.87	437.20	
	484985.59	3741665.87	435.20	
	485085.59	3741665.87	433.50	
	485185.59	3741665.87	432.60	
	485285.59	3741665.87	432.50	
	485385.59	3741665.87	432.30	
	485485.59	3741665.87	432.40	

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: C:\Users\smyers\Desktop\Met Data\PERI_V9_ADJU\PERI_v9.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: C:\Users\smyers\Desktop\Met Data\PERI_V9_ADJU\PERI_v9.PFL
Format Type: Default AERMET format

Wind Speed

☐ Wind Speeds are Vector Mean (Not Scalar Means)

Wind Direction

Rotation Adjustment [deg]:

Potential Temperature Profile

Base Elevation above MSL (for Primary Met Tower): 1,467.00 [ft]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface		2010			
Upper Air		2010			
On-Site		2010			

Data Period

Data Period to Process

Start Date: 1/1/2010 Start Hour: 1 End Date: 12/31/2016 End Hour: 24

Wind Speed Categories

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

Output Pathway

Tabular Printed Outputs

Short Term Averaging Period	RECTABLE Highest Values Table										MAXTABLE Maximum Values Table	DAYTABLE Daily Values Table
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th		
1	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No
24	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐		No

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: STONERIDGE COMMERCE CENTER ALUP OPERATIONS II.AD

Averaging Period	Source Group ID	High Value	File Name
1	ALL	1st	01H1GALL.PLT
24	ALL	1st	24H1GALL.PLT
Annual	ALL	N/A	AN00GALL.PLT

Results Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.21826	ug/m^3	485508.95	3743056.38	436.10	0.00	806.70	10/15/2015, 7
24-HR	1ST	0.04358	ug/m^3	485508.95	3743056.38	436.10	0.00	806.70	1/17/2014, 24
ANNUAL		0.01344	ug/m^3	485508.95	3743056.38	436.10	0.00	806.70	

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.06724	ug/m^3	Futre ResW	484091.43	3742557.73	471.61	0.00	806.75	2/15/2015, 8
1-HR	1ST	0.02880	ug/m^3	Lakesd Mid	483445.55	3743236.87	475.70	0.00	806.75	5/16/2014, 6
1-HR	1ST	0.03255	ug/m^3	Sierra Ele	483373.48	3742884.83	479.57	0.00	764.69	6/24/2015, 6
1-HR	1ST	0.02407	ug/m^3	Rider Res	483334.67	3743397.65	463.73	0.00	806.75	5/16/2014, 6
1-HR	1ST	0.01703	ug/m^3	Whield Res	482921.65	3743902.15	450.97	0.00	806.75	2/14/2014, 8
1-HR	1ST	0.01128	ug/m^3	TresP Res	482338.44	3744552.56	449.10	0.00	806.75	2/14/2014, 8
1-HR	1ST	0.00939	ug/m^3	Reisl Res	481720.48	3744906.65	448.76	0.00	764.69	6/24/2015, 6
1-HR	1ST	0.01000	ug/m^3	AbbeyP Res	481647.63	3744385.89	443.32	0.00	764.69	6/23/2016, 6
1-HR	1ST	0.01700	ug/m^3	Avalon Ele	482809.27	3743547.06	452.82	0.00	806.75	6/24/2015, 6
1-HR	1ST	0.01818	ug/m^3	Walnut Res	482404.05	3742961.89	456.71	0.00	764.69	6/5/2016, 6
1-HR	1ST	0.02346	ug/m^3	Placent Re	482093.27	3742559.02	454.65	0.00	764.69	6/17/2015, 6
1-HR	1ST	0.02956	ug/m^3	Foothi Res	483081.08	3741065.77	457.34	0.00	764.69	6/20/2016, 6
1-HR	1ST	0.01676	ug/m^3	Dunlap Res	482283.94	3741123.86	444.26	0.00	764.69	3/25/2016, 7
1-HR	1ST	0.03138	ug/m^3	Sunset Res	483075.07	3740575.07	451.19	0.00	577.99	10/3/2014, 7
1-HR	1ST	0.02134	ug/m^3	Menife Res	485565.67	3740078.39	435.32	0.00	435.32	9/24/2010, 7
1-HR	1ST	0.02227	ug/m^3	Avla Res	485706.50	3740373.80	434.08	0.00	434.08	10/2/2011, 7
1-HR	1ST	0.02111	ug/m^3	G Vall Res	485920.11	3740601.54	434.70	0.00	434.70	12/8/2014, 8
1-HR	1ST	0.01606	ug/m^3	Reserv Res	486482.14	3741125.34	441.00	0.00	441.00	2/5/2015, 8
1-HR	1ST	0.01538	ug/m^3	12th Res	486686.97	3741601.84	440.75	0.00	440.75	12/8/2014, 8
1-HR	1ST	0.01253	ug/m^3	Nuview Ele	487752.17	3742354.42	444.18	0.00	806.75	4/4/2014, 7

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
1-HR	1ST	0.01447	ug/m^3	Jack C Res	487841.90	3743062.13	440.46	0.00	806.75	6/3/2016, 6
1-HR	1ST	0.01181	ug/m^3	M Shad Mid	488066.22	3743491.97	442.19	0.00	806.75	7/1/2016, 6
1-HR	1ST	0.08285	ug/m^3	Futr ResNE	485684.63	3743194.60	433.69	0.00	806.75	10/15/2015, 7
1-HR	1ST	0.02159	ug/m^3	Placent Re	481546.43	3742577.78	440.28	0.00	764.69	9/24/2011, 7
1-HR	1ST	0.02174	ug/m^3	Placent Re	481827.39	3742524.53	444.71	0.00	764.69	6/17/2015, 6
1-HR	1ST	0.06206	ug/m^3	Futr ResNE	485576.64	3743515.31	441.06	0.00	806.75	3/31/2016, 7
1-HR	1ST	0.06677	ug/m^3	Futr ResNW	484116.76	3742798.51	477.87	0.00	806.75	3/26/2011, 7
24-HR	1ST	0.02108	ug/m^3	Futre ResW	484091.43	3742557.73	471.61	0.00	806.75	12/18/2010, 24
24-HR	1ST	0.00773	ug/m^3	Lakesd Mid	483445.55	3743236.87	475.70	0.00	806.75	9/28/2014, 24
24-HR	1ST	0.00780	ug/m^3	Sierra Ele	483373.48	3742884.83	479.57	0.00	764.69	7/31/2016, 24
24-HR	1ST	0.00658	ug/m^3	Rider Res	483334.67	3743397.65	463.73	0.00	806.75	9/28/2014, 24
24-HR	1ST	0.00504	ug/m^3	Whield Res	482921.65	3743902.15	450.97	0.00	806.75	3/14/2016, 24
24-HR	1ST	0.00361	ug/m^3	TresP Res	482338.44	3744552.56	449.10	0.00	806.75	3/14/2016, 24
24-HR	1ST	0.00270	ug/m^3	Reisl Res	481720.48	3744906.65	448.76	0.00	764.69	3/14/2016, 24
24-HR	1ST	0.00260	ug/m^3	AbbeyP Res	481647.63	3744385.89	443.32	0.00	764.69	4/10/2015, 24
24-HR	1ST	0.00449	ug/m^3	Avalon Ele	482809.27	3743547.06	452.82	0.00	806.75	4/10/2015, 24
24-HR	1ST	0.00500	ug/m^3	Walnut Res	482404.05	3742961.89	456.71	0.00	764.69	4/4/2014, 24
24-HR	1ST	0.00727	ug/m^3	Placent Re	482093.27	3742559.02	454.65	0.00	764.69	2/5/2011, 24
24-HR	1ST	0.00460	ug/m^3	Foothi Res	483081.08	3741065.77	457.34	0.00	764.69	1/2/2011, 24
24-HR	1ST	0.00296	ug/m^3	Dunlap Res	482283.94	3741123.86	444.26	0.00	764.69	1/2/2011, 24
24-HR	1ST	0.00377	ug/m^3	Sunset Res	483075.07	3740575.07	451.19	0.00	577.99	12/22/2016, 24

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
24-HR	1ST	0.00485	ug/m^3	Menife Res	485565.67	3740078.39	435.32	0.00	435.32	10/17/2015, 24
24-HR	1ST	0.00528	ug/m^3	Avla Res	485706.50	3740373.80	434.08	0.00	434.08	11/12/2014, 24
24-HR	1ST	0.00523	ug/m^3	G Vall Res	485920.11	3740601.54	434.70	0.00	434.70	11/12/2014, 24
24-HR	1ST	0.00376	ug/m^3	Reserv Res	486482.14	3741125.34	441.00	0.00	441.00	11/12/2014, 24
24-HR	1ST	0.00298	ug/m^3	12th Res	486686.97	3741601.84	440.75	0.00	440.75	11/12/2014, 24
24-HR	1ST	0.00170	ug/m^3	Nuview Ele	487752.17	3742354.42	444.18	0.00	806.75	1/9/2015, 24
24-HR	1ST	0.00143	ug/m^3	Jack C Res	487841.90	3743062.13	440.46	0.00	806.75	1/27/2016, 24
24-HR	1ST	0.00144	ug/m^3	M Shad Mid	488066.22	3743491.97	442.19	0.00	806.75	1/19/2014, 24
24-HR	1ST	0.01326	ug/m^3	Futr ResNE	485684.63	3743194.60	433.69	0.00	806.75	1/21/2014, 24
24-HR	1ST	0.00652	ug/m^3	Placent Re	481546.43	3742577.78	440.28	0.00	764.69	1/2/2011, 24
24-HR	1ST	0.00730	ug/m^3	Placent Re	481827.39	3742524.53	444.71	0.00	764.69	1/2/2011, 24
24-HR	1ST	0.01274	ug/m^3	Futr ResNE	485576.64	3743515.31	441.06	0.00	806.75	2/19/2010, 24
24-HR	1ST	0.02132	ug/m^3	Futr ResNW	484116.76	3742798.51	477.87	0.00	806.75	12/18/2010, 24
ANNUAL		0.00786	ug/m^3	Futre ResW	484091.43	3742557.73	471.61	0.00	806.75	
ANNUAL		0.00245	ug/m^3	Lakesd Mid	483445.55	3743236.87	475.70	0.00	806.75	
ANNUAL		0.00274	ug/m^3	Sierra Ele	483373.48	3742884.83	479.57	0.00	764.69	
ANNUAL		0.00215	ug/m^3	Rider Res	483334.67	3743397.65	463.73	0.00	806.75	
ANNUAL		0.00145	ug/m^3	Whield Res	482921.65	3743902.15	450.97	0.00	806.75	
ANNUAL		0.00093	ug/m^3	TresP Res	482338.44	3744552.56	449.10	0.00	806.75	
ANNUAL		0.00070	ug/m^3	Reisl Res	481720.48	3744906.65	448.76	0.00	764.69	
ANNUAL		0.00058	ug/m^3	AbbeyP Res	481647.63	3744385.89	443.32	0.00	764.69	

Sensitive Receptor Summary

C:\Lakes\AERMOD View\Stoneridge Commerce Center Construction\Stoneri

PM10 - Concentration - Source Group: ALL

Averaging Period	Rank	Peak	Units	Receptor ID	X (m)	Y (m)	ZELEV (m)	ZFLAG (m)	ZHILL (m)	Peak Date, Start Hour
ANNUAL		0.00132	ug/m^3	Avalon Ele	482809.27	3743547.06	452.82	0.00	806.75	
ANNUAL		0.00154	ug/m^3	Walnut Res	482404.05	3742961.89	456.71	0.00	764.69	
ANNUAL		0.00408	ug/m^3	Placent Re	482093.27	3742559.02	454.65	0.00	764.69	
ANNUAL		0.00095	ug/m^3	Foothi Res	483081.08	3741065.77	457.34	0.00	764.69	
ANNUAL		0.00066	ug/m^3	Dunlap Res	482283.94	3741123.86	444.26	0.00	764.69	
ANNUAL		0.00076	ug/m^3	Sunset Res	483075.07	3740575.07	451.19	0.00	577.99	
ANNUAL		0.00155	ug/m^3	Menife Res	485565.67	3740078.39	435.32	0.00	435.32	
ANNUAL		0.00156	ug/m^3	Avla Res	485706.50	3740373.80	434.08	0.00	434.08	
ANNUAL		0.00143	ug/m^3	G Vall Res	485920.11	3740601.54	434.70	0.00	434.70	
ANNUAL		0.00097	ug/m^3	Reserv Res	486482.14	3741125.34	441.00	0.00	441.00	
ANNUAL		0.00074	ug/m^3	12th Res	486686.97	3741601.84	440.75	0.00	440.75	
ANNUAL		0.00030	ug/m^3	Nuview Ele	487752.17	3742354.42	444.18	0.00	806.75	
ANNUAL		0.00028	ug/m^3	Jack C Res	487841.90	3743062.13	440.46	0.00	806.75	
ANNUAL		0.00025	ug/m^3	M Shad Mid	488066.22	3743491.97	442.19	0.00	806.75	
ANNUAL		0.00275	ug/m^3	Futr ResNE	485684.63	3743194.60	433.69	0.00	806.75	
ANNUAL		0.00383	ug/m^3	Placent Re	481546.43	3742577.78	440.28	0.00	764.69	
ANNUAL		0.00404	ug/m^3	Placent Re	481827.39	3742524.53	444.71	0.00	764.69	
ANNUAL		0.00298	ug/m^3	Futr ResNE	485576.64	3743515.31	441.06	0.00	806.75	
ANNUAL		0.00952	ug/m^3	Futr ResNW	484116.76	3742798.51	477.87	0.00	806.75	

ATTACHMENT D

CalEEMod Output Files – Greenhouse Gas Emissions

Stoneridge Commerce Center Operational Mobile Source Emissions

Primary Land Use Plan

Vehicle Class	Daily VMT[1]	Pollutant	Run Emission Rate[2] (Gram/Mile)	Idle Emission Rate (Gram/Vehicle/Day)	Start Emission Rate[2] (Grams/Start/Day)	Total Grams Daily	Metric Tons Daily	CO2e Annually
Passenger Automobiles	183913	**CO2**	513.197800	124.3677	17.10123	96868228.03	**96.8682**	**36709**
		CH4	0.231945	0.019008	0.022121	43037.44	**0.0430**	
		N2O	0.044348	0.016201	0.012167	8479.87	**0.0085**	

[1] Daily VMT calculated per CaLLEMod v 2016.3.2, which provides average distance traveled per trip type.

[2]Start emissions account for 4 automobile starts daily.

All emission factors sourced from EMFAC2017.

Vehicle Class	Daily VMT[1]	Pollutant	Run Emission Rate[2] (Gram/Mile)	Idle Emission Rate (Gram/Vehicle/Day)	Start Emission Rate[2] (Grams/Start/Day)	Total Grams Daily	Metric Tons Daily	CO2e Annually
Heavy Duty Trucks	211072	**CO2**	1120.405063	11022.54061	0	279650854.63	**279.6509**	**107057**
		CH4	0.001104	0.234962	0	1153.14	**0.0012**	
		N2O	0.176112	1.73259	0	43957.20	**0.0440**	

[1] In order to more accurately account for the trip distribution patterns of freight trucks, the average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

[2]Start emissions account for 4 automobile starts daily.

All emission factors sourced from EMFAC2017.

Stoneridge Commerce Center - Primary Land Use Plan

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	641.64	1000sqft	29.46	641,638.80	0
Manufacturing	847.68	1000sqft	38.92	847,677.60	0
Refrigerated Warehouse-No Rail	1,695.36	1000sqft	77.84	1,695,355.20	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,871.60	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,871.60	0
Unrefrigerated Warehouse-No Rail	427.76	1000sqft	19.64	427,759.20	0
Other Asphalt Surfaces	37.30	Acre	37.30	1,624,788.00	0
Other Non-Asphalt Surfaces	31.40	Acre	31.40	1,367,784.00	0
Free-Standing Discount Superstore	100.00	1000sqft	6.56	100,000.00	0
Strip Mall	21.97	1000sqft	1.44	21,968.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Annual

Project Characteristics - 2017 SCE CO2 Intensity Factor per Edison International Sustainability Template - Section 2 Quantative Information (2018)

Land Use - Land use types are consistent with the Traffic Impact Analysis prepared for the Project (Urban Crossoroads 2020). Land uses also include 37.3 acres of internal circulation and 31.4 acres of offsite infrastructure.

Construction Phase - Construction timing adjusted to reflect a 2021 start date and 2030 Opening Year. Building construction, paving, and painting assumed to occur simultaneously.

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Equipment doubled to account for accelerated timeline compared with CalEEMod defaults

Trips and VMT - Building Construction worker & vendor trips reflect total building s.f. divided by the number of days of construction, coupled with the rates for commercial buildings in the CalEEMod User's Guide, Appendix E. Painting worker trips equate to paving.

Grading - Haul truck emissions calculated separately

Vehicle Trips - Mobile emissions modeled separately

Consumer Products - Consumer product emission factor adjusted to omit dry industrial warehouse square footage. Cold storage, manufacturing, industrial park, and all commercial retail is included.

Water And Wastewater - Water consumption per EMWD Water Supply Assessment Report - Stoneridge Commerce Center SP 239 (2020)

Construction Off-road Equipment Mitigation - "Mitigation" accounts for County requirements to employ Tier 3 engines or better and adhere to SCAQMD Rule 403

Energy Mitigation - Energy use reflects 2019 Title 24 Standards. Increase of efficiency per CEC 2019 Building Energy Efficiency Standards Frequently Asked Questions (2018)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	9,300.00	1,473.00
tblConstructionPhase	NumDays	930.00	465.00
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	360.00	180.00
tblConsumerProducts	ROG_EF	1.98E-05	4.1E-06
tblLandUse	LandUseSquareFeet	641,640.00	641,638.80

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Annual

tblLandUse	LandUseSquareFeet	847,680.00	847,677.60
tblLandUse	LandUseSquareFeet	1,695,360.00	1,695,355.20
tblLandUse	LandUseSquareFeet	2,966,870.00	2,966,871.60
tblLandUse	LandUseSquareFeet	2,966,870.00	2,966,871.60
tblLandUse	LandUseSquareFeet	427,760.00	427,759.20
tblLandUse	LandUseSquareFeet	21,970.00	21,968.00
tblLandUse	LotAcreage	14.73	29.46
tblLandUse	LotAcreage	19.46	38.92
tblLandUse	LotAcreage	38.92	77.84
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	9.82	19.64
tblLandUse	LotAcreage	2.30	6.56
tblLandUse	LotAcreage	0.50	1.44
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	2,075.00	180.00
tblTripsAndVMT	WorkerTripNumber	5,305.00	257.00
tblTripsAndVMT	WorkerTripNumber	1,061.00	30.00
tblVehicleTrips	ST_TR	64.07	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	56.12	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	50.75	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	5,330,000.00
tblWater	IndoorWaterUseRate	148,379,250.00	15,864,849.00

tblWater	IndoorWaterUseRate	196,026,000.00	31,024,945.00
tblWater	IndoorWaterUseRate	392,052,000.00	62,754,292.00
tblWater	IndoorWaterUseRate	1,627,373.30	1,170,000.00
tblWater	IndoorWaterUseRate	1,471,096,875.00	242,555,914.00
tblWater	OutdoorWaterUseRate	4,539,928.74	246,000.00
tblWater	OutdoorWaterUseRate	997,422.34	54,000.00

