

Alvarado Specific Plan

Air Quality Technical Report

April 2020 | LAM-08

Prepared for:

City of La Mesa
Community Development Department
8130 Allison Avenue
La Mesa, CA 91942

Prepared by:

HELIX Environmental Planning, Inc.
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ACRONYMS AND ABBREVIATIONS

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
AAM	annual arithmetic mean
AAQS	Ambient Air Quality Standard
ACM	asbestos containing material
ADMRT	Air Dispersion Modeling and Risk Tool
AERMAP	air quality dispersion model terrain preprocessor
AERMOD	air quality dispersion model
AQIA	Air Quality Impact Assessment
BMPs	best management practices
CAA	Clean Air Act (Federal)
CAAQS	California Ambient Air Quality Standard
CalEEMod	California Emission Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards code
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
City	City of La Mesa
CO	carbon monoxide
County	County of San Diego
DPM	diesel particulate matter
DU	dwelling unit
EMFAC	Emission Factor onroad mobile source model
°F	Fahrenheit (degrees)
FAA	Federal Aviation Administration
g/L	grams per liter
GHG	greenhouse gases
HARP	Hot Spots Analysis and Reporting Program
H ₂ S	hydrogen sulfide
HRA	Health Risk Assessment
I-8	Interstate 8
IEM	Iowa Environmental Mesonet

ACRONYMS AND ABBREVIATIONS (cont.)

km	kilometer
LBP	lead-based paint
mg/m ³	milligrams per cubic meter
mph	miles per hour
MTS	Metropolitan Transit System
NAAQS	National Ambient Air Quality Standard
NED	National Elevation Dataset
NO	nitrogen oxide
NO ₂	nitrogen dioxide
NOA	naturally occurring asbestos
NO _x	oxides of nitrogen
O ₃	Ozone
OEHA	Office of Environmental Health Hazard Assessment
Pb	lead
PM	particulate matter
PM ₁₀	particulate matter less than 10 microns
PM _{2.5}	particulate matter less than 2.5 microns
ppm	parts per million
project	Alvarado Specific Plan Project
RAQS	Regional Air Quality Strategy
ROG	reactive organic gas
SANDAG	San Diego Association of Governments
SCAQMD	South Coast Air Quality Management District
SDAB	San Diego Air Basin
SDAPCD	San Diego County Air Pollution Control District
SMAQMD	Sacramento Metropolitan Air Quality Management District
SF	square feet/foot
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SO _x	oxides of sulfur
T-BACT	Toxics Best Available Control Technology
TAC	Toxic Air Contaminant
TIS	Traffic Impact Study
TOD	transit-oriented development

ACRONYMS AND ABBREVIATIONS (cont.)

USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
VMТ	Vehicle Miles Traveled
VOC	volatile organic compound
WRCC	Western Regional Climate Center

EXECUTIVE SUMMARY

This report presents an assessment of potential air quality impacts associated with the construction and operation of the proposed Alvarado Specific Plan Project (Specific Plan; project) located in the city of La Mesa. The project is a master development plan for a phased transit-oriented development and associated public improvements. The project would allow development of the site with multi-family residential buildings and local-serving commercial space. The project would also include improvements to the Alvarado Creek channel within the project site, improvements to Alvarado Road, relocation of utilities, and pedestrian connection to the 70th Street Trolley Station.

The project would result in reduced Vehicle Miles Traveled (VMT) compared to the regional average. The project would be consistent with the City General Plan goals of encouraging mixed-use transit-oriented development. The project would not conflict with or obstruct implementation of the San Diego County Regional Air Quality Strategy or the State Implementation Plan, and impacts would be less than significant.

Criteria pollutant and precursor pollutant emissions generated during project construction activities would not exceed the San Diego Air Pollution Control District's (SDAPCD's) screening thresholds. Long-term operational emissions of criteria pollutants and precursors would not exceed the SDAPCD screening thresholds and would not result in a cumulatively considerable net increase in criteria pollutants.

Construction of the project would not expose sensitive receptors to substantial concentration's of Toxic Air Contaminants (TACs), including diesel particulate matter (DPM) from the operation of heavy construction equipment, or asbestos and lead from demolition activities. The project's contribution to area traffic would not result in carbon monoxide (CO) hotspots. Health risks for future residents of the project as a result of DPM emissions from Interstate 8 (I-8) would not exceed the SDAPCD screening thresholds for incremental increased cancer risk. Impacts related to exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Neither construction activities nor long-term operation of the project would be a source of objectionable odors that would adversely affect a significant number of persons and odor impacts would be less than significant.

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1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This report presents an assessment of potential air quality impacts associated with construction and operation of the proposed Alvarado Specific Plan (Specific Plan; project) for transit-oriented development (TOD) and associated public improvements. The analysis within this report addresses the relevant issues listed in Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

1.2 PROJECT LOCATION

The project site is located on an approximately 12-acre site along the south side of Alvarado Road, generally between 70th Street on the west and Guava Avenue on the east, in the city of La Mesa. The project site is bound by the 70th Street Trolley Station to the west, the Green Line trolley corridor to the south, a car dealership to the east, and Alvarado Road and Interstate 8 (I-8) to the north. (see Figure 1, *Regional Location*, and Figure 2, *Site Location*).

1.3 PROJECT DESCRIPTION

The proposed project entails a master development plan (Specific Plan) for a phased TOD and associated public improvements (City of La Mesa 2020). The project would include four development parcels that would be constructed in two phases. Phase 1 includes the parcels west of the intersection of Alvarado Creek and Alvarado Road (Parcels 1-3). Phase 2 includes the parcel east of the intersection of Alvarado Creek and Alvarado Road (Parcel 4). Each parcel would be developed with one or more multi-family residential buildings with potential ground-floor commercial uses.

Phase 1 would feature two multi-family residential buildings built on a podium deck over multi-level parking in the central portion of the site and a smaller-scale building in the western-most parcel. Phase 2 would include one building in the eastern portion of the site similar in size and scale to the two larger buildings constructed in Phase 1. The buildings would include up to five stories of residential units and one to three levels of parking. Each building would include a mix of housing types and sizes. In total, an estimated 850 to 950 residential units would be constructed at buildout. In addition to the residential uses, the project would include ground floor or podium level, resident-serving commercial uses (see Figure 3, *Site Plan Concept*).

1.3.1 Residential Development

The primary land use within the Specific Plan is multi-family residential development. The project would develop four multi-family residential buildings. As described above, the project would construct three residential structures (Buildings 2, 3, and 4) with similar construction type and size consisting of multi-level parking structures with residential units above the parking. A smaller-scale building (Building 1) with a similar construction type is proposed on the smaller and narrower western-most parcel (Parcel 1). The proposed buildings would be wood-and metal-frame construction and the parking garages would be concrete.

Building 1 would include five residential levels atop a one-level parking garage. Building 1 would include a total of 60 apartments comprised of a mix of studio, one-bedroom, and two-bedroom units. A patio

area would be located above the garage. Sky decks would be provided at the western and eastern ends of the top floor.

Buildings 2, 3, and 4 would include five residential levels on a three-level parking garage with an attached leasing office for each building. Each building would include a mix of studio, one-bedroom, and two-bedroom units. Liner units (i.e., units with direct access to the interior creek side area via a front stoop concept) would be provided on the outside edge of the buildings that front Alvarado Creek. These three buildings would be similar in scale and appearance. Buildings 3 and 4 would each include 305 apartment units. Building 2 would include either 280 apartments or 180 student housing units (in association with San Diego State University).

1.3.2 Commercial Uses

Each proposed building would include space for pedestrian-oriented commercial uses, such as cafes or other small retail establishments. Such uses would be provided primarily to serve residents of the proposed development. Within Building 1, a cafe or other commercial use is proposed in the northeastern portion of the building at the street level. Commercial spaces within Buildings 2, 3, and 4 could be provided at the ground level or podium level.

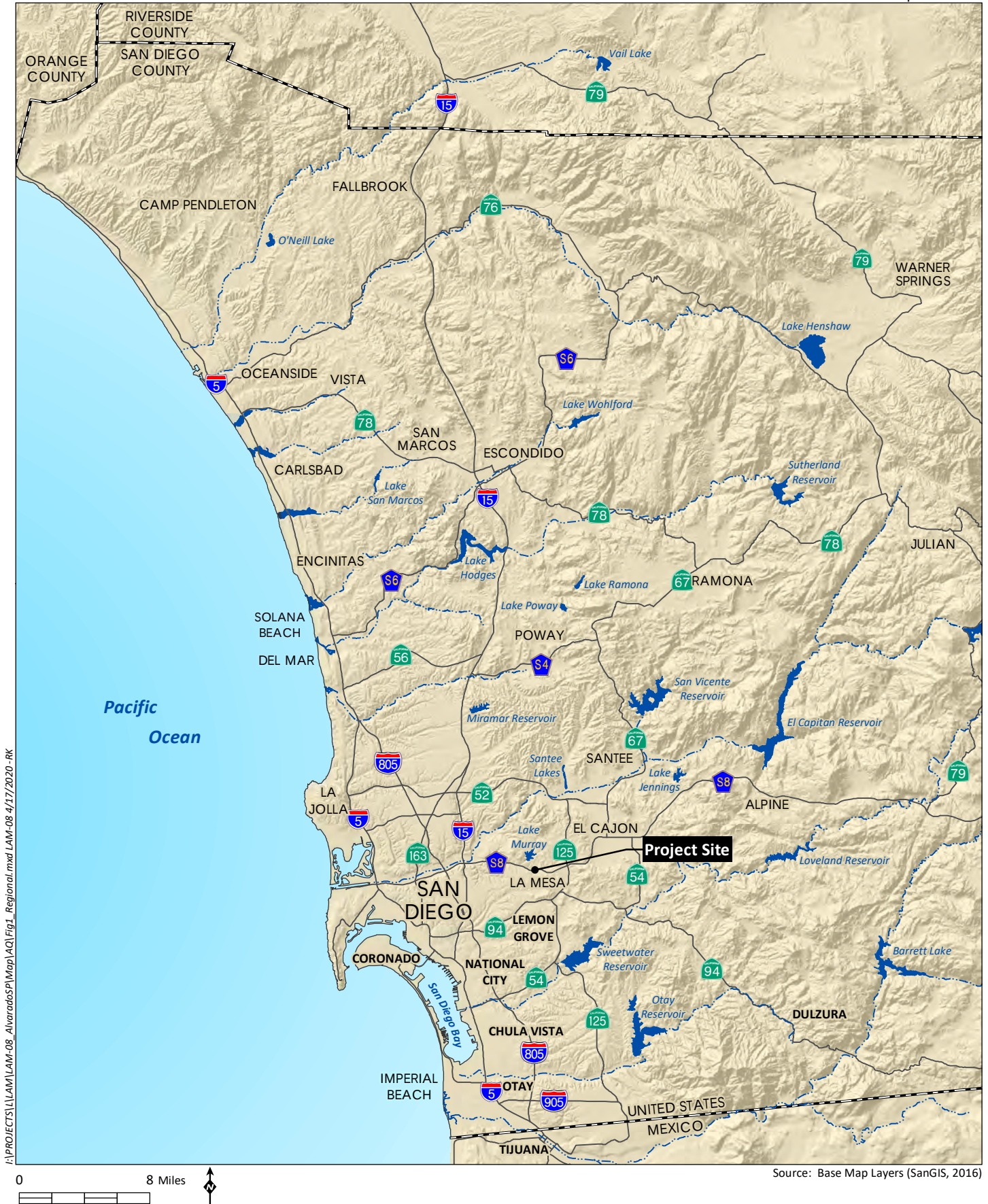
1.3.3 Alvarado Creek Improvements

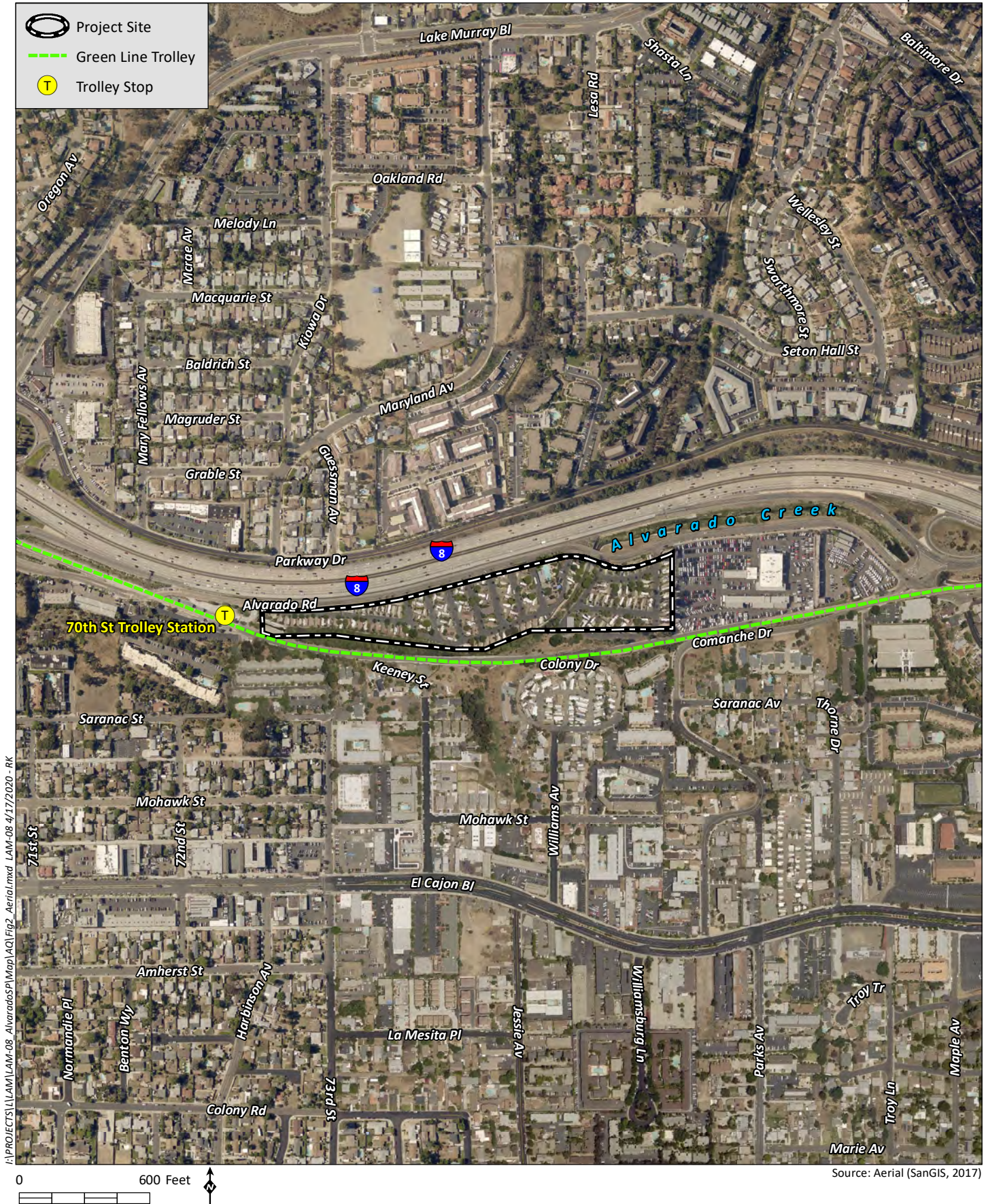
Improvements are proposed to the Alvarado Creek channel that traverses the site to control flood and storm water flows within the channel, as well as to enhance the creek as an open space amenity and natural feature. Most sections of the existing trapezoidal concrete-lined banks along the channel would be removed and replaced with retaining walls to increase the width of the channel bottom. The creek would also be enhanced (e.g., removal of non-native plants and debris) and restored with riparian vegetation. The enhanced creek would function as a major open space feature of the project.