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					
2021	0.5231	5.3523	2.8651	5.2500e-003	2.4101	0.2700	2.6802	1.3176	0.2484	1.5660	0.0000	461.8838	461.8838	0.1432	0.0000	465.4643
2022	0.9410	9.8360	7.2496	0.0155	3.4325	0.4243	3.8569	1.3264	0.3904	1.7168	0.0000	1,360.1483	1,360.1483	0.4268	0.0000	1,370.8176
2023	0.8595	8.7443	7.2322	0.0162	2.8120	0.3607	3.1728	0.9854	0.3319	1.3172	0.0000	1,421.4305	1,421.4305	0.4471	0.0000	1,432.6076
2024	6.9209	6.1720	7.6804	0.0180	0.4690	0.2352	0.7042	0.1272	0.2200	0.3472	0.0000	1,613.2943	1,613.2943	0.2747	0.0000	1,620.1623
2025	8.8406	7.3910	9.7543	0.0230	0.6030	0.2644	0.8675	0.1635	0.2473	0.4108	0.0000	2,057.5475	2,057.5475	0.3509	0.0000	2,066.3187
2026	8.8328	7.3675	9.6802	0.0228	0.6030	0.2643	0.8674	0.1635	0.2472	0.4107	0.0000	2,042.7378	2,042.7378	0.3495	0.0000	2,051.4759
2027	8.8253	7.3455	9.6151	0.0227	0.6030	0.2642	0.8672	0.1635	0.2470	0.4106	0.0000	2,029.8012	2,029.8012	0.3483	0.0000	2,038.5078
2028	8.7842	7.2990	9.5229	0.0225	0.6007	0.2630	0.8637	0.1629	0.2459	0.4088	0.0000	2,010.9527	2,010.9527	0.3457	0.0000	2,019.5961
2029	7.6626	6.3580	8.2690	0.0195	0.5245	0.2295	0.7539	0.1422	0.2146	0.3568	0.0000	1,747.2239	1,747.2239	0.3009	0.0000	1,754.7461
Maximum	**8.8406**	**9.8360**	**9.7543**	**0.0230**	**3.4325**	**0.4243**	**3.8569**	**1.3264**	**0.3904**	**1.7168**	**0.0000**	**2,057.5475**	**2,057.5475**	**0.4471**	**0.0000**	**2,066.3187**

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					
2021	0.1328	2.5233	3.1034	5.2500e-003	0.9466	0.1251	1.0717	0.5158	0.1250	0.6409	0.0000	461.8833	461.8833	0.1432	0.0000	465.4638
2022	0.3880	7.2837	9.0346	0.0155	1.3534	0.3212	1.6746	0.5216	0.3212	0.8428	0.0000	1,360.1467	1,360.1467	0.4268	0.0000	1,370.8160
2023	0.4044	7.5963	9.4261	0.0162	1.1113	0.3291	1.4404	0.3886	0.3291	0.7176	0.0000	1,421.4289	1,421.4289	0.4471	0.0000	1,432.6059
2024	6.6476	6.7183	8.5734	0.0180	0.3137	0.3296	0.6433	0.0891	0.3294	0.4185	0.0000	1,613.2932	1,613.2932	0.2747	0.0000	1,620.1612
2025	8.5380	8.6129	10.9366	0.0230	0.4033	0.4237	0.8270	0.1145	0.4235	0.5380	0.0000	2,057.5461	2,057.5461	0.3509	0.0000	2,066.3172
2026	8.5302	8.5893	10.8626	0.0228	0.4033	0.4236	0.8269	0.1145	0.4234	0.5379	0.0000	2,042.7364	2,042.7364	0.3495	0.0000	2,051.4745
2027	8.5227	8.5674	10.7975	0.0227	0.4033	0.4235	0.8268	0.1145	0.4232	0.5377	0.0000	2,029.7998	2,029.7998	0.3483	0.0000	2,038.5064
2028	8.4828	8.5162	10.7007	0.0225	0.4017	0.4217	0.8234	0.1141	0.4215	0.5355	0.0000	2,010.9513	2,010.9513	0.3457	0.0000	2,019.5947
2029	7.3995	7.4207	9.2973	0.0195	0.3507	0.3680	0.7187	0.0996	0.3678	0.4674	0.0000	1,747.2227	1,747.2227	0.3009	0.0000	1,754.7449
Maximum	**8.5380**	**8.6129**	**10.9366**	**0.0230**	**1.3534**	**0.4237**	**1.6746**	**0.5216**	**0.4235**	**0.8428**	**0.0000**	**2,057.5461**	**2,057.5461**	**0.4471**	**0.0000**	**2,066.3172**

	ROG	NOx	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	**6.02**	**0.06**	**-15.12**	**0.00**	**52.83**	**-22.90**	**39.50**	**54.48**	**-32.25**	**24.60**	**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)
4	**4-8-2021**	**7-7-2021**	0.2226	0.1006

5	**7-8-2021**	**10-7-2021**	2.9253	1.3226
6	**10-8-2021**	**1-7-2022**	2.8846	1.3226
7	**1-8-2022**	**4-7-2022**	2.4674	1.5319
8	**4-8-2022**	**7-7-2022**	2.7694	2.0565
9	**7-8-2022**	**10-7-2022**	2.7998	2.0791
10	**10-8-2022**	**1-7-2023**	2.7766	2.0791
11	**1-8-2023**	**4-7-2023**	2.4406	2.0333
12	**4-8-2023**	**7-7-2023**	2.4677	2.0558
13	**7-8-2023**	**10-7-2023**	2.4948	2.0784
14	**10-8-2023**	**1-7-2024**	2.0067	1.6718
15	**1-8-2024**	**4-7-2024**	0.7831	0.7994
16	**4-8-2024**	**7-7-2024**	4.1942	4.2816
17	**7-8-2024**	**10-7-2024**	4.2399	4.3283
18	**10-8-2024**	**1-7-2025**	4.2244	4.3236
19	**1-8-2025**	**4-7-2025**	3.9958	4.2223
20	**4-8-2025**	**7-7-2025**	4.0442	4.2732
21	**7-8-2025**	**10-7-2025**	4.0883	4.3198
22	**10-8-2025**	**1-7-2026**	4.0837	4.3152
23	**1-8-2026**	**4-7-2026**	3.9881	4.2146
24	**4-8-2026**	**7-7-2026**	4.0364	4.2654
25	**7-8-2026**	**10-7-2026**	4.0804	4.3119
26	**10-8-2026**	**1-7-2027**	4.0759	4.3073
27	**1-8-2027**	**4-7-2027**	3.9809	4.2073
28	**4-8-2027**	**7-7-2027**	4.0291	4.2580
29	**7-8-2027**	**10-7-2027**	4.0730	4.3045
30	**10-8-2027**	**1-7-2028**	4.0685	4.3000
31	**1-8-2028**	**4-7-2028**	4.0187	4.2476

32	**4-8-2028**	**7-7-2028**	4.0227	4.2516
33	**7-8-2028**	**10-7-2028**	4.0665	4.2980
34	**10-8-2028**	**1-7-2029**	4.0620	4.2935
35	**1-8-2029**	**4-7-2029**	3.9684	4.1949
36	**4-8-2029**	**7-7-2029**	4.0165	4.2455
37	**7-8-2029**	**9-30-2029**	3.7517	3.9656
		Highest	4.2399	4.3283

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	11.9617	1.1100e-003	0.1236	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	0.2416	0.2416	6.2000e-004	0.0000	0.2572
Energy	0.7048	6.4071	5.3819	0.0384		0.4869	0.4869		0.4869	0.4869	0.0000	29,545.6159	29,545.6159	1.4359	0.3973	29,699.9066
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	2,004.1988	0.0000	2,004.1988	118.4448	0.0000	4,965.3177
Water						0.0000	0.0000		0.0000	0.0000	113.7990	1,065.6558	1,179.4548	11.7497	0.2887	1,559.2321
Total	**12.6665**	**6.4082**	**5.5056**	**0.0385**	**0.0000**	**0.4874**	**0.4874**	**0.0000**	**0.4874**	**0.4874**	**2,117.9978**	**30,611.5133**	**32,729.5111**	**131.6310**	**0.6860**	**36,224.7135**

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	11.9617	1.1100e-003	0.1236	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	0.2416	0.2416	6.2000e-004	0.0000	0.2572
Energy	0.6502	5.9113	4.9655	0.0355		0.4493	0.4493		0.4493	0.4493	0.0000	28,421.4688	28,421.4688	1.3918	0.3804	28,569.6303
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	2,004.1988	0.0000	2,004.1988	118.4448	0.0000	4,965.3177
Water						0.0000	0.0000		0.0000	0.0000	113.7990	1,065.6558	1,179.4548	11.7497	0.2887	1,559.2321
Total	**12.6120**	**5.9124**	**5.0891**	**0.0355**	**0.0000**	**0.4497**	**0.4497**	**0.0000**	**0.4497**	**0.4497**	**2,117.9978**	**29,487.3662**	**31,605.3640**	**131.5869**	**0.6691**	**35,094.4373**

	ROG	NOx	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**	**7.74**	**7.56**	**7.72**	**0.00**	**7.73**	**7.73**	**0.00**	**7.73**	**7.73**	**0.00**	**3.67**	**3.43**	**0.03**	**2.46**	**3.12**

3.0 Construction Detail

Construction Phase

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2021	3/9/2022	5	180	
2	Grading	Grading	3/10/2022	12/20/2023	5	465	
3	Building Construction	Building Construction	3/22/2024	11/13/2029	5	1473	
4	Paving	Paving	3/22/2024	11/13/2029	5	1473	
5	Architectural Coating	Architectural Coating	3/22/2024	11/13/2029	5	1473	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2325

Acres of Paving: 68.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,502,213; Non-Residential Outdoor: 4,834,071; Striped Parking Area: 179,554 (Architectural Coating – sqft)

OffRoad Equipment

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	14	35.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	40.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	257.00	180.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	30.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	30.00	0.00	0.00	14.70	6.90	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

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					2.3848	0.0000	2.3848	1.3109	0.0000	1.3109	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5132	5.3456	2.7924	5.0200e-003		0.2699	0.2699		0.2483	0.2483	0.0000	441.3515	441.3515	0.1427	0.0000	444.9200
Total	**0.5132**	**5.3456**	**2.7924**	**5.0200e-003**	**2.3848**	**0.2699**	**2.6546**	**1.3109**	**0.2483**	**1.5591**	**0.0000**	**441.3515**	**441.3515**	**0.1427**	**0.0000**	**444.9200**

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-003	6.6700e-003	0.0727	2.3000e-004	0.0254	1.5000e-004	0.0255	6.7400e-003	1.4000e-004	6.8800e-003	0.0000	20.5324	20.5324	4.8000e-004	0.0000	20.5443
Total	**9.9000e-003**	**6.6700e-003**	**0.0727**	**2.3000e-004**	**0.0254**	**1.5000e-004**	**0.0255**	**6.7400e-003**	**1.4000e-004**	**6.8800e-003**	**0.0000**	**20.5324**	**20.5324**	**4.8000e-004**	**0.0000**	**20.5443**

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					0.9301	0.0000	0.9301	0.5112	0.0000	0.5112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1229	2.5167	3.0307	5.0200e-003		0.1249	0.1249		0.1249	0.1249	0.0000	441.3509	441.3509	0.1427	0.0000	444.9195
Total	**0.1229**	**2.5167**	**3.0307**	**5.0200e-003**	**0.9301**	**0.1249**	**1.0549**	**0.5112**	**0.1249**	**0.6361**	**0.0000**	**441.3509**	**441.3509**	**0.1427**	**0.0000**	**444.9195**

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.9000e-003	6.6700e-003	0.0727	2.3000e-004	0.0166	1.5000e-004	0.0167	4.5800e-003	1.4000e-004	4.7200e-003	0.0000	20.5324	20.5324	4.8000e-004	0.0000	20.5443
Total	**9.9000e-003**	**6.6700e-003**	**0.0727**	**2.3000e-004**	**0.0166**	**1.5000e-004**	**0.0167**	**4.5800e-003**	**1.4000e-004**	**4.7200e-003**	**0.0000**	**20.5324**	**20.5324**	**4.8000e-004**	**0.0000**	**20.5443**

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8672	0.0000	0.8672	0.4767	0.0000	0.4767	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1522	1.5880	0.9455	1.8300e-003		0.0774	0.0774		0.0712	0.0712	0.0000	160.5091	160.5091	0.0519	0.0000	161.8069
Total	**0.1522**	**1.5880**	**0.9455**	**1.8300e-003**	**0.8672**	**0.0774**	**0.9446**	**0.4767**	**0.0712**	**0.5479**	**0.0000**	**160.5091**	**160.5091**	**0.0519**	**0.0000**	**161.8069**

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3700e-003	2.1800e-003	0.0244	8.0000e-005	9.2300e-003	5.0000e-005	9.2900e-003	2.4500e-003	5.0000e-005	2.5000e-003	0.0000	7.1939	7.1939	1.6000e-004	0.0000	7.1978
Total	**3.3700e-003**	**2.1800e-003**	**0.0244**	**8.0000e-005**	**9.2300e-003**	**5.0000e-005**	**9.2900e-003**	**2.4500e-003**	**5.0000e-005**	**2.5000e-003**	**0.0000**	**7.1939**	**7.1939**	**1.6000e-004**	**0.0000**	**7.1978**

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					0.3382	0.0000	0.3382	0.1859	0.0000	0.1859	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0447	0.9152	1.1021	1.8300e-003		0.0454	0.0454		0.0454	0.0454	0.0000	160.5089	160.5089	0.0519	0.0000	161.8067
Total	**0.0447**	**0.9152**	**1.1021**	**1.8300e-003**	**0.3382**	**0.0454**	**0.3836**	**0.1859**	**0.0454**	**0.2313**	**0.0000**	**160.5089**	**160.5089**	**0.0519**	**0.0000**	**161.8067**

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.3700e-003	2.1800e-003	0.0244	8.0000e-005	6.0300e-003	5.0000e-005	6.0800e-003	1.6700e-003	5.0000e-005	1.7200e-003	0.0000	7.1939	7.1939	1.6000e-004	0.0000	7.1978
Total	**3.3700e-003**	**2.1800e-003**	**0.0244**	**8.0000e-005**	**6.0300e-003**	**5.0000e-005**	**6.0800e-003**	**1.6700e-003**	**5.0000e-005**	**1.7200e-003**	**0.0000**	**7.1939**	**7.1939**	**1.6000e-004**	**0.0000**	**7.1978**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5095	0.0000	2.5095	0.8349	0.0000	0.8349	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7685	8.2348	6.1568	0.0132		0.3466	0.3466		0.3189	0.3189	0.0000	1,156.1335	1,156.1335	0.3739	0.0000	1,165.4814
Total	**0.7685**	**8.2348**	**6.1568**	**0.0132**	**2.5095**	**0.3466**	**2.8561**	**0.8349**	**0.3189**	**1.1538**	**0.0000**	**1,156.1335**	**1,156.1335**	**0.3739**	**0.0000**	**1,165.4814**

3.3 Grading - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0170	0.0110	0.1230	4.0000e-004	0.0466	2.7000e-004	0.0469	0.0124	2.5000e-004	0.0126	0.0000	36.3118	36.3118	7.9000e-004	0.0000	36.3316
Total	**0.0170**	**0.0110**	**0.1230**	**4.0000e-004**	**0.0466**	**2.7000e-004**	**0.0469**	**0.0124**	**2.5000e-004**	**0.0126**	**0.0000**	**36.3118**	**36.3118**	**7.9000e-004**	**0.0000**	**36.3316**

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					0.9787	0.0000	0.9787	0.3256	0.0000	0.3256	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3229	6.3554	7.7852	0.0132		0.2755	0.2755		0.2755	0.2755	0.0000	1,156.1321	1,156.1321	0.3739	0.0000	1,165.4800
Total	**0.3229**	**6.3554**	**7.7852**	**0.0132**	**0.9787**	**0.2755**	**1.2542**	**0.3256**	**0.2755**	**0.6011**	**0.0000**	**1,156.1321**	**1,156.1321**	**0.3739**	**0.0000**	**1,165.4800**

3.3 Grading - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0170	0.0110	0.1230	4.0000e-004	0.0304	2.7000e-004	0.0307	8.4100e-003	2.5000e-004	8.6600e-003	0.0000	36.3118	36.3118	7.9000e-004	0.0000	36.3316
Total	**0.0170**	**0.0110**	**0.1230**	**4.0000e-004**	**0.0304**	**2.7000e-004**	**0.0307**	**8.4100e-003**	**2.5000e-004**	**8.6600e-003**	**0.0000**	**36.3118**	**36.3118**	**7.9000e-004**	**0.0000**	**36.3316**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7564	0.0000	2.7564	0.9706	0.0000	0.9706	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.8404	8.7325	7.0969	0.0157		0.3604	0.3604		0.3316	0.3316	0.0000	1,379.7408	1,379.7408	0.4462	0.0000	1,390.8967
Total	**0.8404**	**8.7325**	**7.0969**	**0.0157**	**2.7564**	**0.3604**	**3.1168**	**0.9706**	**0.3316**	**1.3022**	**0.0000**	**1,379.7408**	**1,379.7408**	**0.4462**	**0.0000**	**1,390.8967**

3.3 Grading - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0191	0.0119	0.1353	4.6000e-004	0.0556	3.2000e-004	0.0559	0.0148	2.9000e-004	0.0151	0.0000	41.6897	41.6897	8.5000e-004	0.0000	41.7109
Total	**0.0191**	**0.0119**	**0.1353**	**4.6000e-004**	**0.0556**	**3.2000e-004**	**0.0559**	**0.0148**	**2.9000e-004**	**0.0151**	**0.0000**	**41.6897**	**41.6897**	**8.5000e-004**	**0.0000**	**41.7109**

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					1.0750	0.0000	1.0750	0.3785	0.0000	0.3785	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3853	7.5845	9.2908	0.0157		0.3288	0.3288		0.3288	0.3288	0.0000	1,379.7391	1,379.7391	0.4462	0.0000	1,390.8950
Total	**0.3853**	**7.5845**	**9.2908**	**0.0157**	**1.0750**	**0.3288**	**1.4038**	**0.3785**	**0.3288**	**0.7073**	**0.0000**	**1,379.7391**	**1,379.7391**	**0.4462**	**0.0000**	**1,390.8950**

3.3 Grading - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0191	0.0119	0.1353	4.6000e-004	0.0363	3.2000e-004	0.0366	0.0100	2.9000e-004	0.0103	0.0000	41.6897	41.6897	8.5000e-004	0.0000	41.7109
Total	**0.0191**	**0.0119**	**0.1353**	**4.6000e-004**	**0.0363**	**3.2000e-004**	**0.0366**	**0.0100**	**2.9000e-004**	**0.0103**	**0.0000**	**41.6897**	**41.6897**	**8.5000e-004**	**0.0000**	**41.7109**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2987	2.7291	3.2819	5.4700e-003		0.1245	0.1245		0.1171	0.1171	0.0000	470.6537	470.6537	0.1113	0.0000	473.4361
Total	**0.2987**	**2.7291**	**3.2819**	**5.4700e-003**		**0.1245**	**0.1245**		**0.1171**	**0.1171**	**0.0000**	**470.6537**	**470.6537**	**0.1113**	**0.0000**	**473.4361**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0305	1.1937	0.2570	4.4800e-003	0.1154	1.2200e-003	0.1166	0.0333	1.1600e-003	0.0345	0.0000	428.6429	428.6429	0.0241	0.0000	429.2458
Worker	0.0929	0.0554	0.6527	2.2900e-003	0.2867	1.6200e-003	0.2883	0.0761	1.4900e-003	0.0776	0.0000	207.2442	207.2442	3.9800e-003	0.0000	207.3436
Total	**0.1234**	**1.2491**	**0.9097**	**6.7700e-003**	**0.4021**	**2.8400e-003**	**0.4049**	**0.1094**	**2.6500e-003**	**0.1121**	**0.0000**	**635.8871**	**635.8871**	**0.0281**	**0.0000**	**636.5895**

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	0.1368	2.8879	3.6284	5.4700e-003		0.1834	0.1834		0.1834	0.1834	0.0000	470.6531	470.6531	0.1113	0.0000	473.4355
Total	**0.1368**	**2.8879**	**3.6284**	**5.4700e-003**		**0.1834**	**0.1834**		**0.1834**	**0.1834**	**0.0000**	**470.6531**	**470.6531**	**0.1113**	**0.0000**	**473.4355**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0305	1.1937	0.2570	4.4800e-003	0.0827	1.2200e-003	0.0839	0.0253	1.1600e-003	0.0264	0.0000	428.6429	428.6429	0.0241	0.0000	429.2458
Worker	0.0929	0.0554	0.6527	2.2900e-003	0.1873	1.6200e-003	0.1889	0.0517	1.4900e-003	0.0532	0.0000	207.2442	207.2442	3.9800e-003	0.0000	207.3436
Total	**0.1234**	**1.2491**	**0.9097**	**6.7700e-003**	**0.2699**	**2.8400e-003**	**0.2728**	**0.0770**	**2.6500e-003**	**0.0796**	**0.0000**	**635.8871**	**635.8871**	**0.0281**	**0.0000**	**636.5895**

3.4 Building Construction - 2025

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	0.3569	3.2546	4.1981	7.0400e-003		0.1377	0.1377		0.1295	0.1295	0.0000	605.3098	605.3098	0.1423	0.0000	608.8670
Total	**0.3569**	**3.2546**	**4.1981**	**7.0400e-003**		**0.1377**	**0.1377**		**0.1295**	**0.1295**	**0.0000**	**605.3098**	**605.3098**	**0.1423**	**0.0000**	**608.8670**

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0383	1.5177	0.3193	5.7200e-003	0.1483	1.5400e-003	0.1499	0.0428	1.4800e-003	0.0443	0.0000	547.5848	547.5848	0.0302	0.0000	548.3401
Worker	0.1130	0.0648	0.7782	2.8300e-003	0.3686	2.0400e-003	0.3707	0.0979	1.8800e-003	0.0998	0.0000	255.7924	255.7924	4.6400e-003	0.0000	255.9084
Total	**0.1513**	**1.5825**	**1.0975**	**8.5500e-003**	**0.5170**	**3.5800e-003**	**0.5206**	**0.1407**	**3.3600e-003**	**0.1440**	**0.0000**	**803.3772**	**803.3772**	**0.0349**	**0.0000**	**804.2485**

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	0.1759	3.7130	4.6651	7.0400e-003		0.2358	0.2358		0.2358	0.2358	0.0000	605.3091	605.3091	0.1423	0.0000	608.8663
Total	**0.1759**	**3.7130**	**4.6651**	**7.0400e-003**		**0.2358**	**0.2358**		**0.2358**	**0.2358**	**0.0000**	**605.3091**	**605.3091**	**0.1423**	**0.0000**	**608.8663**

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0383	1.5177	0.3193	5.7200e-003	0.1063	1.5400e-003	0.1079	0.0325	1.4800e-003	0.0340	0.0000	547.5848	547.5848	0.0302	0.0000	548.3401
Worker	0.1130	0.0648	0.7782	2.8300e-003	0.2408	2.0400e-003	0.2428	0.0665	1.8800e-003	0.0684	0.0000	255.7924	255.7924	4.6400e-003	0.0000	255.9084
Total	**0.1513**	**1.5825**	**1.0975**	**8.5500e-003**	**0.3471**	**3.5800e-003**	**0.3507**	**0.0990**	**3.3600e-003**	**0.1023**	**0.0000**	**803.3772**	**803.3772**	**0.0349**	**0.0000**	**804.2485**

3.4 Building Construction - 2026

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	0.3569	3.2546	4.1981	7.0400e-003		0.1377	0.1377		0.1295	0.1295	0.0000	605.3098	605.3098	0.1423	0.0000	608.8670
Total	**0.3569**	**3.2546**	**4.1981**	**7.0400e-003**		**0.1377**	**0.1377**		**0.1295**	**0.1295**	**0.0000**	**605.3098**	**605.3098**	**0.1423**	**0.0000**	**608.8670**

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0374	1.5008	0.3104	5.6800e-003	0.1483	1.5200e-003	0.1499	0.0428	1.4600e-003	0.0443	0.0000	544.2662	544.2662	0.0294	0.0000	545.0011
Worker	0.1074	0.0594	0.7254	2.7200e-003	0.3686	1.9800e-003	0.3706	0.0979	1.8200e-003	0.0997	0.0000	246.4762	246.4762	4.2300e-003	0.0000	246.5819
Total	**0.1448**	**1.5602**	**1.0358**	**8.4000e-003**	**0.5170**	**3.5000e-003**	**0.5205**	**0.1407**	**3.2800e-003**	**0.1440**	**0.0000**	**790.7424**	**790.7424**	**0.0336**	**0.0000**	**791.5831**

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	0.1759	3.7130	4.6651	7.0400e-003		0.2358	0.2358		0.2358	0.2358	0.0000	605.3091	605.3091	0.1423	0.0000	608.8663
Total	**0.1759**	**3.7130**	**4.6651**	**7.0400e-003**		**0.2358**	**0.2358**		**0.2358**	**0.2358**	**0.0000**	**605.3091**	**605.3091**	**0.1423**	**0.0000**	**608.8663**

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0374	1.5008	0.3104	5.6800e-003	0.1063	1.5200e-003	0.1078	0.0325	1.4600e-003	0.0339	0.0000	544.2662	544.2662	0.0294	0.0000	545.0011
Worker	0.1074	0.0594	0.7254	2.7200e-003	0.2408	1.9800e-003	0.2427	0.0665	1.8200e-003	0.0683	0.0000	246.4762	246.4762	4.2300e-003	0.0000	246.5819
Total	**0.1448**	**1.5602**	**1.0358**	**8.4000e-003**	**0.3471**	**3.5000e-003**	**0.3506**	**0.0990**	**3.2800e-003**	**0.1023**	**0.0000**	**790.7424**	**790.7424**	**0.0336**	**0.0000**	**791.5831**

3.4 Building Construction - 2027

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	0.3569	3.2546	4.1981	7.0400e-003		0.1377	0.1377		0.1295	0.1295	0.0000	605.3098	605.3098	0.1423	0.0000	608.8670
Total	**0.3569**	**3.2546**	**4.1981**	**7.0400e-003**		**0.1377**	**0.1377**		**0.1295**	**0.1295**	**0.0000**	**605.3098**	**605.3098**	**0.1423**	**0.0000**	**608.8670**

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0367	1.4848	0.3031	5.6500e-003	0.1483	1.5000e-003	0.1498	0.0428	1.4400e-003	0.0442	0.0000	541.4032	541.4032	0.0286	0.0000	542.1178
Worker	0.1019	0.0546	0.6785	2.6300e-003	0.3686	1.8700e-003	0.3705	0.0979	1.7200e-003	0.0996	0.0000	238.3094	238.3094	3.8600e-003	0.0000	238.4059
Total	**0.1386**	**1.5394**	**0.9816**	**8.2800e-003**	**0.5170**	**3.3700e-003**	**0.5203**	**0.1407**	**3.1600e-003**	**0.1438**	**0.0000**	**779.7125**	**779.7125**	**0.0324**	**0.0000**	**780.5237**

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	0.1759	3.7130	4.6651	7.0400e-003		0.2358	0.2358		0.2358	0.2358	0.0000	605.3091	605.3091	0.1423	0.0000	608.8663
Total	**0.1759**	**3.7130**	**4.6651**	**7.0400e-003**		**0.2358**	**0.2358**		**0.2358**	**0.2358**	**0.0000**	**605.3091**	**605.3091**	**0.1423**	**0.0000**	**608.8663**

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0367	1.4848	0.3031	5.6500e-003	0.1063	1.5000e-003	0.1078	0.0325	1.4400e-003	0.0339	0.0000	541.4032	541.4032	0.0286	0.0000	542.1178
Worker	0.1019	0.0546	0.6785	2.6300e-003	0.2408	1.8700e-003	0.2426	0.0665	1.7200e-003	0.0682	0.0000	238.3094	238.3094	3.8600e-003	0.0000	238.4059
Total	**0.1386**	**1.5394**	**0.9816**	**8.2800e-003**	**0.3471**	**3.3700e-003**	**0.3504**	**0.0990**	**3.1600e-003**	**0.1021**	**0.0000**	**779.7125**	**779.7125**	**0.0324**	**0.0000**	**780.5237**

3.4 Building Construction - 2028

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	0.3555	3.2421	4.1820	7.0100e-003		0.1372	0.1372		0.1290	0.1290	0.0000	602.9906	602.9906	0.1417	0.0000	606.5342
Total	**0.3555**	**3.2421**	**4.1820**	**7.0100e-003**		**0.1372**	**0.1372**		**0.1290**	**0.1290**	**0.0000**	**602.9906**	**602.9906**	**0.1417**	**0.0000**	**606.5342**

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0360	1.4661	0.2966	5.6000e-003	0.1478	1.4800e-003	0.1492	0.0426	1.4200e-003	0.0440	0.0000	537.0143	537.0143	0.0277	0.0000	537.7060
Worker	0.0961	0.0501	0.6353	2.5400e-003	0.3672	1.7300e-003	0.3690	0.0975	1.5900e-003	0.0991	0.0000	230.2968	230.2968	3.5400e-003	0.0000	230.3852
Total	**0.1320**	**1.5162**	**0.9319**	**8.1400e-003**	**0.5150**	**3.2100e-003**	**0.5182**	**0.1401**	**3.0100e-003**	**0.1431**	**0.0000**	**767.3111**	**767.3111**	**0.0312**	**0.0000**	**768.0912**

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	0.1752	3.6988	4.6472	7.0100e-003		0.2349	0.2349		0.2349	0.2349	0.0000	602.9899	602.9899	0.1417	0.0000	606.5335
Total	**0.1752**	**3.6988**	**4.6472**	**7.0100e-003**		**0.2349**	**0.2349**		**0.2349**	**0.2349**	**0.0000**	**602.9899**	**602.9899**	**0.1417**	**0.0000**	**606.5335**

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0360	1.4661	0.2966	5.6000e-003	0.1059	1.4800e-003	0.1074	0.0324	1.4200e-003	0.0338	0.0000	537.0143	537.0143	0.0277	0.0000	537.7060
Worker	0.0961	0.0501	0.6353	2.5400e-003	0.2398	1.7300e-003	0.2416	0.0663	1.5900e-003	0.0678	0.0000	230.2968	230.2968	3.5400e-003	0.0000	230.3852
Total	**0.1320**	**1.5162**	**0.9319**	**8.1400e-003**	**0.3457**	**3.2100e-003**	**0.3489**	**0.0986**	**3.0100e-003**	**0.1016**	**0.0000**	**767.3111**	**767.3111**	**0.0312**	**0.0000**	**768.0912**

3.4 Building Construction - 2029

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	0.3104	2.8306	3.6512	6.1200e-003		0.1198	0.1198		0.1127	0.1127	0.0000	526.4572	526.4572	0.1238	0.0000	529.5510
Total	**0.3104**	**2.8306**	**3.6512**	**6.1200e-003**		**0.1198**	**0.1198**		**0.1127**	**0.1127**	**0.0000**	**526.4572**	**526.4572**	**0.1238**	**0.0000**	**529.5510**

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0310	1.2696	0.2549	4.8700e-003	0.1290	1.2800e-003	0.1303	0.0372	1.2200e-003	0.0384	0.0000	467.0524	467.0524	0.0235	0.0000	467.6401
Worker	0.0789	0.0403	0.5213	2.1600e-003	0.3206	1.4000e-003	0.3220	0.0851	1.2900e-003	0.0864	0.0000	195.6430	195.6430	2.8300e-003	0.0000	195.7137
Total	**0.1098**	**1.3099**	**0.7762**	**7.0300e-003**	**0.4496**	**2.6800e-003**	**0.4523**	**0.1224**	**2.5100e-003**	**0.1249**	**0.0000**	**662.6954**	**662.6954**	**0.0263**	**0.0000**	**663.3538**

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	0.1530	3.2293	4.0573	6.1200e-003		0.2051	0.2051		0.2051	0.2051	0.0000	526.4565	526.4565	0.1238	0.0000	529.5504
Total	**0.1530**	**3.2293**	**4.0573**	**6.1200e-003**		**0.2051**	**0.2051**		**0.2051**	**0.2051**	**0.0000**	**526.4565**	**526.4565**	**0.1238**	**0.0000**	**529.5504**

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0310	1.2696	0.2549	4.8700e-003	0.0924	1.2800e-003	0.0937	0.0282	1.2200e-003	0.0295	0.0000	467.0524	467.0524	0.0235	0.0000	467.6401
Worker	0.0789	0.0403	0.5213	2.1600e-003	0.2094	1.4000e-003	0.2108	0.0578	1.2900e-003	0.0591	0.0000	195.6430	195.6430	2.8300e-003	0.0000	195.7137
Total	**0.1098**	**1.3099**	**0.7762**	**7.0300e-003**	**0.3018**	**2.6800e-003**	**0.3045**	**0.0861**	**2.5100e-003**	**0.0886**	**0.0000**	**662.6954**	**662.6954**	**0.0263**	**0.0000**	**663.3538**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2006	1.9335	2.9690	4.6300e-003		0.0951	0.0951		0.0875	0.0875	0.0000	406.5386	406.5386	0.1315	0.0000	409.8257
Paving	6.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2073**	**1.9335**	**2.9690**	**4.6300e-003**		**0.0951**	**0.0951**		**0.0875**	**0.0875**	**0.0000**	**406.5386**	**406.5386**	**0.1315**	**0.0000**	**409.8257**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0108	6.4700e-003	0.0762	2.7000e-004	0.0335	1.9000e-004	0.0337	8.8900e-003	1.7000e-004	9.0600e-003	0.0000	24.1919	24.1919	4.6000e-004	0.0000	24.2035
Total	**0.0108**	**6.4700e-003**	**0.0762**	**2.7000e-004**	**0.0335**	**1.9000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0600e-003**	**0.0000**	**24.1919**	**24.1919**	**4.6000e-004**	**0.0000**	**24.2035**

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	0.1139	2.2929	3.5110	4.6300e-003		0.1237	0.1237		0.1237	0.1237	0.0000	406.5381	406.5381	0.1315	0.0000	409.8252
Paving	6.7300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1206**	**2.2929**	**3.5110**	**4.6300e-003**		**0.1237**	**0.1237**		**0.1237**	**0.1237**	**0.0000**	**406.5381**	**406.5381**	**0.1315**	**0.0000**	**409.8252**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0108	6.4700e-003	0.0762	2.7000e-004	0.0219	1.9000e-004	0.0221	6.0400e-003	1.7000e-004	6.2100e-003	0.0000	24.1919	24.1919	4.6000e-004	0.0000	24.2035
Total	**0.0108**	**6.4700e-003**	**0.0762**	**2.7000e-004**	**0.0219**	**1.9000e-004**	**0.0221**	**6.0400e-003**	**1.7000e-004**	**6.2100e-003**	**0.0000**	**24.1919**	**24.1919**	**4.6000e-004**	**0.0000**	**24.2035**

3.5 Paving - 2025

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	0.2389	2.2398	3.8049	5.9500e-003		0.1092	0.1092		0.1005	0.1005	0.0000	522.5026	522.5026	0.1690	0.0000	526.7273
Paving	8.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2475**	**2.2398**	**3.8049**	**5.9500e-003**		**0.1092**	**0.1092**		**0.1005**	**0.1005**	**0.0000**	**522.5026**	**522.5026**	**0.1690**	**0.0000**	**526.7273**

3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	7.5700e-003	0.0908	3.3000e-004	0.0430	2.4000e-004	0.0433	0.0114	2.2000e-004	0.0117	0.0000	29.8590	29.8590	5.4000e-004	0.0000	29.8726
Total	**0.0132**	**7.5700e-003**	**0.0908**	**3.3000e-004**	**0.0430**	**2.4000e-004**	**0.0433**	**0.0114**	**2.2000e-004**	**0.0117**	**0.0000**	**29.8590**	**29.8590**	**5.4000e-004**	**0.0000**	**29.8726**

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	0.1464	2.9481	4.5142	5.9500e-003		0.1590	0.1590		0.1590	0.1590	0.0000	522.5019	522.5019	0.1690	0.0000	526.7266
Paving	8.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1551**	**2.9481**	**4.5142**	**5.9500e-003**		**0.1590**	**0.1590**		**0.1590**	**0.1590**	**0.0000**	**522.5019**	**522.5019**	**0.1690**	**0.0000**	**526.7266**

3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	7.5700e-003	0.0908	3.3000e-004	0.0281	2.4000e-004	0.0283	7.7600e-003	2.2000e-004	7.9800e-003	0.0000	29.8590	29.8590	5.4000e-004	0.0000	29.8726
Total	**0.0132**	**7.5700e-003**	**0.0908**	**3.3000e-004**	**0.0281**	**2.4000e-004**	**0.0283**	**7.7600e-003**	**2.2000e-004**	**7.9800e-003**	**0.0000**	**29.8590**	**29.8590**	**5.4000e-004**	**0.0000**	**29.8726**

3.5 Paving - 2026

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	0.2389	2.2398	3.8049	5.9500e-003		0.1092	0.1092		0.1005	0.1005	0.0000	522.5026	522.5026	0.1690	0.0000	526.7273
Paving	8.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2475**	**2.2398**	**3.8049**	**5.9500e-003**		**0.1092**	**0.1092**		**0.1005**	**0.1005**	**0.0000**	**522.5026**	**522.5026**	**0.1690**	**0.0000**	**526.7273**

3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0125	6.9400e-003	0.0847	3.2000e-004	0.0430	2.3000e-004	0.0433	0.0114	2.1000e-004	0.0116	0.0000	28.7715	28.7715	4.9000e-004	0.0000	28.7839
Total	**0.0125**	**6.9400e-003**	**0.0847**	**3.2000e-004**	**0.0430**	**2.3000e-004**	**0.0433**	**0.0114**	**2.1000e-004**	**0.0116**	**0.0000**	**28.7715**	**28.7715**	**4.9000e-004**	**0.0000**	**28.7839**

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	0.1464	2.9481	4.5142	5.9500e-003		0.1590	0.1590		0.1590	0.1590	0.0000	522.5019	522.5019	0.1690	0.0000	526.7266
Paving	8.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1551**	**2.9481**	**4.5142**	**5.9500e-003**		**0.1590**	**0.1590**		**0.1590**	**0.1590**	**0.0000**	**522.5019**	**522.5019**	**0.1690**	**0.0000**	**526.7266**

3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0125	6.9400e-003	0.0847	3.2000e-004	0.0281	2.3000e-004	0.0283	7.7600e-003	2.1000e-004	7.9800e-003	0.0000	28.7715	28.7715	4.9000e-004	0.0000	28.7839
Total	**0.0125**	**6.9400e-003**	**0.0847**	**3.2000e-004**	**0.0281**	**2.3000e-004**	**0.0283**	**7.7600e-003**	**2.1000e-004**	**7.9800e-003**	**0.0000**	**28.7715**	**28.7715**	**4.9000e-004**	**0.0000**	**28.7839**

3.5 Paving - 2027

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	0.2389	2.2398	3.8049	5.9500e-003		0.1092	0.1092		0.1005	0.1005	0.0000	522.5026	522.5026	0.1690	0.0000	526.7273
Paving	8.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2475**	**2.2398**	**3.8049**	**5.9500e-003**		**0.1092**	**0.1092**		**0.1005**	**0.1005**	**0.0000**	**522.5026**	**522.5026**	**0.1690**	**0.0000**	**526.7273**

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	6.3700e-003	0.0792	3.1000e-004	0.0430	2.2000e-004	0.0433	0.0114	2.0000e-004	0.0116	0.0000	27.8182	27.8182	4.5000e-004	0.0000	27.8295
Total	**0.0119**	**6.3700e-003**	**0.0792**	**3.1000e-004**	**0.0430**	**2.2000e-004**	**0.0433**	**0.0114**	**2.0000e-004**	**0.0116**	**0.0000**	**27.8182**	**27.8182**	**4.5000e-004**	**0.0000**	**27.8295**

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	0.1464	2.9481	4.5142	5.9500e-003		0.1590	0.1590		0.1590	0.1590	0.0000	522.5019	522.5019	0.1690	0.0000	526.7266
Paving	8.6600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1551**	**2.9481**	**4.5142**	**5.9500e-003**		**0.1590**	**0.1590**		**0.1590**	**0.1590**	**0.0000**	**522.5019**	**522.5019**	**0.1690**	**0.0000**	**526.7266**

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	6.3700e-003	0.0792	3.1000e-004	0.0281	2.2000e-004	0.0283	7.7600e-003	2.0000e-004	7.9600e-003	0.0000	27.8182	27.8182	4.5000e-004	0.0000	27.8295
Total	**0.0119**	**6.3700e-003**	**0.0792**	**3.1000e-004**	**0.0281**	**2.2000e-004**	**0.0283**	**7.7600e-003**	**2.0000e-004**	**7.9600e-003**	**0.0000**	**27.8182**	**27.8182**	**4.5000e-004**	**0.0000**	**27.8295**