1.3.4 Public Improvements

As part of the project, several public improvements would be implemented. Frontage road improvements to Alvarado Road would be provided, including a shared pedestrian/bicycle path, curb and gutter, streetlights, a pedestrian bridge over the Alvarado Creek channel, and a pedestrian connection to the adjacent 70th Street Trolley Station. The project would dedicate 4.5 feet of road right-of-way and a 16-foot-wide public access easement along the Alvarado Road frontage to provide for a shoulder, parking lane, curb and gutter, and a shared pedestrian/bicycle path, as well as street-side landscaping. Additionally, a 15-foot-wide prefabricated pedestrian bridge would be constructed over Alvarado Creek where it crosses under Alvarado Road. The pedestrian bridge would connect to the proposed shared pedestrian/bicycle path on both sides of the creek and provide a pedestrian linkage between the eastern and western portions of the site that are bisected by the creek. At the western end of the project site, a public connection to the adjacent 70th Street Trolley Station would be provided as part of the new shared pedestrian/bicycle path along Alvarado Road.

The existing communications and 12-kilovolt power lines that extend across the site would be relocated underground. These lines currently cross over I-8, the central portion of the site, and up to Keeney Street in a generally north-south alignment. The portion of the overhead utility lines that cross the site would be relocated underground in the western end of the site.





LEGEND

- | | | | | | |
|---|--|------------------------------------|----------------------------------|--|----------------------------|
| 1 Outdoor courtyard at podium level | 6 Proposed entry monument | 11 Accent street trees | 16 Loading zone | 21 Public connection to 70th street trolley | 26 Pick up & drop off zone |
| 2 Pedestrian promenade / Emergency vehicular access (EVA) | 7 Pedestrian sidewalk | 12 Existing power pole to remain | 17 Future resident parking | 22 Private connection to 70th street trolley | |
| 3 Gabion retaining wall or similar at creek edge | 8 Parallel parking | 13 Prefabricated pedestrian bridge | 18 Vehicular gate | 23 Building 4 commercial component | |
| 4 Decorative paving | 9 Palm trees in 5x8 tree grates | 14 Bio-filtration basin | 19 Existing creek | 24 Building 2 private residential patios | |
| 5 Social node with shade element and synthetic turf area | 10 Proposed vines at existing retaining wall | 15 Rain event bio-filtration basin | 20 Existing billboards to remain | 25 Building 1 landscape corridor between buildings | |



Source: City of La Mesa 2019

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Sewer system improvements are also proposed, including relocating an existing sewer trunk line within Alvarado Creek out of the channel and under the proposed internal access road, removing several abandoned sewer lines in the creek, and raising and capping an existing manhole.

1.3.5 Recreation Areas/Public Space

The buildings would include interior amenity facilities and active outdoor spaces on the podium deck levels. Building amenities are anticipated to include clubhouses, pools, and gymnasiums, as well as patios and balconies. Outdoor recreation areas would include a pedestrian promenade, courtyards, public gathering spaces, seating areas, and observation areas (e.g., seating and/or interpretive signage at Alvarado Creek overlook areas). The pedestrian promenade would be located along the interior of the site and much of it would be adjacent to the enhanced Alvarado Creek.

1.4 PROJECT CONSTRUCTION

As described above, the project would be constructed in two phases. Phase 1 includes the parcels west of the intersection of Alvarado Creek and Alvarado Road (Parcels 1-3). Phase 2 includes the parcel east of the intersection of the Creek and Alvarado Road (Parcel 4). Phase 1 construction is anticipated to commence as early as July 2021 and be completed in approximately 26 months. Phase 1 construction would also include Alvarado Creek improvements and Alvarado Road improvements. The portion of the existing recreation vehicle resort on Parcel 4 would remain in operation during Phase 1 construction. Phase 2 construction would commence at the conclusion of Phase 1 construction and be completed in approximately 20 months. Phase 2 construction would include construction of the pedestrian bridge over Alvarado Creek.

1.4.1 Construction Best Management Practices

The project would incorporate BMPs during construction to reduce emissions of fugitive dust. SDAPCD Rule 55 – Fugitive Dust Control states that no dust and/or dirt shall leave the property line. SDAPCD Rule 55 requires the following:

- (1) **Airborne Dust Beyond the Property Line:** No person shall engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.
- (2) **Track-Out/Carry-Out:** Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall:
 - (i) be minimized by the use of any of the following or equally effective track-out/carry-out and erosion control measures that apply to the project or operation:
 - (a) track-out grates or gravel beds at each egress point,
 - (b) wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks;
 - (c) using secured tarps or cargo covering, watering, or treating of transported material; and

- (ii) be removed at the conclusion of each workday when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only PM₁₀-efficient (particulate matter less than 10 microns) street sweepers certified to meet the most current South Coast Air Quality Management District (SCAQMD) Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances.

The control measures listed below are the BMPs that the project would incorporate for dust control:

- A minimum of two applications of water shall be applied during grading between dozer/grader passes;
- Paving, chip sealing, or chemical stabilization of internal roadways shall be applied after completion of grading;
- Grading shall be terminated if winds exceed 25 mph;
- All exposed surfaces shall maintain a minimum soil moisture of 12 percent;
- Dirt storage piles shall be stabilized by chemical binders, tarps, fencing, or other erosion control; and

Vehicle speeds shall be limited to 15 mph on unpaved roads.

1.5 PROJECT DESIGN FEATURES

1.5.1 Transit Oriented Development

The project proposes high-density multi-family residential and local serving commercial uses. The project is within .5 mile of a major transit (rail) station (the 70th Street Trolley stop) and would provide pedestrian access to the transit station. The project would be considered TOD.

1.5.2 Energy and Water Efficiencies

The project would be designed to meet the California 2019 Title 24 Part 6, building energy efficiency standards, and Part 11, California Green Building Standards (CALGreen), including cool/green roofs, low flow plumbing fixtures and fittings, and drought tolerant/water efficient landscaping.

1.5.3 Bicycle and Pedestrian Facilities

The project would include internal pedestrian paths including a bridge over Alvarado Creek, a shared pedestrian/bicycle path on Alvarado Road, and a pedestrian connection to the 70th Street Trolley stop. The project would include short-term bicycle parking spaces for visitors and commercial customers, and long-term bicycle storage for residents in accordance with City of La Mesa (City) design standards.

2.0 REGULATORY SETTING

The project site is located within the San Diego Air Basin (SDAB). Air Quality in the SDAB is regulated by the US Environmental Protection Agency (USEPA) at the federal level, by the California Air Resources Board (CARB) at the state level, and by the San Diego Air Pollution Control District (SDAPCD) at the regional level.