3.5 Paving - 2028

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	0.2379	2.2312	3.7903	5.9300e-003		0.1088	0.1088		0.1001	0.1001	0.0000	520.5006	520.5006	0.1683	0.0000	524.7092
Paving	8.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2466**	**2.2312**	**3.7903**	**5.9300e-003**		**0.1088**	**0.1088**		**0.1001**	**0.1001**	**0.0000**	**520.5006**	**520.5006**	**0.1683**	**0.0000**	**524.7092**

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0112	5.8500e-003	0.0742	3.0000e-004	0.0429	2.0000e-004	0.0431	0.0114	1.9000e-004	0.0116	0.0000	26.8829	26.8829	4.1000e-004	0.0000	26.8932
Total	**0.0112**	**5.8500e-003**	**0.0742**	**3.0000e-004**	**0.0429**	**2.0000e-004**	**0.0431**	**0.0114**	**1.9000e-004**	**0.0116**	**0.0000**	**26.8829**	**26.8829**	**4.1000e-004**	**0.0000**	**26.8932**

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	0.1458	2.9368	4.4969	5.9300e-003		0.1584	0.1584		0.1584	0.1584	0.0000	520.5000	520.5000	0.1683	0.0000	524.7085
Paving	8.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1545**	**2.9368**	**4.4969**	**5.9300e-003**		**0.1584**	**0.1584**		**0.1584**	**0.1584**	**0.0000**	**520.5000**	**520.5000**	**0.1683**	**0.0000**	**524.7085**

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0112	5.8500e-003	0.0742	3.0000e-004	0.0280	2.0000e-004	0.0282	7.7300e-003	1.9000e-004	7.9200e-003	0.0000	26.8829	26.8829	4.1000e-004	0.0000	26.8932
Total	**0.0112**	**5.8500e-003**	**0.0742**	**3.0000e-004**	**0.0280**	**2.0000e-004**	**0.0282**	**7.7300e-003**	**1.9000e-004**	**7.9200e-003**	**0.0000**	**26.8829**	**26.8829**	**4.1000e-004**	**0.0000**	**26.8932**

3.5 Paving - 2029

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	0.2077	1.9480	3.3092	5.1800e-003		0.0950	0.0950		0.0874	0.0874	0.0000	454.4371	454.4371	0.1470	0.0000	458.1115
Paving	7.5300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2153**	**1.9480**	**3.3092**	**5.1800e-003**		**0.0950**	**0.0950**		**0.0874**	**0.0874**	**0.0000**	**454.4371**	**454.4371**	**0.1470**	**0.0000**	**458.1115**

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2000e-003	4.7000e-003	0.0609	2.5000e-004	0.0374	1.6000e-004	0.0376	9.9400e-003	1.5000e-004	0.0101	0.0000	22.8377	22.8377	3.3000e-004	0.0000	22.8460
Total	**9.2000e-003**	**4.7000e-003**	**0.0609**	**2.5000e-004**	**0.0374**	**1.6000e-004**	**0.0376**	**9.9400e-003**	**1.5000e-004**	**0.0101**	**0.0000**	**22.8377**	**22.8377**	**3.3000e-004**	**0.0000**	**22.8460**

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	0.1273	2.5640	3.9261	5.1800e-003		0.1383	0.1383		0.1383	0.1383	0.0000	454.4366	454.4366	0.1470	0.0000	458.1109
Paving	7.5300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1349**	**2.5640**	**3.9261**	**5.1800e-003**		**0.1383**	**0.1383**		**0.1383**	**0.1383**	**0.0000**	**454.4366**	**454.4366**	**0.1470**	**0.0000**	**458.1109**

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2000e-003	4.7000e-003	0.0609	2.5000e-004	0.0244	1.6000e-004	0.0246	6.7500e-003	1.5000e-004	6.9000e-003	0.0000	22.8377	22.8377	3.3000e-004	0.0000	22.8460
Total	**9.2000e-003**	**4.7000e-003**	**0.0609**	**2.5000e-004**	**0.0244**	**1.6000e-004**	**0.0246**	**6.7500e-003**	**1.5000e-004**	**6.9000e-003**	**0.0000**	**22.8377**	**22.8377**	**3.3000e-004**	**0.0000**	**22.8460**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.2330					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0367	0.2474	0.3675	6.0000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	51.8311	51.8311	2.9200e-003	0.0000	51.9040
Total	**6.2697**	**0.2474**	**0.3675**	**6.0000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**51.8311**	**51.8311**	**2.9200e-003**	**0.0000**	**51.9040**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0108	6.4700e-003	0.0762	2.7000e-004	0.0335	1.9000e-004	0.0337	8.8900e-003	1.7000e-004	9.0600e-003	0.0000	24.1919	24.1919	4.6000e-004	0.0000	24.2035
Total	**0.0108**	**6.4700e-003**	**0.0762**	**2.7000e-004**	**0.0335**	**1.9000e-004**	**0.0337**	**8.8900e-003**	**1.7000e-004**	**9.0600e-003**	**0.0000**	**24.1919**	**24.1919**	**4.6000e-004**	**0.0000**	**24.2035**

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	6.2330					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.2755	0.3720	6.0000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	51.8310	51.8310	2.9200e-003	0.0000	51.9040
Total	**6.2451**	**0.2755**	**0.3720**	**6.0000e-004**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**51.8310**	**51.8310**	**2.9200e-003**	**0.0000**	**51.9040**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0108	6.4700e-003	0.0762	2.7000e-004	0.0219	1.9000e-004	0.0221	6.0400e-003	1.7000e-004	6.2100e-003	0.0000	24.1919	24.1919	4.6000e-004	0.0000	24.2035
Total	**0.0108**	**6.4700e-003**	**0.0762**	**2.7000e-004**	**0.0219**	**1.9000e-004**	**0.0221**	**6.0400e-003**	**1.7000e-004**	**6.2100e-003**	**0.0000**	**24.1919**	**24.1919**	**4.6000e-004**	**0.0000**	**24.2035**

3.6 Architectural Coating - 2025

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	8.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	**8.0585**	**0.2990**	**0.4722**	**7.8000e-004**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**66.6399**	**66.6399**	**3.6400e-003**	**0.0000**	**66.7308**

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	7.5700e-003	0.0908	3.3000e-004	0.0430	2.4000e-004	0.0433	0.0114	2.2000e-004	0.0117	0.0000	29.8590	29.8590	5.4000e-004	0.0000	29.8726
Total	**0.0132**	**7.5700e-003**	**0.0908**	**3.3000e-004**	**0.0430**	**2.4000e-004**	**0.0433**	**0.0114**	**2.2000e-004**	**0.0117**	**0.0000**	**29.8590**	**29.8590**	**5.4000e-004**	**0.0000**	**29.8726**

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	8.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	**8.0294**	**0.3542**	**0.4783**	**7.8000e-004**		**0.0248**	**0.0248**		**0.0248**	**0.0248**	**0.0000**	**66.6398**	**66.6398**	**3.6400e-003**	**0.0000**	**66.7307**

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	7.5700e-003	0.0908	3.3000e-004	0.0281	2.4000e-004	0.0283	7.7600e-003	2.2000e-004	7.9800e-003	0.0000	29.8590	29.8590	5.4000e-004	0.0000	29.8726
Total	**0.0132**	**7.5700e-003**	**0.0908**	**3.3000e-004**	**0.0281**	**2.4000e-004**	**0.0283**	**7.7600e-003**	**2.2000e-004**	**7.9800e-003**	**0.0000**	**29.8590**	**29.8590**	**5.4000e-004**	**0.0000**	**29.8726**

3.6 Architectural Coating - 2026

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	8.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	**8.0585**	**0.2990**	**0.4722**	**7.8000e-004**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**66.6399**	**66.6399**	**3.6400e-003**	**0.0000**	**66.7308**

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0125	6.9400e-003	0.0847	3.2000e-004	0.0430	2.3000e-004	0.0433	0.0114	2.1000e-004	0.0116	0.0000	28.7715	28.7715	4.9000e-004	0.0000	28.7839
Total	**0.0125**	**6.9400e-003**	**0.0847**	**3.2000e-004**	**0.0430**	**2.3000e-004**	**0.0433**	**0.0114**	**2.1000e-004**	**0.0116**	**0.0000**	**28.7715**	**28.7715**	**4.9000e-004**	**0.0000**	**28.7839**

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	8.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	**8.0294**	**0.3542**	**0.4783**	**7.8000e-004**		**0.0248**	**0.0248**		**0.0248**	**0.0248**	**0.0000**	**66.6398**	**66.6398**	**3.6400e-003**	**0.0000**	**66.7307**

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0125	6.9400e-003	0.0847	3.2000e-004	0.0281	2.3000e-004	0.0283	7.7600e-003	2.1000e-004	7.9800e-003	0.0000	28.7715	28.7715	4.9000e-004	0.0000	28.7839
Total	**0.0125**	**6.9400e-003**	**0.0847**	**3.2000e-004**	**0.0281**	**2.3000e-004**	**0.0283**	**7.7600e-003**	**2.1000e-004**	**7.9800e-003**	**0.0000**	**28.7715**	**28.7715**	**4.9000e-004**	**0.0000**	**28.7839**

3.6 Architectural Coating - 2027

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	8.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	**8.0585**	**0.2990**	**0.4722**	**7.8000e-004**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**66.6399**	**66.6399**	**3.6400e-003**	**0.0000**	**66.7308**

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	6.3700e-003	0.0792	3.1000e-004	0.0430	2.2000e-004	0.0433	0.0114	2.0000e-004	0.0116	0.0000	27.8182	27.8182	4.5000e-004	0.0000	27.8295
Total	**0.0119**	**6.3700e-003**	**0.0792**	**3.1000e-004**	**0.0430**	**2.2000e-004**	**0.0433**	**0.0114**	**2.0000e-004**	**0.0116**	**0.0000**	**27.8182**	**27.8182**	**4.5000e-004**	**0.0000**	**27.8295**

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	8.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	**8.0294**	**0.3542**	**0.4783**	**7.8000e-004**		**0.0248**	**0.0248**		**0.0248**	**0.0248**	**0.0000**	**66.6398**	**66.6398**	**3.6400e-003**	**0.0000**	**66.7307**

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0119	6.3700e-003	0.0792	3.1000e-004	0.0281	2.2000e-004	0.0283	7.7600e-003	2.0000e-004	7.9600e-003	0.0000	27.8182	27.8182	4.5000e-004	0.0000	27.8295
Total	**0.0119**	**6.3700e-003**	**0.0792**	**3.1000e-004**	**0.0281**	**2.2000e-004**	**0.0283**	**7.7600e-003**	**2.0000e-004**	**7.9600e-003**	**0.0000**	**27.8182**	**27.8182**	**4.5000e-004**	**0.0000**	**27.8295**

3.6 Architectural Coating - 2028

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	7.9832					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0444	0.2978	0.4704	7.7000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.3846	66.3846	3.6200e-003	0.0000	66.4751
Total	**8.0276**	**0.2978**	**0.4704**	**7.7000e-004**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**66.3846**	**66.3846**	**3.6200e-003**	**0.0000**	**66.4751**

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0112	5.8500e-003	0.0742	3.0000e-004	0.0429	2.0000e-004	0.0431	0.0114	1.9000e-004	0.0116	0.0000	26.8829	26.8829	4.1000e-004	0.0000	26.8932
Total	**0.0112**	**5.8500e-003**	**0.0742**	**3.0000e-004**	**0.0429**	**2.0000e-004**	**0.0431**	**0.0114**	**1.9000e-004**	**0.0116**	**0.0000**	**26.8829**	**26.8829**	**4.1000e-004**	**0.0000**	**26.8932**

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	7.9832					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3528	0.4764	7.7000e-004		0.0247	0.0247		0.0247	0.0247	0.0000	66.3845	66.3845	3.6200e-003	0.0000	66.4751
Total	**7.9987**	**0.3528**	**0.4764**	**7.7000e-004**		**0.0247**	**0.0247**		**0.0247**	**0.0247**	**0.0000**	**66.3845**	**66.3845**	**3.6200e-003**	**0.0000**	**66.4751**

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0112	5.8500e-003	0.0742	3.0000e-004	0.0280	2.0000e-004	0.0282	7.7300e-003	1.9000e-004	7.9200e-003	0.0000	26.8829	26.8829	4.1000e-004	0.0000	26.8932
Total	**0.0112**	**5.8500e-003**	**0.0742**	**3.0000e-004**	**0.0280**	**2.0000e-004**	**0.0282**	**7.7300e-003**	**1.9000e-004**	**7.9200e-003**	**0.0000**	**26.8829**	**26.8829**	**4.1000e-004**	**0.0000**	**26.8932**

3.6 Architectural Coating - 2029

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	6.9700					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0388	0.2600	0.4107	6.7000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	57.9589	57.9589	3.1600e-003	0.0000	58.0379
Total	**7.0088**	**0.2600**	**0.4107**	**6.7000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**	**0.0000**	**57.9589**	**57.9589**	**3.1600e-003**	**0.0000**	**58.0379**

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2000e-003	4.7000e-003	0.0609	2.5000e-004	0.0374	1.6000e-004	0.0376	9.9400e-003	1.5000e-004	0.0101	0.0000	22.8377	22.8377	3.3000e-004	0.0000	22.8460
Total	**9.2000e-003**	**4.7000e-003**	**0.0609**	**2.5000e-004**	**0.0374**	**1.6000e-004**	**0.0376**	**9.9400e-003**	**1.5000e-004**	**0.0101**	**0.0000**	**22.8377**	**22.8377**	**3.3000e-004**	**0.0000**	**22.8460**

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	6.9700					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0135	0.3080	0.4160	6.7000e-004		0.0216	0.0216		0.0216	0.0216	0.0000	57.9588	57.9588	3.1600e-003	0.0000	58.0378
Total	**6.9835**	**0.3080**	**0.4160**	**6.7000e-004**		**0.0216**	**0.0216**		**0.0216**	**0.0216**	**0.0000**	**57.9588**	**57.9588**	**3.1600e-003**	**0.0000**	**58.0378**

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.2000e-003	4.7000e-003	0.0609	2.5000e-004	0.0244	1.6000e-004	0.0246	6.7500e-003	1.5000e-004	6.9000e-003	0.0000	22.8377	22.8377	3.3000e-004	0.0000	22.8460
Total	**9.2000e-003**	**4.7000e-003**	**0.0609**	**2.5000e-004**	**0.0244**	**1.6000e-004**	**0.0246**	**6.7500e-003**	**1.5000e-004**	**6.9000e-003**	**0.0000**	**22.8377**	**22.8377**	**3.3000e-004**	**0.0000**	**22.8460**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Free-Standing Discount Superstore	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Free-Standing Discount	16.60	8.40	6.90	13.20	67.80	19.00	47.5	35.5	17
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Free-Standing Discount Superstore	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Industrial Park	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Manufacturing	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Non-Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Refrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Strip Mall	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Unrefrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

Stoneridge Commerce Center - Primary Land Use Plan - Riverside-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21,986.3504	21,986.3504	1.2685	0.2625	22,096.2712
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22,570.7668	22,570.7668	1.3022	0.2694	22,683.6094
NaturalGas Mitigated	0.6502	5.9113	4.9655	0.0355		0.4493	0.4493		0.4493	0.4493	0.0000	6,435.1184	6,435.1184	0.1233	0.1180	6,473.3591
NaturalGas Unmitigated	0.7048	6.4071	5.3819	0.0384		0.4869	0.4869		0.4869	0.4869	0.0000	6,974.8491	6,974.8491	0.1337	0.1279	7,016.2971

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					
Free-Standing Discount Superstore	222000	1.2000e-003	0.0109	9.1400e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8468	11.8468	2.3000e-004	2.2000e-004	11.9172
Industrial Park	2.22649e+006	0.0120	0.1091	0.0917	6.5000e-004		8.2900e-003	8.2900e-003		8.2900e-003	8.2900e-003	0.0000	118.8138	118.8138	2.2800e-003	2.1800e-003	119.5199
Manufacturing	2.7541e+007	0.1485	1.3501	1.1340	8.1000e-003		0.1026	0.1026		0.1026	0.1026	0.0000	1,469.6951	1,469.6951	0.0282	0.0269	1,478.4287
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	8.77516e+007	0.4732	4.3016	3.6133	0.0258		0.3269	0.3269		0.3269	0.3269	0.0000	4,682.7588	4,682.7588	0.0898	0.0859	4,710.5861
Strip Mall	48769	2.6000e-004	2.3900e-003	2.0100e-003	1.0000e-005		1.8000e-004	1.8000e-004		1.8000e-004	1.8000e-004	0.0000	2.6025	2.6025	5.0000e-005	5.0000e-005	2.6180
Unrefrigerated Warehouse-No Rail	6.02275e+006	0.0650	0.5905	0.4960	3.5400e-003		0.0449	0.0449		0.0449	0.0449	0.0000	642.7937	642.7937	0.0123	0.0118	646.6135
Unrefrigerated Warehouse-No Rail	868351	4.6800e-003	0.0426	0.0358	2.6000e-004		3.2400e-003	3.2400e-003		3.2400e-003	3.2400e-003	0.0000	46.3385	46.3385	8.9000e-004	8.5000e-004	46.6139
Total		**0.7048**	**6.4071**	**5.3819**	**0.0384**		**0.4869**	**0.4869**		**0.4869**	**0.4869**	**0.0000**	**6,974.8491**	**6,974.8491**	**0.1337**	**0.1279**	**7,016.2971**

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					
Free-Standing Discount Superstore	164400	8.9000e-004	8.0600e-003	6.7700e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7730	8.7730	1.7000e-004	1.6000e-004	8.8251
Industrial Park	1.55854e+006	8.4000e-003	0.0764	0.0642	4.6000e-004		5.8100e-003	5.8100e-003		5.8100e-003	5.8100e-003	0.0000	83.1697	83.1697	1.5900e-003	1.5200e-003	83.6639
Manufacturing	2.36349e+007	0.1274	1.1586	0.9732	6.9500e-003		0.0881	0.0881		0.0881	0.0881	0.0000	1,261.2508	1,261.2508	0.0242	0.0231	1,268.7458
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	8.60986e+007	0.4643	4.2205	3.5452	0.0253		0.3208	0.3208		0.3208	0.3208	0.0000	4,594.5499	4,594.5499	0.0881	0.0842	4,621.8530
Strip Mall	36115.4	1.9000e-004	1.7700e-003	1.4900e-003	1.0000e-005		1.3000e-004	1.3000e-004		1.3000e-004	1.3000e-004	0.0000	1.9273	1.9273	4.0000e-005	4.0000e-005	1.9387
Unrefrigerated Warehouse-No Rail	4.24263e+006	0.0458	0.4159	0.3494	2.5000e-003		0.0316	0.0316		0.0316	0.0316	0.0000	452.8054	452.8054	8.6800e-003	8.3000e-003	455.4962
Unrefrigerated Warehouse-No Rail	611696	3.3000e-003	0.0300	0.0252	1.8000e-004		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	32.6424	32.6424	6.3000e-004	6.0000e-004	32.8364
Total		**0.6502**	**5.9113**	**4.9655**	**0.0355**		**0.4493**	**0.4493**		**0.4493**	**0.4493**	**0.0000**	**6,435.1184**	**6,435.1184**	**0.1233**	**0.1180**	**6,473.3591**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Free-Standing Discount Superstore	1.263e+006	287.9617	0.0166	3.4400e-003	289.4014
Industrial Park	6.1084e+006	1,392.7046	0.0804	0.0166	1,399.6674
Manufacturing	8.60393e+006	1,961.6801	0.1132	0.0234	1,971.4875
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	6.77294e+007	15,442.1908	0.8909	0.1843	15,519.3941
Strip Mall	277456	63.2594	3.6500e-003	7.6000e-004	63.5757
Unrefrigerated Warehouse-No Rail	1.00951e+006	230.1669	0.0133	2.7500e-003	231.3176
Unrefrigerated Warehouse-No Rail	7.00182e+006	3,192.8034	0.1842	0.0381	3,208.7658
Total		**22,570.7668**	**1.3022**	**0.2694**	**22,683.6094**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Free-Standing Discount Superstore	1.1256e+006	256.6348	0.0148	3.0600e-003	257.9178
Industrial Park	5.51745e+006	1,257.9692	0.0726	0.0150	1,264.2584
Manufacturing	8.04446e+006	1,834.1225	0.1058	0.0219	1,843.2922
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	6.71903e+007	15,319.2717	0.8838	0.1829	15,395.8605
Strip Mall	247272	56.3775	3.2500e-003	6.7000e-004	56.6594
Unrefrigerated Warehouse-No Rail	6.67249e+006	3,042.6334	0.1755	0.0363	3,057.8451
Unrefrigerated Warehouse-No Rail	962030	219.3412	0.0127	2.6200e-003	220.4378
Total		**21,986.3504**	**1.2685**	**0.2624**	**22,096.2712**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	11.9617	1.1100e-003	0.1236	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	0.2416	0.2416	6.2000e-004	0.0000	0.2572
Unmitigated	11.9617	1.1100e-003	0.1236	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	0.2416	0.2416	6.2000e-004	0.0000	0.2572