2.1 AIR POLLUTANT DESCRIPTORS AND TERMINOLOGY

2.1.1 Criteria Air Pollutants

Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the general public. In general, criteria air pollutants include the following compounds:

- Ozone (O₃)
- Carbon monoxide (CO)
- Nitrogen dioxide (NO₂)
- Particulate matter (PM), which is further subdivided:
 - Coarse PM, 10 micrometers or less in diameter (PM₁₀)
 - Fine PM, 2.5 micrometers or less in diameter (PM_{2.5})
- Sulfur dioxide (SO₂)
- Lead (Pb)

Criteria pollutants can be emitted directly from sources (primary pollutants; e.g., CO, SO₂, PM₁₀, PM_{2.5}, and lead), or they may be formed through chemical and photochemical reactions of precursor pollutants in the atmosphere (secondary pollutants; e.g., ozone, NO₂, PM₁₀, and PM_{2.5}). Note that PM₁₀ and PM_{2.5} can be both primary and secondary pollutants. The principal precursor pollutants of concern are reactive organic gasses ([ROGs] also known as volatile organic compounds [VOCs])¹ and nitrogen oxides (NO_x).

The descriptions of sources and general health effects for each of the criteria air pollutants are shown in Table 1, *Summary of Health Effects of Criteria Air Pollutants*, based on information provided by the California Air Pollution Control Officers Association (CAPCOA; 2018). Specific adverse health effects to individuals or population groups induced by criteria pollutant emissions are highly dependent on a multitude of interconnected variables such as cumulative concentrations, local meteorology and atmospheric conditions, and the number and character of exposed individuals (e.g., age, gender). Criteria pollutant precursors (ROG and NO_x) affect air quality on a regional scale, typically after significant delay and distance from the pollutant source emissions. Health effects related to ozone and NO₂ are, therefore, the product of emissions generated by numerous sources throughout a region.

¹ CARB defines and uses the term ROGs while the USEPA defines and uses the term VOCs. The compounds included in the lists of ROGs and VOCs and the methods of calculation are slightly different. However, for the purposes of estimating criteria pollutant precursor emissions, the two terms are often used interchangeably.

Emissions of criteria pollutants from vehicles traveling to or from the project site (mobile emissions) are distributed nonuniformly in location and time throughout the region, wherever the vehicles may travel. As such, specific health effects from these criteria pollutant emissions cannot be directly correlated to the incremental contribution from the project.

Table 1
SUMMARY OF HEALTH EFFECTS OF CRITERIA AIR POLLUTANTS

Pollutant	Major Man-Made Sources	Human Health Effects
Carbon Monoxide (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, affecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
Nitrogen Dioxide (NO ₂)	A reddish-brown gas formed during fuel combustion for motor vehicles and industrial sources. Sources include motor vehicles, electric utilities, and other sources that burn fuel.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Contributes to climate change and nutrient overloading which deteriorates water quality. Causes brown discoloration of the atmosphere.
Ozone (O ₃)	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrogen oxides (NO _x) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, gasoline storage and transport, 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. Damages rubber, some textiles and dyes.
Particulate Matter (PM ₁₀ & PM _{2.5})	Produced by power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles, and other sources.	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).
Sulfur Dioxide (SO ₂)	A colorless, nonflammable gas formed when fuel containing sulfur is burned, when gasoline is extracted from oil, or when metal is extracted from ore. Examples are petroleum refineries, cement manufacturing, metal processing facilities, locomotives, and ships.	Respiratory irritant. Aggravates lung and heart problems. In the presence of moisture and oxygen, sulfur dioxide converts to sulfuric acid which can damage marble, iron and steel. Damages crops and natural vegetation. Impairs visibility. Precursor to acid rain.
Lead	Metallic element emitted from metal refineries, smelters, battery manufacturers, iron and steel producers, use of leaded fuels by racing and aircraft industries.	Anemia, high blood pressure, brain and kidney damage, neurological disorders, cancer, lowered IQ. Affects animals, plants, and aquatic ecosystems.

Source: CAPCOA 2018

2.1.2 Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For carcinogenic TACs, there is no level of exposure that is considered safe and impacts are evaluated in terms of overall relative risk 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.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is known as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is less than 2.5 microns in diameter (CARB 2018a). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a significant impact on California's population—it is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM (CARB 2018a).

Asbestos is a mineral fiber that naturally occurs in some rock and soil. Long-term exposure to airborne asbestos fibers has been linked to major health effects including: lung cancer; mesothelioma, a rare form of cancer that is found in the thin lining of the lung, chest, abdomen, and heart; and asbestosis, a serious progressive, long-term, non-cancer disease of the lungs (USEPA 2019a). Because of its fiber strength and heat resistance, asbestos has been used in a variety of building construction materials for insulation and as a fire retardant, primarily in buildings constructed before 1979. Asbestos fibers may be released into the air by the disturbance of asbestos containing material (ACM) during renovation and demolition activities; or during earth disturbing activities in areas where naturally occurring asbestos (NOA) is present in the rock or soil. NOA is not likely to be present in the soil and rock of San Diego County (California Geologic Survey [CGS] 2000).

Lead is a naturally occurring metallic element that is found in small amounts in the earth's crust. In addition to its status as a criteria pollutant, lead is listed as a TAC because, depending on the level and duration of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems and the cardiovascular system. There is also a probable link between lead exposure and kidney cancer, brain cancer (gliomas), and lung cancer (USEPA 2019b). Lead particulate matter can be emitted during demolition and renovation activities that disturb material that contains lead-based paint (LBP), most typically found in structures built before 1978.

2.2 FEDERAL REGULATIONS

2.2.1 Clean Air Act

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to the health and welfare of the general public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants, which are introduced above. Table 2, *Ambient Air Quality Standards*, shows the federal and state ambient air quality standards (AAQS) for these pollutants.

Table 2
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary ¹	Secondary ²
O ₃	1 Hour	0.09 ppm (180 µg/m ³)	–	–
	8 Hour	0.070 ppm (137 µg/m ³)	0.070 ppm (137 µg/m ³)	Same as Primary
PM ₁₀	24 Hour	50 µg/m ³	150 µg/m ³	Same as Primary
	AAM	20 µg/m ³	–	Same as Primary
PM _{2.5}	24 Hour	–	35 µg/m ³	Same as Primary
	AAM	12 µg/m ³	12.0 µg/m ³	15.0 µg/m ³
CO	1 Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	–
	8 Hour	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	–
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	–	–
NO ₂	1 Hour	0.18 ppm (339 µg/m ³)	100 ppb (188 µg/m ³)	–
	AAM	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	Same as Primary
SO ₂	1 Hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)	–
	3 Hour	–	–	0.5 ppm (1,300 µg/m ³)
	24 Hour	0.04 ppm (105 µg/m ³)	–	–
Lead	30-day Avg.	1.5 µg/m ³	–	–
	Calendar Quarter	–	1.5 µg/m ³	Same as Primary
	Rolling 3-month Avg.	–	0.15 µg/m ³	

Table 2 (cont.)
AMBIENT AIR QUALITY STANDARDS

Pollutant	Averaging Time	California Standards	Federal Standards	
			Primary ¹	Secondary ²
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards	
Sulfates	24 Hour	25 µg/m ³		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m ³)		

Source: CARB 2016

¹ National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

² National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

O₃: ozone; ppm: parts per million; µg/m³: micrograms per cubic meter; PM₁₀: large particulate matter;

AAM: Annual Arithmetic Mean; PM_{2.5}: fine particulate matter; CO: carbon monoxide;

mg/m³: milligrams per cubic meter; NO₂ nitrogen dioxide; SO₂: sulfur dioxide; km: kilometer; –: No Standard.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. Areas that do not meet the NAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. On August 3, 2018, the SDAB was classified as a moderate nonattainment area for the 8-hour NAAQS for ozone (USEPA 2020). The SDAB is an attainment area or unclassified for the NAAQS for all other criteria pollutants including PM₁₀ and PM_{2.5}. The current federal attainment status for the SDAB is provided in Table 3, *Federal and State Air Quality Designations*.