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	4.5228					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.4276					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0113	1.1100e-003	0.1236	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	0.2416	0.2416	6.2000e-004	0.0000	0.2572
Total	**11.9617**	**1.1100e-003**	**0.1236**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**0.2416**	**0.2416**	**6.2000e-004**	**0.0000**	**0.2572**

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	4.5228					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.4276					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0113	1.1100e-003	0.1236	1.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004	0.0000	0.2416	0.2416	6.2000e-004	0.0000	0.2572
Total	**11.9617**	**1.1100e-003**	**0.1236**	**1.0000e-005**		**4.4000e-004**	**4.4000e-004**		**4.4000e-004**	**4.4000e-004**	**0.0000**	**0.2416**	**0.2416**	**6.2000e-004**	**0.0000**	**0.2572**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,179.4548	11.7497	0.2887	1,559.2321
Unmitigated	1,179.4548	11.7497	0.2887	1,559.2321

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Free-Standing Discount Superstore	5.33 / 0.246	18.1376	0.1746	4.3000e-003	23.7839
Industrial Park	15.8648 / 0	52.1322	0.5197	0.0128	68.9291
Manufacturing	31.0249 / 0	101.9485	1.0163	0.0250	134.7962
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	62.7543 / 0	206.2118	2.0556	0.0505	272.6529
Strip Mall	1.17 / 0.054	3.9814	0.0383	9.4000e-004	5.2209
Unrefrigerated Warehouse-No Rail	242.556 / 0	797.0432	7.9452	0.1952	1,053.8492
Total		**1,179.4548**	**11.7497**	**0.2887**	**1,559.2321**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Free-Standing Discount Superstore	5.33 / 0.246	18.1376	0.1746	4.3000e-003	23.7839
Industrial Park	15.8648 / 0	52.1322	0.5197	0.0128	68.9291
Manufacturing	31.0249 / 0	101.9485	1.0163	0.0250	134.7962
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	62.7543 / 0	206.2118	2.0556	0.0505	272.6529
Strip Mall	1.17 / 0.054	3.9814	0.0383	9.4000e-004	5.2209
Unrefrigerated Warehouse-No Rail	242.556 / 0	797.0432	7.9452	0.1952	1,053.8492
Total		**1,179.4548**	**11.7497**	**0.2887**	**1,559.2321**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2,004.1988	118.4448	0.0000	4,965.3177
Unmitigated	2,004.1988	118.4448	0.0000	4,965.3177

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Free-Standing Discount Superstore	430.07	87.3003	5.1593	0.0000	216.2829
Industrial Park	795.63	161.5057	9.5447	0.0000	400.1235
Manufacturing	1051.12	213.3679	12.6097	0.0000	528.6098
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1593.64	323.4945	19.1180	0.0000	801.4440
Strip Mall	23.07	4.6830	0.2768	0.0000	11.6019
Unrefrigerated Warehouse-No Rail	5979.81	1,213.8474	71.7363	0.0000	3,007.2555
Total		**2,004.1988**	**118.4448**	**0.0000**	**4,965.3177**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Free-Standing Discount Superstore	430.07	87.3003	5.1593	0.0000	216.2829
Industrial Park	795.63	161.5057	9.5447	0.0000	400.1235
Manufacturing	1051.12	213.3679	12.6097	0.0000	528.6098
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1593.64	323.4945	19.1180	0.0000	801.4440
Strip Mall	23.07	4.6830	0.2768	0.0000	11.6019
Unrefrigerated Warehouse-No Rail	5979.81	1,213.8474	71.7363	0.0000	3,007.2555
Total		**2,004.1988**	**118.4448**	**0.0000**	**4,965.3177**

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

Stoneridge Commerce Center Construction Haul Truck Emissions

Primary & Alternative Land Use Plan

Vehicle Class	Daily VMT[1]	Daily Idling[2] (minutes)	Pollutant	Emission Rate (Gram/Mile)	Emission Rate (Gram/Minute)	Total Grams Daily	Total Metric Tons Daily	Daily CO2e
T7 Single Construction Haul Trucks (Model Year 2010 & Newer)	280	210	**CO2**	1369.301000	4080.217	1240249.85	**1.24**	**1.30**
			CH4	0.001936	0.073941	16.07	**0.00**	
			N2O	0.215236	0.641353	194.95	**0.00**	

2021 Metric Tons	2022 Metric Tons	2023 Metric Tons
163.94	**338.28**	**336.98**

[1] Daily VMT: 68,877 cubic yards of cut material to be hauled offsite over the course of Site Preparation and Grading activities.
Per CalEEMod 2016.3.2, the combined activities of Site Preparation & Grading would span 645 days, the average haul truck trip length = 20 miles, and the capacity of a single haul truck is 16 cubic yards.
All emission factors sourced from EMFAC2017.

Stoneridge Commerce Center Operational Mobile Source Emissions

Alternative Land Use Plan

Vehicle Class	Daily VMT[1]	Pollutant	Run Emission Rate[2] (Gram/Mile)	Idle Emission Rate (Gram/Vehicle/Day)	Start Emission Rate[2] (Grams/Start/Day)	Total Grams Daily	Metric Tons Daily	CO2e Annually
Passenger Automobiles	183027	**CO2**	513.197800	124.3677	17.10123	96388369.05	**96.3884**	**36527**
		CH4	0.231945	0.019008	0.022121	42828.15	**0.0428**	
		N2O	0.044348	0.016201	0.012167	8437.29	**0.0084**	

[1] Daily VMT calculated per CaLLEMod v 2016.3.2, which provides average distance traveled per trip type.

[2]Start emissions account for 4 automobile starts daily.

All emission factors sourced from EMFAC2017.

Vehicle Class	Daily VMT[1]	Pollutant	Run Emission Rate[2] (Gram/Mile)	Idle Emission Rate (Gram/Vehicle/Day)	Start Emission Rate[2] (Grams/Start/Day)	Total Grams Daily	Metric Tons Daily	CO2e Annually
Heavy Duty Trucks	207515	**CO2**	1120.405063	11022.54061	0	274937637.98	**274.9376**	**105253**
		CH4	0.001104	0.234962	0	1133.70	**0.0011**	
		N2O	0.176112	1.73259	0	43216.35	**0.0432**	

[1] In order to more accurately account for the trip distribution patterns of freight trucks, the average trip length is calculated at 53.9 miles, which represents the average distance between the Project site and the Port of Los Angeles/Long Beach, the Project site and the Banning Pass, the Project Site and the San Diego County line, the Project site and the Cajon Pass, and the Project site and downtown Los Angeles.

[2]Start emissions account for 4 automobile starts daily.

All emission factors sourced from EMFAC2017.

Stoneridge Commerce Center - Alternative Land Use Plan

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Industrial Park	561.92	1000sqft	30.90	561,920.00	0
Manufacturing	847.68	1000sqft	38.92	847,680.00	0
Refrigerated Warehouse-No Rail	1,695.36	1000sqft	77.84	1,695,360.00	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,870.00	0
Unrefrigerated Warehouse-No Rail	2,966.87	1000sqft	136.22	2,966,870.00	0
Unrefrigerated Warehouse-No Rail	374.62	1000sqft	20.60	374,620.00	0
Other Asphalt Surfaces	34.40	Acre	34.40	1,498,464.00	0
Other Non-Asphalt Surfaces	31.40	Acre	31.40	1,367,784.00	0
Free-Standing Discount Superstore	100.00	1000sqft	6.72	100,000.00	0
Strip Mall	26.54	1000sqft	1.78	26,540.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2030
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	502.65	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 2017 SCE CO2 Intensity Factor per Edison International Sustainability Template - Section 2 Quantative Information (2018)

Land Use - Land use types are consistent with the Traffic Impact Analysis prepared for the Project (Urban Crossroads 2020). Land uses also include 34.4 acres of internal circulation and 31.4 acres of offsite infrastructure.

Construction Phase - Construction timing adjusted to reflect a 2021 start date and 2030 Opening Year. Building construction, paving, and painting assumed to occur simultaneously

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Ibid

Off-road Equipment - Equipment doubled to account for accelerated timeline compared with CalEEMod defaults

Trips and VMT - Building construction worker & vendor trips reflect total building s.f. divided by the number of days of construction, coupled with the rates for commercial buildings in the CalEEMod User's Guide Appendix E. Painting worker trips equate to Paving.

Grading - Haul truck emissions calculated separately

Vehicle Trips - Mobile emissions modeled separately

Consumer Products - Consumer product emission factor adusted to omit dry warehouse square footage. Cold storage, manufacturing, industrial park, and all commercial retail are included

Water And Wastewater - Water supply derived from EMWD Water Supply Assessment Repot Stoneridge Commerce Center SP 239 (2020)

Construction Off-road Equipment Mitigation - "Mitigation" accounts for County requirements to employ Tier 3 engines or better and adhere to SCAQMD Rule 403

Energy Mitigation - Energy use reflects 2019 Title 24 standards. Increase in efficiency per CEC Building Energy Efficiency Standards Frequently Asked Questions (2018)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	40
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	18.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
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
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	9,300.00	1,473.00
tblConstructionPhase	NumDays	930.00	465.00
tblConstructionPhase	NumDays	660.00	1,473.00
tblConstructionPhase	NumDays	360.00	180.00
tblConsumerProducts	ROG_EF	1.98E-05	4.1E-06
tblLandUse	LotAcreage	12.90	30.90

tblLandUse	LotAcreage	19.46	38.92
tblLandUse	LotAcreage	38.92	77.84
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	68.11	136.22
tblLandUse	LotAcreage	8.60	20.60
tblLandUse	LotAcreage	2.30	6.72
tblLandUse	LotAcreage	0.61	1.78
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	502.65
tblTripsAndVMT	VendorTripNumber	2,033.00	178.00
tblTripsAndVMT	WorkerTripNumber	35.00	18.00
tblTripsAndVMT	WorkerTripNumber	40.00	20.00

tblTripsAndVMT	WorkerTripNumber	5,198.00	253.00
tblTripsAndVMT	WorkerTripNumber	30.00	15.00
tblTripsAndVMT	WorkerTripNumber	1,040.00	15.00
tblVehicleTrips	ST_TR	64.07	0.00
tblVehicleTrips	ST_TR	2.49	0.00
tblVehicleTrips	ST_TR	1.49	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	56.12	0.00
tblVehicleTrips	SU_TR	0.73	0.00
tblVehicleTrips	SU_TR	0.62	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	50.75	0.00
tblVehicleTrips	WD_TR	6.83	0.00
tblVehicleTrips	WD_TR	3.82	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	7,407,252.15	5,330,000.00
tblWater	IndoorWaterUseRate	129,944,000.00	12,907,430.00
tblWater	IndoorWaterUseRate	196,026,000.00	31,024,945.00
tblWater	IndoorWaterUseRate	392,052,000.00	62,754,292.00
tblWater	IndoorWaterUseRate	1,965,884.72	1,339,695.00
tblWater	IndoorWaterUseRate	1,458,808,250.00	240,584,301.00

tblWater	OutdoorWaterUseRate	4,539,928.74	246,000.00
tblWater	OutdoorWaterUseRate	1,204,897.09	54,000.00

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					
2021	0.5183	5.3491	2.8298	5.1400e-003	2.3978	0.2700	2.6678	1.3143	0.2484	1.5627	0.0000	451.9110	451.9110	0.1430	0.0000	455.4857
2022	0.9309	9.8295	7.1763	0.0152	3.4047	0.4242	3.8289	1.3190	0.3902	1.7092	0.0000	1,338.4982	1,338.4982	0.4263	0.0000	1,349.1558
2023	0.8499	8.7384	7.1646	0.0159	2.7842	0.3606	3.1448	0.9780	0.3317	1.3097	0.0000	1,400.5856	1,400.5856	0.4467	0.0000	1,411.7521
2024	6.8234	6.1514	7.5912	0.0177	0.4298	0.2350	0.6648	0.1168	0.2198	0.3365	0.0000	1,581.1141	1,581.1141	0.2739	0.0000	1,587.9622
2025	8.7160	7.3656	9.6478	0.0225	0.5526	0.2641	0.8168	0.1501	0.2470	0.3971	0.0000	2,017.6230	2,017.6230	0.3499	0.0000	2,026.3704
2026	8.7090	7.3430	9.5808	0.0224	0.5526	0.2641	0.8167	0.1501	0.2469	0.3970	0.0000	2,004.0826	2,004.0826	0.3486	0.0000	2,012.7986
2027	8.7022	7.3218	9.5220	0.0223	0.5526	0.2639	0.8165	0.1501	0.2468	0.3969	0.0000	1,992.2583	1,992.2583	0.3474	0.0000	2,000.9442
2028	8.6623	7.2761	9.4355	0.0221	0.5505	0.2627	0.8132	0.1495	0.2457	0.3952	0.0000	1,974.5186	1,974.5186	0.3450	0.0000	1,983.1426
2029	7.5569	6.3386	8.1972	0.0192	0.4806	0.2293	0.7099	0.1306	0.2144	0.3449	0.0000	1,716.1517	1,716.1517	0.3003	0.0000	1,723.6580
Maximum	**8.7160**	**9.8295**	**9.6478**	**0.0225**	**3.4047**	**0.4242**	**3.8289**	**1.3190**	**0.3902**	**1.7092**	**0.0000**	**2,017.6230**	**2,017.6230**	**0.4467**	**0.0000**	**2,026.3704**

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					
2021	0.1280	2.5201	3.0681	5.1400e-003	0.9386	0.1250	1.0636	0.5136	0.1250	0.6386	0.0000	451.9104	451.9104	0.1430	0.0000	455.4851
2022	0.3778	7.2772	8.9613	0.0152	1.3352	0.3211	1.6563	0.5166	0.3210	0.8376	0.0000	1,338.4966	1,338.4966	0.4263	0.0000	1,349.1542
2023	0.3949	7.5904	9.3584	0.0159	1.0932	0.3289	1.4221	0.3836	0.3289	0.7125	0.0000	1,400.5840	1,400.5840	0.4467	0.0000	1,411.7505
2024	6.5501	6.6977	8.4842	0.0177	0.2880	0.3294	0.6174	0.0819	0.3292	0.4111	0.0000	1,581.1130	1,581.1130	0.2739	0.0000	1,587.9611
2025	8.4135	8.5874	10.8302	0.0225	0.3703	0.4235	0.7937	0.1053	0.4232	0.5286	0.0000	2,017.6216	2,017.6216	0.3499	0.0000	2,026.3690
2026	8.4065	8.5648	10.7632	0.0224	0.3702	0.4234	0.7936	0.1053	0.4231	0.5285	0.0000	2,004.0812	2,004.0812	0.3486	0.0000	2,012.7972
2027	8.3997	8.5437	10.7044	0.0223	0.3702	0.4232	0.7935	0.1053	0.4230	0.5283	0.0000	1,992.2569	1,992.2569	0.3474	0.0000	2,000.9427
2028	8.3610	8.4933	10.6133	0.0221	0.3688	0.4214	0.7903	0.1049	0.4212	0.5262	0.0000	1,974.5172	1,974.5172	0.3450	0.0000	1,983.1412
2029	7.2938	7.4012	9.2255	0.0192	0.3220	0.3678	0.6898	0.0916	0.3676	0.4593	0.0000	1,716.1505	1,716.1505	0.3003	0.0000	1,723.6568
Maximum	**8.4135**	**8.5874**	**10.8302**	**0.0225**	**1.3352**	**0.4235**	**1.6563**	**0.5166**	**0.4232**	**0.8376**	**0.0000**	**2,017.6216**	**2,017.6216**	**0.4467**	**0.0000**	**2,026.3690**

	ROG	NOx	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	**6.11**	**0.06**	**-15.27**	**0.00**	**53.39**	**-22.92**	**39.63**	**54.96**	**-32.27**	**24.51**	**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)
4	**4-8-2021**	**7-7-2021**	0.2223	0.1003

5	**7-8-2021**	**10-7-2021**	2.9211	1.3185
6	**10-8-2021**	**1-7-2022**	2.8805	1.3185
7	**1-8-2022**	**4-7-2022**	2.4634	1.5279
8	**4-8-2022**	**7-7-2022**	2.7649	2.0520
9	**7-8-2022**	**10-7-2022**	2.7953	2.0746
10	**10-8-2022**	**1-7-2023**	2.7721	2.0746
11	**1-8-2023**	**4-7-2023**	2.4365	2.0292
12	**4-8-2023**	**7-7-2023**	2.4636	2.0517
13	**7-8-2023**	**10-7-2023**	2.4906	2.0743
14	**10-8-2023**	**1-7-2024**	2.0033	1.6684
15	**1-8-2024**	**4-7-2024**	0.7759	0.7923
16	**4-8-2024**	**7-7-2024**	4.1561	4.2435
17	**7-8-2024**	**10-7-2024**	4.2014	4.2898
18	**10-8-2024**	**1-7-2025**	4.1860	4.2852
19	**1-8-2025**	**4-7-2025**	3.9587	4.1851
20	**4-8-2025**	**7-7-2025**	4.0066	4.2356
21	**7-8-2025**	**10-7-2025**	4.0503	4.2818
22	**10-8-2025**	**1-7-2026**	4.0458	4.2772
23	**1-8-2026**	**4-7-2026**	3.9514	4.1778
24	**4-8-2026**	**7-7-2026**	3.9993	4.2282
25	**7-8-2026**	**10-7-2026**	4.0429	4.2743
26	**10-8-2026**	**1-7-2027**	4.0383	4.2698
27	**1-8-2027**	**4-7-2027**	3.9445	4.1710
28	**4-8-2027**	**7-7-2027**	3.9923	4.2213
29	**7-8-2027**	**10-7-2027**	4.0359	4.2673
30	**10-8-2027**	**1-7-2028**	4.0314	4.2628
31	**1-8-2028**	**4-7-2028**	3.9823	4.2112

32	**4-8-2028**	**7-7-2028**	3.9863	4.2152
33	**7-8-2028**	**10-7-2028**	4.0298	4.2612
34	**10-8-2028**	**1-7-2029**	4.0253	4.2567
35	**1-8-2029**	**4-7-2029**	3.9328	4.1592
36	**4-8-2029**	**7-7-2029**	3.9805	4.2095
37	**7-8-2029**	**9-30-2029**	3.7181	3.9319
		Highest	4.2014	4.2898

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	11.7962	1.1000e-003	0.1220	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.2384	0.2384	6.1000e-004	0.0000	0.2538
Energy	0.7028	6.3887	5.3665	0.0383		0.4855	0.4855		0.4855	0.4855	0.0000	29,337.2436	29,337.2436	1.4246	0.3947	29,490.4736
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	1,974.9681	0.0000	1,974.9681	116.7173	0.0000	4,892.8999
Water						0.0000	0.0000		0.0000	0.0000	112.2890	1,051.5264	1,163.8155	11.5938	0.2849	1,538.5539
Total	**12.4990**	**6.3898**	**5.4885**	**0.0383**	**0.0000**	**0.4860**	**0.4860**	**0.0000**	**0.4860**	**0.4860**	**2,087.2571**	**30,389.0084**	**32,476.2655**	**129.7363**	**0.6796**	**35,922.1811**

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	11.7962	1.1000e-003	0.1220	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.2384	0.2384	6.1000e-004	0.0000	0.2538
Energy	0.6488	5.8984	4.9547	0.0354		0.4483	0.4483		0.4483	0.4483	0.0000	28,235.7369	28,235.7369	1.3817	0.3781	28,382.9567
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	1,974.9681	0.0000	1,974.9681	116.7173	0.0000	4,892.8999
Water						0.0000	0.0000		0.0000	0.0000	112.2890	1,051.5264	1,163.8155	11.5938	0.2849	1,538.5539
Total	**12.4451**	**5.8995**	**5.0767**	**0.0354**	**0.0000**	**0.4487**	**0.4487**	**0.0000**	**0.4487**	**0.4487**	**2,087.2571**	**29,287.5017**	**31,374.7589**	**129.6934**	**0.6630**	**34,814.6642**