Table 3
FEDERAL AND STATE AIR QUALITY DESIGNATIONS

Criteria Pollutant	Federal Designation	State Designation
O ₃ (1-hour)	(No federal standard)	Nonattainment
O ₃ (8-hour)	Nonattainment	Nonattainment
CO	Attainment	Attainment
PM ₁₀	Unclassifiable ¹	Nonattainment
PM _{2.5}	Attainment	Nonattainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassified
Visibility	(No federal standard)	Unclassified

Source: CARB 2018b; SDAPCD 2018

¹ At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.

2.3 STATE REGULATIONS

2.3.1 California Clean Air Act

CARB has established the more stringent California Ambient Air Quality Standards (CAAQS) for the seven criteria air pollutants listed above through the California Clean Air Act of 1988 (CCAA), and has also established CAAQS for additional pollutants, including sulfates, hydrogen sulfide (H₂S), vinyl chloride and visibility-reducing particles (see Table 1). Areas that do not meet the CAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. The SDAB is currently classified as a nonattainment area under the CAAQS for ozone (1-hour and 8-hour), PM₁₀, and PM_{2.5} (SDAPCD 2018). The current state attainment status for the SDAB is provided in Table 3.

CARB is the state regulatory agency with the authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The SDAPCD is responsible for developing and implementing the rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, developing of air quality management plans, and adopting and enforcing air pollution regulations for San Diego County (County).

2.3.2 State Implementation Plan

The CAA requires areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop plans, known as State Implementation Plans (SIPs). SIPs are comprehensive plans that describe how an area will attain the NAAQS. The 1990 amendments to the CAA set deadlines for attainment based on the severity of an area's air pollution problem.

SIPs are not single documents—they are a compilation of new and previously submitted plans, programs (e.g., monitoring, modeling, permitting), district rules, state regulations and federal controls. Many of California's SIPs rely on a core set of control strategies, including emission standards for cars and heavy trucks, fuel regulations and limits on emissions from consumer products. 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 forwards the SIP revisions to the USEPA for approval and publication in the Federal Register. The Code of Federal Regulations (CFR) Title 40, Chapter I, Part 52, Subpart F, Section 52.220 lists all of the items which are included in the California SIP (CARB 2009). At any one time, several California submittals are pending USEPA approval.

2.3.3 California Energy Code

California Code of Regulations (CCR) Title 24 Part 6, California's Energy Efficiency Standards for Residential and Nonresidential Buildings, were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Energy-efficient buildings require less electricity, natural gas, and other fuels. Electricity production from fossil fuels and on-site fuel combustion (typically for water heating) results in greenhouse gas (GHG) emissions.

The Title 24 standards are updated approximately every three years to allow consideration and possible incorporation of new energy efficiency technologies and methods. The 2019 Title 24 standards went into effect on January 1, 2020. 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 most significant efficiency improvements to the residential

standards is a requirement for onsite photovoltaic electricity generation (e.g., solar panels) for most new or modified residential building up to three stories high. The project proposes five story residential buildings and the solar panel requirement would not apply.

The standards are divided into three basic sets. First, there is a basic set of mandatory requirements that apply to all buildings. Second, there is a set of performance standards – the energy budgets – that vary by climate zone (of which there are 16 in California) and building type; thus, the standards are tailored to local conditions. Finally, the third set constitutes an alternative to the performance standards, which is a set of prescriptive packages that are basically a recipe or a checklist compliance approach. Future development per the proposed project would be required to be designed to meet the current Title 24 energy efficiency standards.

2.3.4 Toxic Air Contaminants

The Health and Safety Code (§39655, subd. (a)) defines a TAC as “an air pollutant which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health.” A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the CAA (42 United States Code Sec. 7412[b]) is a TAC. Under State law, the California Environmental Protection Agency (CalEPA), acting through CARB, is authorized to identify a substance as a TAC if it determines the substance is an air pollutant that may cause or contribute to an increase in mortality or an increase in serious illness, or that may pose a present or potential hazard to human health.

2.4 LOCAL REGULATIONS

2.4.1 Regional Air Quality Strategy

The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for the attainment and maintenance of the AAQS in the SDAB. The SDAPCD prepared the San Diego County Regional Air Quality Strategy (RAQS), which was initially adopted in 1991, and is updated on an approximate triennial basis. The most recent version of the RAQS was adopted by the SDAPCD in December 2016 (SDAPCD 2016a). As part of, and attached to, the RAQS are the Transportation Control Measures for the air quality plan prepared by SANDAG. Together, the RAQS and Transportation Control Measures provide the framework for achieving attainment of the CAAQS. The local RAQS, in combination with the plans from all other California nonattainment areas with serious (or worse) air quality problems, is submitted to the CARB, which develops the SIP.

The RAQS relies on information from CARB and SANDAG, including mobile and area source emissions, as well as information regarding projected growth in San Diego County, to estimate future emissions and then determine from that the strategies necessary for the reduction of emissions through regulatory controls. The CARB mobile source emission projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities and by the County of San Diego as part of the development of the County’s General Plan. While SANDAG collaborates with the SDAPCD on the development of the portion of the SIP applicable to the SDAB, the SDAPCD is the lead agency. As such, the SDAPCD is responsible for projecting all future mobile source emissions (using CARB’s mobile source emissions inventory EMFAC).

2.4.2 San Diego Air Pollution Control District Rules and Regulations

Future development pursuant to the project would be required to comply with SDAPCD Rules and Regulations which require the incorporation of best management practices (BMPs) during construction to reduce emissions of fugitive dust.

2.4.2.1 Rule 50 (Visible Emissions)

Particulate matter pollution impacts the environment by decreasing visibility (haze). These particles vary greatly in shape, size and chemical composition, and come from a variety of natural and manmade sources. Some haze-causing particles are directly emitted to the air such as windblown dust and soot. Others are formed in the air from the chemical transformation of gaseous pollutants (e.g., sulfates, nitrates, organic carbon particles) which are the major constituents of PM_{2.5}. These fine particles, caused largely by combustion of fuel, can travel hundreds of miles causing visibility impairment.

Visibility reduction is probably the most apparent symptom of air pollution. Visibility degradation is caused by the absorption and scattering of light by particles and gases in the atmosphere before it reaches the observer. As the number of fine particles increases, more light is absorbed and scattered, resulting in less clarity, color, and visual range. Light absorption by gases and particles is sometimes the cause of discolorations in the atmosphere but usually does not contribute very significantly to visibility degradation. Scattering by particulates impairs visibility much more readily. SDAPCD Rule 50 (Visible Emissions) sets emission limits based on the apparent density or opacity of the emissions using the Ringelmann scale.

2.4.2.2 Rule 51 (Nuisance)

SDAPCD Rule 51 (Nuisance) states that a person shall not 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. The provisions of the rule do not apply to odors emanating from agricultural operations in the growing of crops or raising of fowls or animals

2.4.2.3 Rule 55 (Fugitive Dust Control)

SDAPCD Rule 55 (Fugitive Dust Control) requires action be taken to limit dust from construction and demolition activities from leaving the property line. Similar to Rule 50 (Visible Emissions), Rule 55 (Fugitive Dust Control) places limits on the amount of visible dust emissions in the atmosphere beyond the property line. It further stipulates that visible dust on roadways as a result of track-out/carry-out shall be minimized through implementation of control measures and removed at the conclusion of each workday using street sweepers.