	ROG	NOx	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**	**7.67**	**7.50**	**7.67**	**0.00**	**7.67**	**7.67**	**0.00**	**7.67**	**7.67**	**0.00**	**3.62**	**3.39**	**0.03**	**2.44**	**3.08**

3.0 Construction Detail

Construction Phase

Stoneridge Commerce Center - Alternative Land Use Plan - Riverside-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	7/1/2021	3/9/2022	5	180	
2	Grading	Grading	3/10/2022	12/20/2023	5	465	
3	Building Construction	Building Construction	3/22/2024	11/13/2029	5	1473	
4	Paving	Paving	3/22/2024	11/13/2029	5	1473	
5	Architectural Coating	Architectural Coating	3/22/2024	11/13/2029	5	1473	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2325

Acres of Paving: 65.8

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 14,309,790; Non-Residential Outdoor: 4,769,930; Striped Parking Area: 171,975 (Architectural Coating – sqft)

OffRoad Equipment

Stoneridge Commerce Center - Alternative Land Use Plan - Riverside-South Coast County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	6	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	8	8.00	97	0.37
Grading	Excavators	4	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	4	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Building Construction	Cranes	2	7.00	231	0.29
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	6	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Paving	Pavers	4	8.00	130	0.42
Paving	Paving Equipment	4	8.00	132	0.36
Paving	Rollers	4	8.00	80	0.38
Architectural Coating	Air Compressors	2	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	14	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	16	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	253.00	178.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	12	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	15.00	0.00	0.00	14.70	6.90	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

Clean Paved Roads

3.2 Site Preparation - 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					
Fugitive Dust					2.3848	0.0000	2.3848	1.3109	0.0000	1.3109	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5132	5.3456	2.7924	5.0200e-003		0.2699	0.2699		0.2483	0.2483	0.0000	441.3515	441.3515	0.1427	0.0000	444.9200
Total	**0.5132**	**5.3456**	**2.7924**	**5.0200e-003**	**2.3848**	**0.2699**	**2.6546**	**1.3109**	**0.2483**	**1.5591**	**0.0000**	**441.3515**	**441.3515**	**0.1427**	**0.0000**	**444.9200**

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0900e-003	3.4300e-003	0.0374	1.2000e-004	0.0131	8.0000e-005	0.0131	3.4700e-003	7.0000e-005	3.5400e-003	0.0000	10.5595	10.5595	2.5000e-004	0.0000	10.5656
Total	**5.0900e-003**	**3.4300e-003**	**0.0374**	**1.2000e-004**	**0.0131**	**8.0000e-005**	**0.0131**	**3.4700e-003**	**7.0000e-005**	**3.5400e-003**	**0.0000**	**10.5595**	**10.5595**	**2.5000e-004**	**0.0000**	**10.5656**

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					0.9301	0.0000	0.9301	0.5112	0.0000	0.5112	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1229	2.5167	3.0307	5.0200e-003		0.1249	0.1249		0.1249	0.1249	0.0000	441.3509	441.3509	0.1427	0.0000	444.9195
Total	**0.1229**	**2.5167**	**3.0307**	**5.0200e-003**	**0.9301**	**0.1249**	**1.0549**	**0.5112**	**0.1249**	**0.6361**	**0.0000**	**441.3509**	**441.3509**	**0.1427**	**0.0000**	**444.9195**

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.0900e-003	3.4300e-003	0.0374	1.2000e-004	8.5300e-003	8.0000e-005	8.6100e-003	2.3600e-003	7.0000e-005	2.4300e-003	0.0000	10.5595	10.5595	2.5000e-004	0.0000	10.5656
Total	**5.0900e-003**	**3.4300e-003**	**0.0374**	**1.2000e-004**	**8.5300e-003**	**8.0000e-005**	**8.6100e-003**	**2.3600e-003**	**7.0000e-005**	**2.4300e-003**	**0.0000**	**10.5595**	**10.5595**	**2.5000e-004**	**0.0000**	**10.5656**

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.8672	0.0000	0.8672	0.4767	0.0000	0.4767	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1522	1.5880	0.9455	1.8300e-003		0.0774	0.0774		0.0712	0.0712	0.0000	160.5091	160.5091	0.0519	0.0000	161.8069
Total	**0.1522**	**1.5880**	**0.9455**	**1.8300e-003**	**0.8672**	**0.0774**	**0.9446**	**0.4767**	**0.0712**	**0.5479**	**0.0000**	**160.5091**	**160.5091**	**0.0519**	**0.0000**	**161.8069**

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7400e-003	1.1200e-003	0.0125	4.0000e-005	4.7500e-003	3.0000e-005	4.7800e-003	1.2600e-003	3.0000e-005	1.2900e-003	0.0000	3.6997	3.6997	8.0000e-005	0.0000	3.7017
Total	**1.7400e-003**	**1.1200e-003**	**0.0125**	**4.0000e-005**	**4.7500e-003**	**3.0000e-005**	**4.7800e-003**	**1.2600e-003**	**3.0000e-005**	**1.2900e-003**	**0.0000**	**3.6997**	**3.6997**	**8.0000e-005**	**0.0000**	**3.7017**

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					0.3382	0.0000	0.3382	0.1859	0.0000	0.1859	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0447	0.9152	1.1021	1.8300e-003		0.0454	0.0454		0.0454	0.0454	0.0000	160.5089	160.5089	0.0519	0.0000	161.8067
Total	**0.0447**	**0.9152**	**1.1021**	**1.8300e-003**	**0.3382**	**0.0454**	**0.3836**	**0.1859**	**0.0454**	**0.2313**	**0.0000**	**160.5089**	**160.5089**	**0.0519**	**0.0000**	**161.8067**

3.2 Site Preparation - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.7400e-003	1.1200e-003	0.0125	4.0000e-005	3.1000e-003	3.0000e-005	3.1300e-003	8.6000e-004	3.0000e-005	8.8000e-004	0.0000	3.6997	3.6997	8.0000e-005	0.0000	3.7017
Total	**1.7400e-003**	**1.1200e-003**	**0.0125**	**4.0000e-005**	**3.1000e-003**	**3.0000e-005**	**3.1300e-003**	**8.6000e-004**	**3.0000e-005**	**8.8000e-004**	**0.0000**	**3.6997**	**3.6997**	**8.0000e-005**	**0.0000**	**3.7017**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.5095	0.0000	2.5095	0.8349	0.0000	0.8349	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.7685	8.2348	6.1568	0.0132		0.3466	0.3466		0.3189	0.3189	0.0000	1,156.1335	1,156.1335	0.3739	0.0000	1,165.4814
Total	**0.7685**	**8.2348**	**6.1568**	**0.0132**	**2.5095**	**0.3466**	**2.8561**	**0.8349**	**0.3189**	**1.1538**	**0.0000**	**1,156.1335**	**1,156.1335**	**0.3739**	**0.0000**	**1,165.4814**

3.3 Grading - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5200e-003	5.5100e-003	0.0615	2.0000e-004	0.0233	1.4000e-004	0.0234	6.1900e-003	1.3000e-004	6.3100e-003	0.0000	18.1559	18.1559	3.9000e-004	0.0000	18.1658
Total	**8.5200e-003**	**5.5100e-003**	**0.0615**	**2.0000e-004**	**0.0233**	**1.4000e-004**	**0.0234**	**6.1900e-003**	**1.3000e-004**	**6.3100e-003**	**0.0000**	**18.1559**	**18.1559**	**3.9000e-004**	**0.0000**	**18.1658**

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					0.9787	0.0000	0.9787	0.3256	0.0000	0.3256	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3229	6.3554	7.7852	0.0132		0.2755	0.2755		0.2755	0.2755	0.0000	1,156.1321	1,156.1321	0.3739	0.0000	1,165.4800
Total	**0.3229**	**6.3554**	**7.7852**	**0.0132**	**0.9787**	**0.2755**	**1.2542**	**0.3256**	**0.2755**	**0.6011**	**0.0000**	**1,156.1321**	**1,156.1321**	**0.3739**	**0.0000**	**1,165.4800**

3.3 Grading - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5200e-003	5.5100e-003	0.0615	2.0000e-004	0.0152	1.4000e-004	0.0154	4.2000e-003	1.3000e-004	4.3300e-003	0.0000	18.1559	18.1559	3.9000e-004	0.0000	18.1658
Total	**8.5200e-003**	**5.5100e-003**	**0.0615**	**2.0000e-004**	**0.0152**	**1.4000e-004**	**0.0154**	**4.2000e-003**	**1.3000e-004**	**4.3300e-003**	**0.0000**	**18.1559**	**18.1559**	**3.9000e-004**	**0.0000**	**18.1658**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					2.7564	0.0000	2.7564	0.9706	0.0000	0.9706	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.8404	8.7325	7.0969	0.0157		0.3604	0.3604		0.3316	0.3316	0.0000	1,379.7408	1,379.7408	0.4462	0.0000	1,390.8967
Total	**0.8404**	**8.7325**	**7.0969**	**0.0157**	**2.7564**	**0.3604**	**3.1168**	**0.9706**	**0.3316**	**1.3022**	**0.0000**	**1,379.7408**	**1,379.7408**	**0.4462**	**0.0000**	**1,390.8967**

3.3 Grading - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5500e-003	5.9300e-003	0.0676	2.3000e-004	0.0278	1.6000e-004	0.0280	7.3800e-003	1.5000e-004	7.5300e-003	0.0000	20.8449	20.8449	4.2000e-004	0.0000	20.8554
Total	**9.5500e-003**	**5.9300e-003**	**0.0676**	**2.3000e-004**	**0.0278**	**1.6000e-004**	**0.0280**	**7.3800e-003**	**1.5000e-004**	**7.5300e-003**	**0.0000**	**20.8449**	**20.8449**	**4.2000e-004**	**0.0000**	**20.8554**

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					1.0750	0.0000	1.0750	0.3785	0.0000	0.3785	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.3853	7.5845	9.2908	0.0157		0.3288	0.3288		0.3288	0.3288	0.0000	1,379.7391	1,379.7391	0.4462	0.0000	1,390.8950
Total	**0.3853**	**7.5845**	**9.2908**	**0.0157**	**1.0750**	**0.3288**	**1.4038**	**0.3785**	**0.3288**	**0.7073**	**0.0000**	**1,379.7391**	**1,379.7391**	**0.4462**	**0.0000**	**1,390.8950**

3.3 Grading - 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	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.5500e-003	5.9300e-003	0.0676	2.3000e-004	0.0182	1.6000e-004	0.0183	5.0200e-003	1.5000e-004	5.1600e-003	0.0000	20.8449	20.8449	4.2000e-004	0.0000	20.8554
Total	**9.5500e-003**	**5.9300e-003**	**0.0676**	**2.3000e-004**	**0.0182**	**1.6000e-004**	**0.0183**	**5.0200e-003**	**1.5000e-004**	**5.1600e-003**	**0.0000**	**20.8449**	**20.8449**	**4.2000e-004**	**0.0000**	**20.8554**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2987	2.7291	3.2819	5.4700e-003		0.1245	0.1245		0.1171	0.1171	0.0000	470.6537	470.6537	0.1113	0.0000	473.4361
Total	**0.2987**	**2.7291**	**3.2819**	**5.4700e-003**		**0.1245**	**0.1245**		**0.1171**	**0.1171**	**0.0000**	**470.6537**	**470.6537**	**0.1113**	**0.0000**	**473.4361**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0302	1.1804	0.2541	4.4300e-003	0.1141	1.2000e-003	0.1153	0.0329	1.1500e-003	0.0341	0.0000	423.8802	423.8802	0.0239	0.0000	424.4764
Worker	0.0915	0.0545	0.6426	2.2500e-003	0.2823	1.5900e-003	0.2838	0.0750	1.4600e-003	0.0764	0.0000	204.0186	204.0186	3.9200e-003	0.0000	204.1165
Total	**0.1216**	**1.2350**	**0.8967**	**6.6800e-003**	**0.3964**	**2.7900e-003**	**0.3991**	**0.1079**	**2.6100e-003**	**0.1105**	**0.0000**	**627.8988**	**627.8988**	**0.0278**	**0.0000**	**628.5929**

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	0.1368	2.8879	3.6284	5.4700e-003		0.1834	0.1834		0.1834	0.1834	0.0000	470.6531	470.6531	0.1113	0.0000	473.4355
Total	**0.1368**	**2.8879**	**3.6284**	**5.4700e-003**		**0.1834**	**0.1834**		**0.1834**	**0.1834**	**0.0000**	**470.6531**	**470.6531**	**0.1113**	**0.0000**	**473.4355**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0302	1.1804	0.2541	4.4300e-003	0.0818	1.2000e-003	0.0830	0.0250	1.1500e-003	0.0261	0.0000	423.8802	423.8802	0.0239	0.0000	424.4764
Worker	0.0915	0.0545	0.6426	2.2500e-003	0.1844	1.5900e-003	0.1859	0.0509	1.4600e-003	0.0524	0.0000	204.0186	204.0186	3.9200e-003	0.0000	204.1165
Total	**0.1216**	**1.2350**	**0.8967**	**6.6800e-003**	**0.2661**	**2.7900e-003**	**0.2689**	**0.0759**	**2.6100e-003**	**0.0785**	**0.0000**	**627.8988**	**627.8988**	**0.0278**	**0.0000**	**628.5929**

3.4 Building Construction - 2025

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	0.3569	3.2546	4.1981	7.0400e-003		0.1377	0.1377		0.1295	0.1295	0.0000	605.3098	605.3098	0.1423	0.0000	608.8670
Total	**0.3569**	**3.2546**	**4.1981**	**7.0400e-003**		**0.1377**	**0.1377**		**0.1295**	**0.1295**	**0.0000**	**605.3098**	**605.3098**	**0.1423**	**0.0000**	**608.8670**

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0378	1.5008	0.3158	5.6500e-003	0.1467	1.5300e-003	0.1482	0.0423	1.4600e-003	0.0438	0.0000	541.5005	541.5005	0.0299	0.0000	542.2474
Worker	0.1113	0.0638	0.7661	2.7800e-003	0.3629	2.0100e-003	0.3649	0.0964	1.8500e-003	0.0982	0.0000	251.8112	251.8112	4.5700e-003	0.0000	251.9253
Total	**0.1491**	**1.5647**	**1.0819**	**8.4300e-003**	**0.5096**	**3.5400e-003**	**0.5131**	**0.1387**	**3.3100e-003**	**0.1420**	**0.0000**	**793.3117**	**793.3117**	**0.0345**	**0.0000**	**794.1728**

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	0.1759	3.7130	4.6651	7.0400e-003		0.2358	0.2358		0.2358	0.2358	0.0000	605.3091	605.3091	0.1423	0.0000	608.8663
Total	**0.1759**	**3.7130**	**4.6651**	**7.0400e-003**		**0.2358**	**0.2358**		**0.2358**	**0.2358**	**0.0000**	**605.3091**	**605.3091**	**0.1423**	**0.0000**	**608.8663**

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0378	1.5008	0.3158	5.6500e-003	0.1051	1.5300e-003	0.1067	0.0321	1.4600e-003	0.0336	0.0000	541.5005	541.5005	0.0299	0.0000	542.2474
Worker	0.1113	0.0638	0.7661	2.7800e-003	0.2370	2.0100e-003	0.2390	0.0655	1.8500e-003	0.0673	0.0000	251.8112	251.8112	4.5700e-003	0.0000	251.9253
Total	**0.1491**	**1.5647**	**1.0819**	**8.4300e-003**	**0.3421**	**3.5400e-003**	**0.3457**	**0.0976**	**3.3100e-003**	**0.1009**	**0.0000**	**793.3117**	**793.3117**	**0.0345**	**0.0000**	**794.1728**

3.4 Building Construction - 2026

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	0.3569	3.2546	4.1981	7.0400e-003		0.1377	0.1377		0.1295	0.1295	0.0000	605.3098	605.3098	0.1423	0.0000	608.8670
Total	**0.3569**	**3.2546**	**4.1981**	**7.0400e-003**		**0.1377**	**0.1377**		**0.1295**	**0.1295**	**0.0000**	**605.3098**	**605.3098**	**0.1423**	**0.0000**	**608.8670**

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0370	1.4842	0.3069	5.6200e-003	0.1467	1.5100e-003	0.1482	0.0423	1.4400e-003	0.0438	0.0000	538.2188	538.2188	0.0291	0.0000	538.9456
Worker	0.1057	0.0585	0.7141	2.6800e-003	0.3629	1.9500e-003	0.3648	0.0964	1.7900e-003	0.0982	0.0000	242.6400	242.6400	4.1600e-003	0.0000	242.7441
Total	**0.1427**	**1.5427**	**1.0210**	**8.3000e-003**	**0.5096**	**3.4600e-003**	**0.5130**	**0.1387**	**3.2300e-003**	**0.1419**	**0.0000**	**780.8588**	**780.8588**	**0.0332**	**0.0000**	**781.6896**

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	0.1759	3.7130	4.6651	7.0400e-003		0.2358	0.2358		0.2358	0.2358	0.0000	605.3091	605.3091	0.1423	0.0000	608.8663
Total	**0.1759**	**3.7130**	**4.6651**	**7.0400e-003**		**0.2358**	**0.2358**		**0.2358**	**0.2358**	**0.0000**	**605.3091**	**605.3091**	**0.1423**	**0.0000**	**608.8663**

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0370	1.4842	0.3069	5.6200e-003	0.1051	1.5100e-003	0.1066	0.0321	1.4400e-003	0.0336	0.0000	538.2188	538.2188	0.0291	0.0000	538.9456
Worker	0.1057	0.0585	0.7141	2.6800e-003	0.2370	1.9500e-003	0.2390	0.0655	1.7900e-003	0.0673	0.0000	242.6400	242.6400	4.1600e-003	0.0000	242.7441
Total	**0.1427**	**1.5427**	**1.0210**	**8.3000e-003**	**0.3421**	**3.4600e-003**	**0.3456**	**0.0976**	**3.2300e-003**	**0.1008**	**0.0000**	**780.8588**	**780.8588**	**0.0332**	**0.0000**	**781.6896**

3.4 Building Construction - 2027

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	0.3569	3.2546	4.1981	7.0400e-003		0.1377	0.1377		0.1295	0.1295	0.0000	605.3098	605.3098	0.1423	0.0000	608.8670
Total	**0.3569**	**3.2546**	**4.1981**	**7.0400e-003**		**0.1377**	**0.1377**		**0.1295**	**0.1295**	**0.0000**	**605.3098**	**605.3098**	**0.1423**	**0.0000**	**608.8670**

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0363	1.4683	0.2997	5.5900e-003	0.1467	1.4900e-003	0.1482	0.0423	1.4200e-003	0.0437	0.0000	535.3876	535.3876	0.0283	0.0000	536.0943
Worker	0.1003	0.0537	0.6680	2.5900e-003	0.3629	1.8400e-003	0.3647	0.0964	1.7000e-003	0.0981	0.0000	234.6003	234.6003	3.8000e-003	0.0000	234.6953
Total	**0.1366**	**1.5221**	**0.9677**	**8.1800e-003**	**0.5096**	**3.3300e-003**	**0.5129**	**0.1387**	**3.1200e-003**	**0.1418**	**0.0000**	**769.9879**	**769.9879**	**0.0321**	**0.0000**	**770.7896**

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	0.1759	3.7130	4.6651	7.0400e-003		0.2358	0.2358		0.2358	0.2358	0.0000	605.3091	605.3091	0.1423	0.0000	608.8663
Total	**0.1759**	**3.7130**	**4.6651**	**7.0400e-003**		**0.2358**	**0.2358**		**0.2358**	**0.2358**	**0.0000**	**605.3091**	**605.3091**	**0.1423**	**0.0000**	**608.8663**