2.4.2.4 Rule 67.0.1 (Architectural Coatings)

Construction of development within the Specific Plan is required to comply with SDAPCD Rule 67.0.1 (Architectural Coatings) which requires residential interior/exterior flat coatings to be less than or equal to 50 grams per liter VOC content and interior/exterior non-flat coatings to be less than or equal to 100 grams per liter VOC content.

3.0 EXISTING CONDITIONS

3.1 CLIMATE AND METEOROLOGY

The climate in southern California, including the SDAB, is controlled largely by the large-scale meteorological condition that dominates the west coast of the United States: a seasonally semi-permanent high-pressure cell centered over the northeastern Pacific Ocean, called the Pacific high, which keeps most storms from affecting the California coast. Areas within 30 miles of the coast in the San Diego region, including the project site, experience moderate temperatures and comfortable humidity.

Temperature inversion layers (inversions; layers of warmer air over colder air) affect air quality conditions significantly because they influence the mixing depth (i.e., the vertical depth in the atmosphere available for diluting air contaminants near the ground). The highest air pollutant concentrations in the SDAB generally occur during inversions. During the summer, air quality problems in the SDAB are created due to the interaction between the ocean surface and the lower layer of the atmosphere, creating a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO₂ react under the strong, abundant sunlight in the San Diego region, creating smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving the air pollutants inland, toward the foothills. During the fall and winter, air quality problems are created due to CO and NO₂ emissions. High NO₂ levels usually occur during autumn or winter, on days with summer-like conditions.

The predominant wind direction in the vicinity of the project site is from the southwest and the average wind speed is approximately six miles per hour (mph; Iowa Environmental Mesonet [IEM] 2019). The annual average maximum temperature in the project area is approximately 75 degrees Fahrenheit (°F), and the annual average minimum temperature is approximately 52°F. Total precipitation in the project area averages approximately 13 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center [WRCC] 2006).

3.2 EXISTING SITE CONDITIONS

The project site is developed and currently contains a recreational vehicle resort used for both transient visitors to the San Diego region, with sites rented on a daily basis, and for longer term stays with sites rented on a monthly basis. The resort consists of 167 concrete-pad recreational vehicle sites, six permanent buildings, a swimming pool, paved driveways, landscaping, and three advertising billboards. The channelized Alvarado Creek traverses the property as it flows under Alvarado Road in the eastern portion of the site and continues southwest and west along the southern boundary of the western portion of the site.

The criteria pollutant and precursor emissions associated with operation of the existing land use were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2, described in Section 4.1, below. The estimated emissions for the Phase 1 area (Parcels 1-3) and Phase 2 area (Parcel 4) are shown in Table 4, *Existing Land Use Emissions*.

Table 4
EXISTING LAND USE EMISSIONS

Source Category	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Existing Land Use Parcels 1-3						
Area	2.6	<0.1	7.7	<0.1	<0.1	<0.1
Energy	<0.1	0.5	0.2	<0.1	<0.1	<0.1
Mobile	0.7	2.7	7.0	<0.1	1.8	0.5
Parcels 1-3 Total¹	3.4	3.4	14.9	<0.1	1.9	0.6
Existing Land Use Parcel 4						
Area	1.0	<0.1	3.0	<0.1	<0.1	<0.1
Energy	<0.1	0.2	<0.1	<0.1	<0.1	<0.1
Mobile	0.2	0.9	2.4	<0.1	0.7	0.2
Parcel 4 Total¹	1.3	1.1	5.4	<0.1	0.7	0.2

Source: CalEEMod (output data is provided in Appendix A)

¹ Total may not sum due to rounding. Parcels 1-3 correspond to Phase 1 of the project and Parcel 4 corresponds to Phase 2 of the project.

3.3 EXISTING AIR QUALITY

3.3.1 Attainment Designations

Attainment designations are discussed in Section 2.1 and Table 3. The SDAB is a federal and state nonattainment area for ozone and a state nonattainment area for PM₁₀ and PM_{2.5}.

3.3.2 Monitored Air Quality

The SDAPCD operates a network of ambient air monitoring stations throughout the San Diego region. The purpose of the monitoring stations is to measure ambient concentrations of criteria air pollutants and determine whether the ambient air quality meets state and federal standards, pursuant to the CAAQS and the NAAQS. The nearest ambient monitoring station to the project site is the El Cajon-Lexington Elementary School monitoring station located approximately five miles east of the project site at 533 First Street in El Cajon. This station monitors the following criteria air pollutants: O₃, NO₂, PM₁₀, and PM_{2.5}. Air quality data collected at the El Cajon-Lexington Elementary School monitoring station for the years 2016 through 2018 are shown in Table 5, *Air Quality Monitoring Data*.

Monitoring data at the El Cajon-Lexington Elementary School station reported one exceedance of the one-hour state ozone standard in 2017 and several days above the eight-hour state/federal ozone standard throughout 2016 to 2018. No exceedances of the state or federal standards for NO₂ occurred during 2016 to 2018. There were no exceedances of the state or federal standards for PM₁₀ during 2016 to 2018; the annual average for PM_{2.5} exceeded the state and federal standard in 2017 and 2018, however, insufficient data was available for 2016. The maximum 24-hour concentrations of PM_{2.5} indicates levels above the federal standard for one day in 2018 (CARB 2020a).

Table 5
AIR QUALITY MONITORING DATA

Pollutant Standards	2016	2017	2018
Ozone (O₃)			
Maximum concentration 1-hour period (ppm)	0.087	0.096	0.087
Maximum concentration 8-hour period (ppm)	0.074	0.081	0.079
Days above 1-hour state standard (>0.09 ppm)	0	1	0
Days above 8-hour state/federal standard (>0.070 ppm)	1	9	2
Nitrogen Dioxide (NO₂)			
Maximum 1-hour concentration (ppm)	0.048	0.045	0.045
Days above state 1-hour standard (0.18 ppm)	0	0	0
Days above federal 1-hour standard (0.100 ppm)	0	0	0
Annual average (ppm)	*	0.010	0.008
Exceed annual federal standard (0.053 ppm)	*	No	No
Exceed annual state standard (0.030 ppm)	*	No	No
Suspended Particulates (PM₁₀)			
Maximum 24-hour concentration (µg/m ³)	43.0	50.0	43.0
Measured Days above 24-hr state standard (>50 µg/m ³)	0	0	0
Measured Days above 24-hr federal standard (>150 µg/m ³)	0	0	0
Annual average (µg/m ³)	*	23.0	23.0
Exceed state annual standard (20 µg/m ³)	*	Yes	Yes
Suspended Particulates (PM_{2.5})			
Maximum 24-hour concentration (µg/m ³)	23.9	31.8	36.2
Days above 24-hour federal standard (>35 µg/m ³)	0	0	1
Annual average (µg/m ³)	*	9.6	10.5
Exceed state and federal annual standard (12 µg/m ³)	*	No	No

Source: CARB 2020a. Data collected at the El Cajon-Lexington Elementary School air quality monitoring station.

ppm = parts per million; µg/m³ = micrograms per cubic meter; * = insufficient data

3.4 SENSITIVE RECEPTORS

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis (CARB 2005, OEHHA 2015). Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers.

The closest existing sensitive receptors to the project site are single- and multi-family residences across the trolley tracks to the south, approximately 80 feet from the southern boundary of the project site; and single- and multi-family residences across I-8 to the north, approximately 260 feet from the northern boundary of the project site. The closest school is the Maryland Avenue Elementary School, approximately 1,100 feet (0.2 mile) across I-8 to the north. The closest daycare center is the Center for Young Imaginations, approximately 1,500 feet (0.3 mile) to the south. There are no hospitals within 0.5 mile of the project site.