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0363	1.4683	0.2997	5.5900e-003	0.1051	1.4900e-003	0.1066	0.0321	1.4200e-003	0.0335	0.0000	535.3876	535.3876	0.0283	0.0000	536.0943
Worker	0.1003	0.0537	0.6680	2.5900e-003	0.2370	1.8400e-003	0.2389	0.0655	1.7000e-003	0.0672	0.0000	234.6003	234.6003	3.8000e-003	0.0000	234.6953
Total	**0.1366**	**1.5221**	**0.9677**	**8.1800e-003**	**0.3421**	**3.3300e-003**	**0.3455**	**0.0976**	**3.1200e-003**	**0.1007**	**0.0000**	**769.9879**	**769.9879**	**0.0321**	**0.0000**	**770.7896**

3.4 Building Construction - 2028

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	0.3555	3.2421	4.1820	7.0100e-003		0.1372	0.1372		0.1290	0.1290	0.0000	602.9906	602.9906	0.1417	0.0000	606.5342
Total	**0.3555**	**3.2421**	**4.1820**	**7.0100e-003**		**0.1372**	**0.1372**		**0.1290**	**0.1290**	**0.0000**	**602.9906**	**602.9906**	**0.1417**	**0.0000**	**606.5342**

3.4 Building Construction - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0356	1.4498	0.2933	5.5400e-003	0.1461	1.4600e-003	0.1476	0.0422	1.4000e-003	0.0436	0.0000	531.0475	531.0475	0.0274	0.0000	531.7315
Worker	0.0946	0.0493	0.6254	2.5000e-003	0.3615	1.7000e-003	0.3632	0.0960	1.5700e-003	0.0976	0.0000	226.7124	226.7124	3.4800e-003	0.0000	226.7995
Total	**0.1301**	**1.4991**	**0.9187**	**8.0400e-003**	**0.5076**	**3.1600e-003**	**0.5108**	**0.1381**	**2.9700e-003**	**0.1411**	**0.0000**	**757.7599**	**757.7599**	**0.0308**	**0.0000**	**758.5309**

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	0.1752	3.6988	4.6472	7.0100e-003		0.2349	0.2349		0.2349	0.2349	0.0000	602.9899	602.9899	0.1417	0.0000	606.5335
Total	**0.1752**	**3.6988**	**4.6472**	**7.0100e-003**		**0.2349**	**0.2349**		**0.2349**	**0.2349**	**0.0000**	**602.9899**	**602.9899**	**0.1417**	**0.0000**	**606.5335**

3.4 Building Construction - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0356	1.4498	0.2933	5.5400e-003	0.1047	1.4600e-003	0.1062	0.0320	1.4000e-003	0.0334	0.0000	531.0475	531.0475	0.0274	0.0000	531.7315
Worker	0.0946	0.0493	0.6254	2.5000e-003	0.2361	1.7000e-003	0.2378	0.0652	1.5700e-003	0.0668	0.0000	226.7124	226.7124	3.4800e-003	0.0000	226.7995
Total	**0.1301**	**1.4991**	**0.9187**	**8.0400e-003**	**0.3408**	**3.1600e-003**	**0.3440**	**0.0972**	**2.9700e-003**	**0.1002**	**0.0000**	**757.7599**	**757.7599**	**0.0308**	**0.0000**	**758.5309**

3.4 Building Construction - 2029

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	0.3104	2.8306	3.6512	6.1200e-003		0.1198	0.1198		0.1127	0.1127	0.0000	526.4572	526.4572	0.1238	0.0000	529.5510
Total	**0.3104**	**2.8306**	**3.6512**	**6.1200e-003**		**0.1198**	**0.1198**		**0.1127**	**0.1127**	**0.0000**	**526.4572**	**526.4572**	**0.1238**	**0.0000**	**529.5510**

3.4 Building Construction - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0306	1.2555	0.2521	4.8200e-003	0.1276	1.2600e-003	0.1288	0.0368	1.2100e-003	0.0380	0.0000	461.8630	461.8630	0.0233	0.0000	462.4441
Worker	0.0776	0.0397	0.5132	2.1300e-003	0.3156	1.3800e-003	0.3170	0.0838	1.2700e-003	0.0851	0.0000	192.5979	192.5979	2.7900e-003	0.0000	192.6676
Total	**0.1082**	**1.2952**	**0.7652**	**6.9500e-003**	**0.4432**	**2.6400e-003**	**0.4458**	**0.1206**	**2.4800e-003**	**0.1231**	**0.0000**	**654.4609**	**654.4609**	**0.0260**	**0.0000**	**655.1117**

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	0.1530	3.2293	4.0573	6.1200e-003		0.2051	0.2051		0.2051	0.2051	0.0000	526.4565	526.4565	0.1238	0.0000	529.5504
Total	**0.1530**	**3.2293**	**4.0573**	**6.1200e-003**		**0.2051**	**0.2051**		**0.2051**	**0.2051**	**0.0000**	**526.4565**	**526.4565**	**0.1238**	**0.0000**	**529.5504**

3.4 Building Construction - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0306	1.2555	0.2521	4.8200e-003	0.0914	1.2600e-003	0.0927	0.0279	1.2100e-003	0.0291	0.0000	461.8630	461.8630	0.0233	0.0000	462.4441
Worker	0.0776	0.0397	0.5132	2.1300e-003	0.2061	1.3800e-003	0.2075	0.0569	1.2700e-003	0.0582	0.0000	192.5979	192.5979	2.7900e-003	0.0000	192.6676
Total	**0.1082**	**1.2952**	**0.7652**	**6.9500e-003**	**0.2976**	**2.6400e-003**	**0.3002**	**0.0849**	**2.4800e-003**	**0.0873**	**0.0000**	**654.4609**	**654.4609**	**0.0260**	**0.0000**	**655.1117**

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2006	1.9335	2.9690	4.6300e-003		0.0951	0.0951		0.0875	0.0875	0.0000	406.5386	406.5386	0.1315	0.0000	409.8257
Paving	6.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2068**	**1.9335**	**2.9690**	**4.6300e-003**		**0.0951**	**0.0951**		**0.0875**	**0.0875**	**0.0000**	**406.5386**	**406.5386**	**0.1315**	**0.0000**	**409.8257**

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4200e-003	3.2300e-003	0.0381	1.3000e-004	0.0167	9.0000e-005	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.0960	12.0960	2.3000e-004	0.0000	12.1018
Total	**5.4200e-003**	**3.2300e-003**	**0.0381**	**1.3000e-004**	**0.0167**	**9.0000e-005**	**0.0168**	**4.4400e-003**	**9.0000e-005**	**4.5300e-003**	**0.0000**	**12.0960**	**12.0960**	**2.3000e-004**	**0.0000**	**12.1018**

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	0.1139	2.2929	3.5110	4.6300e-003		0.1237	0.1237		0.1237	0.1237	0.0000	406.5381	406.5381	0.1315	0.0000	409.8252
Paving	6.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1201**	**2.2929**	**3.5110**	**4.6300e-003**		**0.1237**	**0.1237**		**0.1237**	**0.1237**	**0.0000**	**406.5381**	**406.5381**	**0.1315**	**0.0000**	**409.8252**

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4200e-003	3.2300e-003	0.0381	1.3000e-004	0.0109	9.0000e-005	0.0110	3.0200e-003	9.0000e-005	3.1100e-003	0.0000	12.0960	12.0960	2.3000e-004	0.0000	12.1018
Total	**5.4200e-003**	**3.2300e-003**	**0.0381**	**1.3000e-004**	**0.0109**	**9.0000e-005**	**0.0110**	**3.0200e-003**	**9.0000e-005**	**3.1100e-003**	**0.0000**	**12.0960**	**12.0960**	**2.3000e-004**	**0.0000**	**12.1018**

3.5 Paving - 2025

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	0.2389	2.2398	3.8049	5.9500e-003		0.1092	0.1092		0.1005	0.1005	0.0000	522.5026	522.5026	0.1690	0.0000	526.7273
Paving	7.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2468**	**2.2398**	**3.8049**	**5.9500e-003**		**0.1092**	**0.1092**		**0.1005**	**0.1005**	**0.0000**	**522.5026**	**522.5026**	**0.1690**	**0.0000**	**526.7273**

3.5 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-003	3.7800e-003	0.0454	1.6000e-004	0.0215	1.2000e-004	0.0216	5.7100e-003	1.1000e-004	5.8200e-003	0.0000	14.9295	14.9295	2.7000e-004	0.0000	14.9363
Total	**6.6000e-003**	**3.7800e-003**	**0.0454**	**1.6000e-004**	**0.0215**	**1.2000e-004**	**0.0216**	**5.7100e-003**	**1.1000e-004**	**5.8200e-003**	**0.0000**	**14.9295**	**14.9295**	**2.7000e-004**	**0.0000**	**14.9363**

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	0.1464	2.9481	4.5142	5.9500e-003		0.1590	0.1590		0.1590	0.1590	0.0000	522.5019	522.5019	0.1690	0.0000	526.7266
Paving	7.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1544**	**2.9481**	**4.5142**	**5.9500e-003**		**0.1590**	**0.1590**		**0.1590**	**0.1590**	**0.0000**	**522.5019**	**522.5019**	**0.1690**	**0.0000**	**526.7266**

3.5 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-003	3.7800e-003	0.0454	1.6000e-004	0.0141	1.2000e-004	0.0142	3.8800e-003	1.1000e-004	3.9900e-003	0.0000	14.9295	14.9295	2.7000e-004	0.0000	14.9363
Total	**6.6000e-003**	**3.7800e-003**	**0.0454**	**1.6000e-004**	**0.0141**	**1.2000e-004**	**0.0142**	**3.8800e-003**	**1.1000e-004**	**3.9900e-003**	**0.0000**	**14.9295**	**14.9295**	**2.7000e-004**	**0.0000**	**14.9363**

3.5 Paving - 2026

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	0.2389	2.2398	3.8049	5.9500e-003		0.1092	0.1092		0.1005	0.1005	0.0000	522.5026	522.5026	0.1690	0.0000	526.7273
Paving	7.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2468**	**2.2398**	**3.8049**	**5.9500e-003**		**0.1092**	**0.1092**		**0.1005**	**0.1005**	**0.0000**	**522.5026**	**522.5026**	**0.1690**	**0.0000**	**526.7273**

3.5 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2700e-003	3.4700e-003	0.0423	1.6000e-004	0.0215	1.2000e-004	0.0216	5.7100e-003	1.1000e-004	5.8200e-003	0.0000	14.3858	14.3858	2.5000e-004	0.0000	14.3919
Total	**6.2700e-003**	**3.4700e-003**	**0.0423**	**1.6000e-004**	**0.0215**	**1.2000e-004**	**0.0216**	**5.7100e-003**	**1.1000e-004**	**5.8200e-003**	**0.0000**	**14.3858**	**14.3858**	**2.5000e-004**	**0.0000**	**14.3919**

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	0.1464	2.9481	4.5142	5.9500e-003		0.1590	0.1590		0.1590	0.1590	0.0000	522.5019	522.5019	0.1690	0.0000	526.7266
Paving	7.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1544**	**2.9481**	**4.5142**	**5.9500e-003**		**0.1590**	**0.1590**		**0.1590**	**0.1590**	**0.0000**	**522.5019**	**522.5019**	**0.1690**	**0.0000**	**526.7266**

3.5 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2700e-003	3.4700e-003	0.0423	1.6000e-004	0.0141	1.2000e-004	0.0142	3.8800e-003	1.1000e-004	3.9900e-003	0.0000	14.3858	14.3858	2.5000e-004	0.0000	14.3919
Total	**6.2700e-003**	**3.4700e-003**	**0.0423**	**1.6000e-004**	**0.0141**	**1.2000e-004**	**0.0142**	**3.8800e-003**	**1.1000e-004**	**3.9900e-003**	**0.0000**	**14.3858**	**14.3858**	**2.5000e-004**	**0.0000**	**14.3919**

3.5 Paving - 2027

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	0.2389	2.2398	3.8049	5.9500e-003		0.1092	0.1092		0.1005	0.1005	0.0000	522.5026	522.5026	0.1690	0.0000	526.7273
Paving	7.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2468**	**2.2398**	**3.8049**	**5.9500e-003**		**0.1092**	**0.1092**		**0.1005**	**0.1005**	**0.0000**	**522.5026**	**522.5026**	**0.1690**	**0.0000**	**526.7273**

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9500e-003	3.1900e-003	0.0396	1.5000e-004	0.0215	1.1000e-004	0.0216	5.7100e-003	1.0000e-004	5.8100e-003	0.0000	13.9091	13.9091	2.3000e-004	0.0000	13.9147
Total	**5.9500e-003**	**3.1900e-003**	**0.0396**	**1.5000e-004**	**0.0215**	**1.1000e-004**	**0.0216**	**5.7100e-003**	**1.0000e-004**	**5.8100e-003**	**0.0000**	**13.9091**	**13.9091**	**2.3000e-004**	**0.0000**	**13.9147**

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	0.1464	2.9481	4.5142	5.9500e-003		0.1590	0.1590		0.1590	0.1590	0.0000	522.5019	522.5019	0.1690	0.0000	526.7266
Paving	7.9800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1544**	**2.9481**	**4.5142**	**5.9500e-003**		**0.1590**	**0.1590**		**0.1590**	**0.1590**	**0.0000**	**522.5019**	**522.5019**	**0.1690**	**0.0000**	**526.7266**

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9500e-003	3.1900e-003	0.0396	1.5000e-004	0.0141	1.1000e-004	0.0142	3.8800e-003	1.0000e-004	3.9800e-003	0.0000	13.9091	13.9091	2.3000e-004	0.0000	13.9147
Total	**5.9500e-003**	**3.1900e-003**	**0.0396**	**1.5000e-004**	**0.0141**	**1.1000e-004**	**0.0142**	**3.8800e-003**	**1.0000e-004**	**3.9800e-003**	**0.0000**	**13.9091**	**13.9091**	**2.3000e-004**	**0.0000**	**13.9147**

3.5 Paving - 2028

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	0.2379	2.2312	3.7903	5.9300e-003		0.1088	0.1088		0.1001	0.1001	0.0000	520.5006	520.5006	0.1683	0.0000	524.7092
Paving	7.9500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2459**	**2.2312**	**3.7903**	**5.9300e-003**		**0.1088**	**0.1088**		**0.1001**	**0.1001**	**0.0000**	**520.5006**	**520.5006**	**0.1683**	**0.0000**	**524.7092**

3.5 Paving - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6100e-003	2.9200e-003	0.0371	1.5000e-004	0.0214	1.0000e-004	0.0215	5.6900e-003	9.0000e-005	5.7800e-003	0.0000	13.4415	13.4415	2.1000e-004	0.0000	13.4466
Total	**5.6100e-003**	**2.9200e-003**	**0.0371**	**1.5000e-004**	**0.0214**	**1.0000e-004**	**0.0215**	**5.6900e-003**	**9.0000e-005**	**5.7800e-003**	**0.0000**	**13.4415**	**13.4415**	**2.1000e-004**	**0.0000**	**13.4466**

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	0.1458	2.9368	4.4969	5.9300e-003		0.1584	0.1584		0.1584	0.1584	0.0000	520.5000	520.5000	0.1683	0.0000	524.7085
Paving	7.9500e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1538**	**2.9368**	**4.4969**	**5.9300e-003**		**0.1584**	**0.1584**		**0.1584**	**0.1584**	**0.0000**	**520.5000**	**520.5000**	**0.1683**	**0.0000**	**524.7085**

3.5 Paving - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6100e-003	2.9200e-003	0.0371	1.5000e-004	0.0140	1.0000e-004	0.0141	3.8700e-003	9.0000e-005	3.9600e-003	0.0000	13.4415	13.4415	2.1000e-004	0.0000	13.4466
Total	**5.6100e-003**	**2.9200e-003**	**0.0371**	**1.5000e-004**	**0.0140**	**1.0000e-004**	**0.0141**	**3.8700e-003**	**9.0000e-005**	**3.9600e-003**	**0.0000**	**13.4415**	**13.4415**	**2.1000e-004**	**0.0000**	**13.4466**

3.5 Paving - 2029

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	0.2077	1.9480	3.3092	5.1800e-003		0.0950	0.0950		0.0874	0.0874	0.0000	454.4371	454.4371	0.1470	0.0000	458.1115
Paving	6.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2147**	**1.9480**	**3.3092**	**5.1800e-003**		**0.0950**	**0.0950**		**0.0874**	**0.0874**	**0.0000**	**454.4371**	**454.4371**	**0.1470**	**0.0000**	**458.1115**

3.5 Paving - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-003	2.3500e-003	0.0304	1.3000e-004	0.0187	8.0000e-005	0.0188	4.9700e-003	8.0000e-005	5.0400e-003	0.0000	11.4189	11.4189	1.7000e-004	0.0000	11.4230
Total	**4.6000e-003**	**2.3500e-003**	**0.0304**	**1.3000e-004**	**0.0187**	**8.0000e-005**	**0.0188**	**4.9700e-003**	**8.0000e-005**	**5.0400e-003**	**0.0000**	**11.4189**	**11.4189**	**1.7000e-004**	**0.0000**	**11.4230**

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	0.1273	2.5640	3.9261	5.1800e-003		0.1383	0.1383		0.1383	0.1383	0.0000	454.4366	454.4366	0.1470	0.0000	458.1109
Paving	6.9400e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1343**	**2.5640**	**3.9261**	**5.1800e-003**		**0.1383**	**0.1383**		**0.1383**	**0.1383**	**0.0000**	**454.4366**	**454.4366**	**0.1470**	**0.0000**	**458.1109**

3.5 Paving - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-003	2.3500e-003	0.0304	1.3000e-004	0.0122	8.0000e-005	0.0123	3.3800e-003	8.0000e-005	3.4500e-003	0.0000	11.4189	11.4189	1.7000e-004	0.0000	11.4230
Total	**4.6000e-003**	**2.3500e-003**	**0.0304**	**1.3000e-004**	**0.0122**	**8.0000e-005**	**0.0123**	**3.3800e-003**	**8.0000e-005**	**3.4500e-003**	**0.0000**	**11.4189**	**11.4189**	**1.7000e-004**	**0.0000**	**11.4230**

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	6.1487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0367	0.2474	0.3675	6.0000e-004		0.0124	0.0124		0.0124	0.0124	0.0000	51.8311	51.8311	2.9200e-003	0.0000	51.9040
Total	**6.1854**	**0.2474**	**0.3675**	**6.0000e-004**		**0.0124**	**0.0124**		**0.0124**	**0.0124**	**0.0000**	**51.8311**	**51.8311**	**2.9200e-003**	**0.0000**	**51.9040**

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4200e-003	3.2300e-003	0.0381	1.3000e-004	0.0167	9.0000e-005	0.0168	4.4400e-003	9.0000e-005	4.5300e-003	0.0000	12.0960	12.0960	2.3000e-004	0.0000	12.1018
Total	**5.4200e-003**	**3.2300e-003**	**0.0381**	**1.3000e-004**	**0.0167**	**9.0000e-005**	**0.0168**	**4.4400e-003**	**9.0000e-005**	**4.5300e-003**	**0.0000**	**12.0960**	**12.0960**	**2.3000e-004**	**0.0000**	**12.1018**

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	6.1487					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0121	0.2755	0.3720	6.0000e-004		0.0193	0.0193		0.0193	0.0193	0.0000	51.8310	51.8310	2.9200e-003	0.0000	51.9040
Total	**6.1607**	**0.2755**	**0.3720**	**6.0000e-004**		**0.0193**	**0.0193**		**0.0193**	**0.0193**	**0.0000**	**51.8310**	**51.8310**	**2.9200e-003**	**0.0000**	**51.9040**

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.4200e-003	3.2300e-003	0.0381	1.3000e-004	0.0109	9.0000e-005	0.0110	3.0200e-003	9.0000e-005	3.1100e-003	0.0000	12.0960	12.0960	2.3000e-004	0.0000	12.1018
Total	**5.4200e-003**	**3.2300e-003**	**0.0381**	**1.3000e-004**	**0.0109**	**9.0000e-005**	**0.0110**	**3.0200e-003**	**9.0000e-005**	**3.1100e-003**	**0.0000**	**12.0960**	**12.0960**	**2.3000e-004**	**0.0000**	**12.1018**

3.6 Architectural Coating - 2025

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	7.9055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	**7.9500**	**0.2990**	**0.4722**	**7.8000e-004**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**66.6399**	**66.6399**	**3.6400e-003**	**0.0000**	**66.7308**