4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA

4.1 METHODOLOGY

Air emissions from mobile, area, and energy sources were calculated using the CalEEMod, version 2016.3.2. CalEEMod is a computer model used to estimate air emissions resulting from land development projects throughout the state of California. CalEEMod was developed by CAPCOA in collaboration with the California air quality management and pollution control districts, primarily the South Coast Air Quality Management District (SCAQMD). The calculation methodology, source of emission factors used, and default data is described in the CalEEMod User's Guide, and Appendices A, D, and E (CAPCOA 2017).

In brief, CalEEMod is a computer model that estimates criteria air pollutant and greenhouse gas emissions from mobile (i.e., vehicular) sources, area sources (fireplaces, woodstoves, and landscape maintenance equipment), energy use (electricity and natural gas used in space heating, ventilation, and cooling; lighting; and plug-in appliances), water use and wastewater generation, and solid waste disposal. Emissions are estimated based on land use information input to the model by the user.

In the first module, the user defines the specific land uses that will occur at the project site. The user also selects the appropriate land use setting (urban or rural), operational year, location, climate zone, and utility provider. The input land uses, size features, and population are used throughout CalEEMod in determining default variables and calculations in each of the subsequent modules. The input land use information consists of land use subtypes (such as the residential subtypes of single-family residential and multi-family medium-rise residential) and their unit or square footage quantities. For the project, the residential buildings were modeled as high-rise apartments with 950 dwelling units (DU). The commercial space allowed in the Specific Plan was included in the modeling, assuming a maximum of 15,000 square feet.

Subsequent modules include construction (including off-road vehicle emissions), mobile (on-road vehicle emissions), area sources (woodstoves, fireplaces, consumer products [cleansers, aerosols, solvents], landscape maintenance equipment, architectural coatings), water and wastewater, and solid waste. Each module comprises multiple components including an associated mitigation module to account for further reductions in the reported baseline calculations. Other inputs include trip generation rates, trip lengths, vehicle fleet mix (percentage autos, medium truck, etc.), trip distribution (i.e., percent work to home, etc.), duration of construction phases, construction equipment usage, grading areas, season, and ambient temperature, as well as other parameters.

In various places the user can input additional information and/or override the default assumptions to account for project- or location-specific parameters. For this assessment, the default parameters were not changed unless otherwise noted. The CalEEMod output files are included in Appendix A to this report.

4.1.1 Construction Emissions

Based on a conservative estimate (earliest and highest intensity of construction activities) of the project construction timeline, Phase 1 construction is assumed to begin July 2021 and be completed by September 2023, for a total construction period of 26 months. Phase 2 construction is assumed to begin September 2023 and be completed by May 2025, for a total construction period of 20 months. The actual construction period may differ based on market conditions. The quantity, duration, and intensity of construction activity influence the amount of construction emissions and related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a relatively large amount of construction activity is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than assumed in CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

Construction activities would include demolition, site preparation, grading and installation of underground utilities, paving, construction of structures, and architectural coating (e.g., painting). Improvement to the Alvarado Creek channel and Alvarado Road are assumed to occurring during the grading and utilities phase. During Phase 1 site preparation, an export of approximately 6,500 cubic yards of vegetation/soil and old concrete/asphalt is anticipated. During Phase 1 grading/utilities, an export of approximately 2,000 cubic yards of soil is anticipated for underground utilities and creek channel improvements. During Phase 2 site preparation, an export of approximately 3,060 cubic yards of vegetation/soil and old concrete/asphalt is anticipated. During Phase 2 grading/utilities, an export of approximately 1,000 cubic yards of soil for underground utilities is anticipated. All other Phase 1 and Phase 2 grading and excavation cut and fill activities are assumed to be balanced onsite (e.g., no import or export of soil).

Construction would require heavy equipment during demolition, site preparation, grading/utilities, building construction, and paving. Construction equipment estimates are based on default values in CalEEMod, Version 2016.3.2 with additional equipment added for excavation for underground utilities and creek channel improvements, based on assumptions used for similar projects. Table 6, *Construction Equipment Assumptions*, presents a summary of the assumed equipment that would be involved in each stage of construction.

Table 6
CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Phase	Equipment	Number
Phase 1		
Demolition	Concrete/Industrial Saws	1
	Excavators	2
	Rubber Tired Dozers	1
Site Preparation	Excavators	1
	Rubber Tired Dozers	2
	Rubber Tired Loaders	1
	Tractors/Loaders/Backhoes	2
Grading/Utilities	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Scrapers	2
	Tractors/Loaders/Backhoes	2
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Architectural Coating	Air Compressors	1
Phase 2		
Demolition	Concrete/Industrial Saws	1
	Excavators	1
	Rubber Tired Dozers	1
Site Preparation	Excavators	1
	Rubber Tired Dozers	1
	Rubber Tired Loaders	1
	Tractors/Loaders/Backhoes	1
Grading/Utilities	Excavators	1
	Graders	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	3
Paving	Cement and Mortar Mixers	2
	Pavers	1
	Paving Equipment	2
	Rollers	2
	Tractors/Loaders/Backhoes	1
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Architectural Coating	Air Compressors	1

Source: CalEEMod (output data, including equipment horsepower, is provided in Appendix A)

The construction schedule was determined by using CalEEMod defaults and standard assumptions for similarly sized projects, taking into consideration the features of the project and the overall estimated construction schedule. Architectural coating is assumed to occur concurrently with the last half of building construction. The construction schedule assumed in the modeling is shown in Table 7, *Anticipated Construction Schedule*.

Table 7
ANTICIPATED CONSTRUCTION SCHEDULE

Construction Activity	Construction Period		
	Start	End	Number of Working Days
Phase 1			
Demolition	7/1/2021	7/14/2021	10
Site Preparation	7/15/2021	9/22/2021	50
Grading/Utilities	9/23/2021	1/31/2022	93
Paving	2/1/2022	2/28/2022	20
Building Construction	3/1/2022	8/31/2023	393
Architectural Coating	12/1/2022	8/31/2023	196
Phase 2			
Demolition	9/1/2023	9/14/2023	10
Site Preparation	9/15/2023	11/23/2023	50
Grading/Utilities	11/24/2023	4/2/2024	93
Paving	4/3/2024	4/30/2024	20
Building Construction	5/1/2024	4/30/2025	261
Architectural Coating	10/31/2024	4/30/2025	130

Source: CalEEMod (output data is provided in Appendix A)

Construction activities would implement the BMPs, described in Section 1.5, for the control of fugitive dust. The emissions modeling accounts for watering all exposed surfaces a minimum of twice per day and enforcing a 15-mph speed limit for all vehicles traveling on unpaved surfaces. The modeling also assumes conformance with SDAPCD Rule 67, as described in Sections 2.4, limiting the VOC content of architectural coatings to 50 g/L for flat coating and 100 g/L for non-flat coatings.

4.1.2 Operational Emissions

4.1.2.1 Area Source Emissions

Area sources include emissions from landscaping equipment, the use of consumer products, the reapplication of architectural coatings for maintenance, and hearths. With the exception of the number and mix of fireplaces, emissions associated with area sources were estimated using the CalEEMod default values. It was assumed the project would not permit wood-burning stoves or wood-burning fireplaces, and the CalEEMod default value for the number of apartments with natural gas fireplaces was maintained.

4.1.2.2 Energy Emissions

Development within the project would use electricity for lighting, heating and cooling. Natural gas and electricity would be supplied by San Diego Gas and Electric. Direct emissions from the burning of natural gas may result from furnaces, hot water heaters, and kitchen appliances. Electricity generation typically

entails the combustion of fossil fuels, including natural gas and coal, which is then transmitted to end users. A building's electricity use is thus associated with the off-site or indirect emission of greenhouse gases (GHGs) at the source of electricity generation (power plant) and is not included in this analysis.