3.6 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-003	3.7800e-003	0.0454	1.6000e-004	0.0215	1.2000e-004	0.0216	5.7100e-003	1.1000e-004	5.8200e-003	0.0000	14.9295	14.9295	2.7000e-004	0.0000	14.9363
Total	**6.6000e-003**	**3.7800e-003**	**0.0454**	**1.6000e-004**	**0.0215**	**1.2000e-004**	**0.0216**	**5.7100e-003**	**1.1000e-004**	**5.8200e-003**	**0.0000**	**14.9295**	**14.9295**	**2.7000e-004**	**0.0000**	**14.9363**

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	7.9055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	**7.9210**	**0.3542**	**0.4783**	**7.8000e-004**		**0.0248**	**0.0248**		**0.0248**	**0.0248**	**0.0000**	**66.6398**	**66.6398**	**3.6400e-003**	**0.0000**	**66.7307**

3.6 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-003	3.7800e-003	0.0454	1.6000e-004	0.0141	1.2000e-004	0.0142	3.8800e-003	1.1000e-004	3.9900e-003	0.0000	14.9295	14.9295	2.7000e-004	0.0000	14.9363
Total	**6.6000e-003**	**3.7800e-003**	**0.0454**	**1.6000e-004**	**0.0141**	**1.2000e-004**	**0.0142**	**3.8800e-003**	**1.1000e-004**	**3.9900e-003**	**0.0000**	**14.9295**	**14.9295**	**2.7000e-004**	**0.0000**	**14.9363**

3.6 Architectural Coating - 2026

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	7.9055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	**7.9500**	**0.2990**	**0.4722**	**7.8000e-004**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**66.6399**	**66.6399**	**3.6400e-003**	**0.0000**	**66.7308**

3.6 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2700e-003	3.4700e-003	0.0423	1.6000e-004	0.0215	1.2000e-004	0.0216	5.7100e-003	1.1000e-004	5.8200e-003	0.0000	14.3858	14.3858	2.5000e-004	0.0000	14.3919
Total	**6.2700e-003**	**3.4700e-003**	**0.0423**	**1.6000e-004**	**0.0215**	**1.2000e-004**	**0.0216**	**5.7100e-003**	**1.1000e-004**	**5.8200e-003**	**0.0000**	**14.3858**	**14.3858**	**2.5000e-004**	**0.0000**	**14.3919**

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	7.9055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	**7.9210**	**0.3542**	**0.4783**	**7.8000e-004**		**0.0248**	**0.0248**		**0.0248**	**0.0248**	**0.0000**	**66.6398**	**66.6398**	**3.6400e-003**	**0.0000**	**66.7307**

3.6 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.2700e-003	3.4700e-003	0.0423	1.6000e-004	0.0141	1.2000e-004	0.0142	3.8800e-003	1.1000e-004	3.9900e-003	0.0000	14.3858	14.3858	2.5000e-004	0.0000	14.3919
Total	**6.2700e-003**	**3.4700e-003**	**0.0423**	**1.6000e-004**	**0.0141**	**1.2000e-004**	**0.0142**	**3.8800e-003**	**1.1000e-004**	**3.9900e-003**	**0.0000**	**14.3858**	**14.3858**	**2.5000e-004**	**0.0000**	**14.3919**

3.6 Architectural Coating - 2027

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	7.9055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0446	0.2990	0.4722	7.8000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.6399	66.6399	3.6400e-003	0.0000	66.7308
Total	**7.9500**	**0.2990**	**0.4722**	**7.8000e-004**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**66.6399**	**66.6399**	**3.6400e-003**	**0.0000**	**66.7308**

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9500e-003	3.1900e-003	0.0396	1.5000e-004	0.0215	1.1000e-004	0.0216	5.7100e-003	1.0000e-004	5.8100e-003	0.0000	13.9091	13.9091	2.3000e-004	0.0000	13.9147
Total	**5.9500e-003**	**3.1900e-003**	**0.0396**	**1.5000e-004**	**0.0215**	**1.1000e-004**	**0.0216**	**5.7100e-003**	**1.0000e-004**	**5.8100e-003**	**0.0000**	**13.9091**	**13.9091**	**2.3000e-004**	**0.0000**	**13.9147**

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	7.9055					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3542	0.4783	7.8000e-004		0.0248	0.0248		0.0248	0.0248	0.0000	66.6398	66.6398	3.6400e-003	0.0000	66.7307
Total	**7.9210**	**0.3542**	**0.4783**	**7.8000e-004**		**0.0248**	**0.0248**		**0.0248**	**0.0248**	**0.0000**	**66.6398**	**66.6398**	**3.6400e-003**	**0.0000**	**66.7307**

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9500e-003	3.1900e-003	0.0396	1.5000e-004	0.0141	1.1000e-004	0.0142	3.8800e-003	1.0000e-004	3.9800e-003	0.0000	13.9091	13.9091	2.3000e-004	0.0000	13.9147
Total	**5.9500e-003**	**3.1900e-003**	**0.0396**	**1.5000e-004**	**0.0141**	**1.1000e-004**	**0.0142**	**3.8800e-003**	**1.0000e-004**	**3.9800e-003**	**0.0000**	**13.9091**	**13.9091**	**2.3000e-004**	**0.0000**	**13.9147**

3.6 Architectural Coating - 2028

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	7.8752					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0444	0.2978	0.4704	7.7000e-004		0.0134	0.0134		0.0134	0.0134	0.0000	66.3846	66.3846	3.6200e-003	0.0000	66.4751
Total	**7.9196**	**0.2978**	**0.4704**	**7.7000e-004**		**0.0134**	**0.0134**		**0.0134**	**0.0134**	**0.0000**	**66.3846**	**66.3846**	**3.6200e-003**	**0.0000**	**66.4751**

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6100e-003	2.9200e-003	0.0371	1.5000e-004	0.0214	1.0000e-004	0.0215	5.6900e-003	9.0000e-005	5.7800e-003	0.0000	13.4415	13.4415	2.1000e-004	0.0000	13.4466
Total	**5.6100e-003**	**2.9200e-003**	**0.0371**	**1.5000e-004**	**0.0214**	**1.0000e-004**	**0.0215**	**5.6900e-003**	**9.0000e-005**	**5.7800e-003**	**0.0000**	**13.4415**	**13.4415**	**2.1000e-004**	**0.0000**	**13.4466**

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	7.8752					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0155	0.3528	0.4764	7.7000e-004		0.0247	0.0247		0.0247	0.0247	0.0000	66.3845	66.3845	3.6200e-003	0.0000	66.4751
Total	**7.8906**	**0.3528**	**0.4764**	**7.7000e-004**		**0.0247**	**0.0247**		**0.0247**	**0.0247**	**0.0000**	**66.3845**	**66.3845**	**3.6200e-003**	**0.0000**	**66.4751**

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6100e-003	2.9200e-003	0.0371	1.5000e-004	0.0140	1.0000e-004	0.0141	3.8700e-003	9.0000e-005	3.9600e-003	0.0000	13.4415	13.4415	2.1000e-004	0.0000	13.4466
Total	**5.6100e-003**	**2.9200e-003**	**0.0371**	**1.5000e-004**	**0.0140**	**1.0000e-004**	**0.0141**	**3.8700e-003**	**9.0000e-005**	**3.9600e-003**	**0.0000**	**13.4415**	**13.4415**	**2.1000e-004**	**0.0000**	**13.4466**

3.6 Architectural Coating - 2029

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	6.8756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0388	0.2600	0.4107	6.7000e-004		0.0117	0.0117		0.0117	0.0117	0.0000	57.9589	57.9589	3.1600e-003	0.0000	58.0379
Total	**6.9144**	**0.2600**	**0.4107**	**6.7000e-004**		**0.0117**	**0.0117**		**0.0117**	**0.0117**	**0.0000**	**57.9589**	**57.9589**	**3.1600e-003**	**0.0000**	**58.0379**

3.6 Architectural Coating - 2029

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-003	2.3500e-003	0.0304	1.3000e-004	0.0187	8.0000e-005	0.0188	4.9700e-003	8.0000e-005	5.0400e-003	0.0000	11.4189	11.4189	1.7000e-004	0.0000	11.4230
Total	**4.6000e-003**	**2.3500e-003**	**0.0304**	**1.3000e-004**	**0.0187**	**8.0000e-005**	**0.0188**	**4.9700e-003**	**8.0000e-005**	**5.0400e-003**	**0.0000**	**11.4189**	**11.4189**	**1.7000e-004**	**0.0000**	**11.4230**

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	6.8756					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0135	0.3080	0.4160	6.7000e-004		0.0216	0.0216		0.0216	0.0216	0.0000	57.9588	57.9588	3.1600e-003	0.0000	58.0378
Total	**6.8891**	**0.3080**	**0.4160**	**6.7000e-004**		**0.0216**	**0.0216**		**0.0216**	**0.0216**	**0.0000**	**57.9588**	**57.9588**	**3.1600e-003**	**0.0000**	**58.0378**

3.6 Architectural Coating - 2029

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-003	2.3500e-003	0.0304	1.3000e-004	0.0122	8.0000e-005	0.0123	3.3800e-003	8.0000e-005	3.4500e-003	0.0000	11.4189	11.4189	1.7000e-004	0.0000	11.4230
Total	**4.6000e-003**	**2.3500e-003**	**0.0304**	**1.3000e-004**	**0.0122**	**8.0000e-005**	**0.0123**	**3.3800e-003**	**8.0000e-005**	**3.4500e-003**	**0.0000**	**11.4189**	**11.4189**	**1.7000e-004**	**0.0000**	**11.4230**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Free-Standing Discount Superstore	0.00	0.00	0.00		
Industrial Park	0.00	0.00	0.00		
Manufacturing	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Strip Mall	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Free-Standing Discount	16.60	8.40	6.90	13.20	67.80	19.00	47.5	35.5	17
Industrial Park	16.60	8.40	6.90	59.00	28.00	13.00	79	19	2
Manufacturing	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Strip Mall	16.60	8.40	6.90	16.60	64.40	19.00	45	40	15
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Free-Standing Discount Superstore	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Industrial Park	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Manufacturing	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Other Non-Asphalt Surfaces	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Refrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Strip Mall	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615
Unrefrigerated Warehouse-No Rail	0.562310	0.034239	0.191194	0.102231	0.010280	0.004149	0.017053	0.070255	0.001423	0.001071	0.004354	0.000825	0.000615

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21,814.5893	21,814.5893	1.2586	0.2604	21,923.6514
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	22,382.3540	22,382.3540	1.2913	0.2672	22,494.2546
NaturalGas Mitigated	0.6488	5.8984	4.9547	0.0354		0.4483	0.4483		0.4483	0.4483	0.0000	6,421.1476	6,421.1476	0.1231	0.1177	6,459.3053
NaturalGas Unmitigated	0.7028	6.3887	5.3665	0.0383		0.4855	0.4855		0.4855	0.4855	0.0000	6,954.8896	6,954.8896	0.1333	0.1275	6,996.2190

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					
Free-Standing Discount Superstore	222000	1.2000e-003	0.0109	9.1400e-003	7.0000e-005		8.3000e-004	8.3000e-004		8.3000e-004	8.3000e-004	0.0000	11.8468	11.8468	2.3000e-004	2.2000e-004	11.9172
Industrial Park	1.94986e+006	0.0105	0.0956	0.0803	5.7000e-004		7.2600e-003	7.2600e-003		7.2600e-003	7.2600e-003	0.0000	104.0521	104.0521	1.9900e-003	1.9100e-003	104.6704
Manufacturing	2.75411e+007	0.1485	1.3501	1.1341	8.1000e-003		0.1026	0.1026		0.1026	0.1026	0.0000	1,469.6992	1,469.6992	0.0282	0.0269	1,478.4329
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	8.77518e+007	0.4732	4.3016	3.6133	0.0258		0.3269	0.3269		0.3269	0.3269	0.0000	4,682.7720	4,682.7720	0.0898	0.0859	4,710.5994
Strip Mall	58918.8	3.2000e-004	2.8900e-003	2.4300e-003	2.0000e-005		2.2000e-004	2.2000e-004		2.2000e-004	2.2000e-004	0.0000	3.1441	3.1441	6.0000e-005	6.0000e-005	3.1628
Unrefrigerated Warehouse-No Rail	6.02275e+006	0.0650	0.5905	0.4960	3.5400e-003		0.0449	0.0449		0.0449	0.0449	0.0000	642.7933	642.7933	0.0123	0.0118	646.6131
Unrefrigerated Warehouse-No Rail	760479	4.1000e-003	0.0373	0.0313	2.2000e-004		2.8300e-003	2.8300e-003		2.8300e-003	2.8300e-003	0.0000	40.5820	40.5820	7.8000e-004	7.4000e-004	40.8232
Total		**0.7028**	**6.3887**	**5.3665**	**0.0383**		**0.4855**	**0.4855**		**0.4855**	**0.4855**	**0.0000**	**6,954.8896**	**6,954.8896**	**0.1333**	**0.1275**	**6,996.2190**

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					
Free-Standing Discount Superstore	164400	8.9000e-004	8.0600e-003	6.7700e-003	5.0000e-005		6.1000e-004	6.1000e-004		6.1000e-004	6.1000e-004	0.0000	8.7730	8.7730	1.7000e-004	1.6000e-004	8.8251
Industrial Park	1.3649e+006	7.3600e-003	0.0669	0.0562	4.0000e-004		5.0800e-003	5.0800e-003		5.0800e-003	5.0800e-003	0.0000	72.8365	72.8365	1.4000e-003	1.3400e-003	73.2693
Manufacturing	2.3635e+007	0.1274	1.1586	0.9732	6.9500e-003		0.0881	0.0881		0.0881	0.0881	0.0000	1,261.2543	1,261.2543	0.0242	0.0231	1,268.7494
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	8.60989e+007	0.4643	4.2205	3.5453	0.0253		0.3208	0.3208		0.3208	0.3208	0.0000	4,594.5629	4,594.5629	0.0881	0.0842	4,621.8661
Strip Mall	43631.8	2.4000e-004	2.1400e-003	1.8000e-003	1.0000e-005		1.6000e-004	1.6000e-004		1.6000e-004	1.6000e-004	0.0000	2.3284	2.3284	4.0000e-005	4.0000e-005	2.3422
Unrefrigerated Warehouse-No Rail	4.24262e+006	0.0458	0.4159	0.3494	2.5000e-003		0.0316	0.0316		0.0316	0.0316	0.0000	452.8052	452.8052	8.6800e-003	8.3000e-003	455.4960
Unrefrigerated Warehouse-No Rail	535707	2.8900e-003	0.0263	0.0221	1.6000e-004		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003	0.0000	28.5873	28.5873	5.5000e-004	5.2000e-004	28.7572
Total		**0.6488**	**5.8984**	**4.9547**	**0.0354**		**0.4483**	**0.4483**		**0.4483**	**0.4483**	**0.0000**	**6,421.1476**	**6,421.1476**	**0.1231**	**0.1177**	**6,459.3053**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Free-Standing Discount Superstore	1.263e+006	287.9617	0.0166	3.4400e-003	289.4014
Industrial Park	5.34948e+006	1,219.6715	0.0704	0.0146	1,225.7692
Manufacturing	8.60395e+006	1,961.6856	0.1132	0.0234	1,971.4931
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	6.77296e+007	15,442.2345	0.8909	0.1843	15,519.4380
Strip Mall	335200	76.4250	4.4100e-003	9.1000e-004	76.8071
Unrefrigerated Warehouse-No Rail	7.00181e+006	3,192.8017	0.1842	0.0381	3,208.7641
Unrefrigerated Warehouse-No Rail	884103	201.5739	0.0116	2.4100e-003	202.5817
Total		**22,382.3540**	**1.2913**	**0.2672**	**22,494.2546**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Free-Standing Discount Superstore	1.1256e+006	256.6348	0.0148	3.0600e-003	257.9178
Industrial Park	4.83195e+006	1,101.6759	0.0636	0.0132	1,107.1838
Manufacturing	8.04448e+006	1,834.1277	0.1058	0.0219	1,843.2975
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	6.71905e+007	15,319.3151	0.8838	0.1829	15,395.9041
Strip Mall	298734	68.1109	3.9300e-003	8.1000e-004	68.4514
Unrefrigerated Warehouse-No Rail	6.67249e+006	3,042.6318	0.1755	0.0363	3,057.8434
Unrefrigerated Warehouse-No Rail	842520	192.0931	0.0111	2.2900e-003	193.0535
Total		**21,814.5893**	**1.2586**	**0.2604**	**21,923.6514**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	11.7962	1.1000e-003	0.1220	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.2384	0.2384	6.1000e-004	0.0000	0.2538
Unmitigated	11.7962	1.1000e-003	0.1220	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.2384	0.2384	6.1000e-004	0.0000	0.2538

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	4.4616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3235					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0112	1.1000e-003	0.1220	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.2384	0.2384	6.1000e-004	0.0000	0.2538
Total	**11.7962**	**1.1000e-003**	**0.1220**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.2384**	**0.2384**	**6.1000e-004**	**0.0000**	**0.2538**

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	4.4616					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	7.3235					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0112	1.1000e-003	0.1220	1.0000e-005		4.3000e-004	4.3000e-004		4.3000e-004	4.3000e-004	0.0000	0.2384	0.2384	6.1000e-004	0.0000	0.2538
Total	**11.7962**	**1.1000e-003**	**0.1220**	**1.0000e-005**		**4.3000e-004**	**4.3000e-004**		**4.3000e-004**	**4.3000e-004**	**0.0000**	**0.2384**	**0.2384**	**6.1000e-004**	**0.0000**	**0.2538**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1,163.8155	11.5938	0.2849	1,538.5539
Unmitigated	1,163.8155	11.5938	0.2849	1,538.5539

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Free-Standing Discount Superstore	5.33 / 0.246	18.1376	0.1746	4.3000e-003	23.7839
Industrial Park	12.9074 / 0	42.4141	0.4228	0.0104	56.0798
Manufacturing	31.0249 / 0	101.9485	1.0163	0.0250	134.7962
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	62.7543 / 0	206.2118	2.0556	0.0505	272.6529
Strip Mall	1.3397 / 0.054	4.5391	0.0439	1.0800e-003	5.9581
Unrefrigerated Warehouse-No Rail	240.584 / 0	790.5645	7.8807	0.1936	1,045.2830
Total		**1,163.8155**	**11.5938**	**0.2849**	**1,538.5539**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Free-Standing Discount Superstore	5.33 / 0.246	18.1376	0.1746	4.3000e-003	23.7839
Industrial Park	12.9074 / 0	42.4141	0.4228	0.0104	56.0798
Manufacturing	31.0249 / 0	101.9485	1.0163	0.0250	134.7962
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	62.7543 / 0	206.2118	2.0556	0.0505	272.6529
Strip Mall	1.3397 / 0.054	4.5391	0.0439	1.0800e-003	5.9581
Unrefrigerated Warehouse-No Rail	240.584 / 0	790.5645	7.8807	0.1936	1,045.2830
Total		**1,163.8155**	**11.5938**	**0.2849**	**1,538.5539**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	1,974.9681	116.7173	0.0000	4,892.8999
Unmitigated	1,974.9681	116.7173	0.0000	4,892.8999

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Free-Standing Discount Superstore	430.07	87.3003	5.1593	0.0000	216.2829
Industrial Park	696.78	141.4400	8.3589	0.0000	350.4117
Manufacturing	1051.12	213.3679	12.6097	0.0000	528.6098
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1593.64	323.4945	19.1180	0.0000	801.4440
Strip Mall	27.87	5.6574	0.3343	0.0000	14.0159
Unrefrigerated Warehouse-No Rail	5929.86	1,203.7080	71.1371	0.0000	2,982.1356
Total		**1,974.9681**	**116.7173**	**0.0000**	**4,892.8999**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Free-Standing Discount Superstore	430.07	87.3003	5.1593	0.0000	216.2829
Industrial Park	696.78	141.4400	8.3589	0.0000	350.4117
Manufacturing	1051.12	213.3679	12.6097	0.0000	528.6098
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	1593.64	323.4945	19.1180	0.0000	801.4440
Strip Mall	27.87	5.6574	0.3343	0.0000	14.0159
Unrefrigerated Warehouse-No Rail	5929.86	1,203.7080	71.1371	0.0000	2,982.1356
Total		**1,974.9681**	**116.7173**	**0.0000**	**4,892.8999**

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