4.1.2.3 Vehicular (Mobile) Sources

Operational emissions from mobile source emissions are associated with vehicle trip generation and trip length. Based on the trip generation rate from the Traffic Impact Study (TIS), the project would generate 5,415 average daily trips and the existing land use generates 668 average daily trips for a net increase of 4,747 average daily trips. The TIS also analyzed vehicle miles traveled (VMT) and determined that each trip would have an average distance of 4.83 miles (Kimley Horn 2020).

4.1.3 Impacts to New Sensitive Receptors

The project would site new sensitive receptors near a high-volume roadway (I-8). A health risk assessment (HRA) was completed to estimate to potential risks to future residents for exposure to DPM from I-8. The HRA was completed following OEHHA's *Air Toxics Hot Spots Program – Risk Assessment Guidelines – Guidance Manual for Preparation of Health Risk Assessments* (2015).

4.1.3.1 Estimation of Emissions

Almost all DPM is 10 microns or less in diameter. Therefore, it was conservatively assumed that all PM₁₀ emissions from diesel-powered vehicle exhaust emissions are DPM. Emissions factors from diesel vehicles and the fleet mix typical of traffic on San Diego County roadways was estimated using the CARB EMFAC2017 online database (CARB 2020b). Emissions were estimated for the earliest anticipated first full year of Phase 1 operation, 2024. The peak-hour traffic volume on I-8 near the project site (from 70th Street to Fletcher Parkway) was estimated from Caltrans 2018 traffic counts (Caltrans 2018). Anticipated increases in traffic between 2018 and 2024 were extrapolated from data in the SANDAG Traffic Forecast Information Center (SANDAG 2020). All traffic was assumed to be traveling at the posted speed limit for I-8 (55 mph for medium- and heavy-duty trucks and 65 mph for all other vehicles). This speed scenario is conservative (higher emissions)—an examination of truck emissions from data in EMFAC2017 indicated that, between 5 mph and 55 mph, the highest emissions per mile traveled occur at 55 mph. The complete calculation sheets are included in Appendix B, *HRA Calculations and Model Output*, to this report.

4.1.3.2 Dispersion Modeling

Localized concentrations of pollutants were modeled using the Lakes AERMOD View version 9.8.3. The Lakes program utilizes the USEPA's AERMOD gaussian air dispersion model. Emissions from vehicles traveling on I-8 (diesel exhaust only) were modeled as four volume line sources from 70th Street to Fletcher Parkway, using the USEPA haul road modeling parameter recommendations (USEPA 2011). Each volume source included two travel-lanes of the 8-lane section of I-8. All heavy- and medium duty-duty trucks were assumed to be traveling exclusively in the outer two (right-hand) lanes in each travel direction. All other diesel vehicle traffic was assumed to be distributed equally across all travel lanes.

CARB provides pre-processed meteorological data suitable for use with AERMOD (CARB 2015). The available data set most representative of conditions in the project vicinity was from the Montgomery Field Airport station, approximately six miles northwest of the project site. The Montgomery Field Airport data set includes five years of data collected from 2009 to 2013. Urban dispersion coefficients

were selected in the model to reflect the developed nature of the project site and the region downwind (east).

United States Geological Survey (USGS) National Elevation Dataset (NED) files with a 10-meter resolution covering an area approximately one mile around the project site were used in the model to cover the analysis area. Terrain data was imported to the model using AERMAP (a terrain preprocessing program for AERMOD).

The DPM emissions were modeled as variable emissions by hour-of-day with each hour set as a fraction of the peak hour emissions based on studies of hourly traffic volume distribution typical of San Diego freeways (Wyle Laboratories 1973; Ogden International 1986).

The Lakes AERMOD View output reports (which include all modeling parameters selected) are included in Appendix B to this report.

4.1.3.3 Risk Determination

Discrete receptors were placed in the model at estimated representative locations of apartment balconies facing the freeway for each occupied floor of the buildings within the project (starting at the 2nd floor for Building 1, and at the 4th floor for Buildings 2, 3, and 4. The height of the receptors (flag pole height) was set to the estimated floor elevations for each building plus four feet, representing the average breathing height for a standing individual.

Health risks resulting from localized concentration of DPM were estimated using the CARB Hotspots Analysis and Reporting Program (HARP), Air Dispersion Modeling and Risk Tool (ADMRT) version 19121. The plot files of localized concentrations from AERMOD were imported into the ADMRT model to determine health risks. The model conservatively assumes that residents would be standing and breathing on the apartment balconies every day between 17 and 21 hours per day (depending on the age group, starting with fetuses in utero in the third trimester of pregnancy) for 30 years. The OEHHHA derived intake rate percentile method was selected. The output of the dispersion modeling provides unitized ground level concentrations of the modeled constituent in micrograms per cubic meter for the maximum one-hour and the average over the five-year period of the meteorological data. An inventory of maximum hourly and average annual emissions for each source of TACs was entered in the ADMRT program. The ADMRT combines the emissions inventory, the ground level concentration plots from AERMOD, and pollutant-specific risk factors to determine the health risks at each receptor point identified in the model. The ADMRT output files are included in Appendix B to this report.

4.2 GUIDELINES FOR THE DETERMINATION OF SIGNIFICANCE

Thresholds used to evaluate potential air quality and odor impacts are based on applicable criteria in the State's California Environmental Quality Act (CEQA) Guidelines Appendix G. A significant air quality and/or odor impact could occur if the implementation of the proposed project would:

1. Conflict with or obstruct implementation of the San Diego RAQS or applicable portions of the SIP; or
2. Result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is non-attainment under an applicable NAAQS or CAAQS; or

3. Expose sensitive receptors to substantial pollutant concentrations; or
4. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

To determine whether the project would result in a cumulatively considerable net increase of PM₁₀, PM_{2.5}, or the ozone precursors NO_x and VOCs, emissions were evaluated based on the quantitative emission thresholds established by the SDAPCD. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIAs; 2016b). In the absence of a significance threshold for PM_{2.5} from the SDAPCD, the SCAQMD's screening threshold of 55 pounds per day or 10 tons per year was applied to this analysis (2015).

For CEQA purposes, these screening criteria were used as numeric methods to determine if the project would result in a significant impact to air quality or an adverse effect on human health. The screening thresholds are shown in Table 8, *Screening-level Thresholds for Air Quality Impact Analysis*.

Table 8
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant		Total Emissions	
Construction Emissions (Pounds/Day)			
Respirable Particulate Matter (PM ₁₀)		100	
Fine Particulate Matter (PM _{2.5})		55	
Oxides of Nitrogen (NO _x)		250	
Oxides of Sulfur (SO _x)		250	
Carbon Monoxide (CO)		550	
Volatile Organic Compounds (VOCs)		137	
Operational Emissions			
	Pounds per Hour	Pounds per Day	Tons per Year
Respirable Particulate Matter (PM ₁₀)	---	100	15
Fine Particulate Matter (PM _{2.5})	---	55	10
Oxides of Nitrogen (NO _x)	25	250	40
Oxides of Sulfur (SO _x)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOC)	---	137	15
Toxic Air Contaminant Emissions			
Excess Cancer Risk	1 in 1 million 10 in 1 million with T-BACT		
Non-Cancer Hazard	1.0		

Source: SDAPCD 2016b; SCAQMD 2015

T-BACT = Toxics-Best Available Control Technology

SDAPCD Rule 51 (Nuisance) prohibits emissions from any source whatsoever in such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. It is generally accepted that the considerable number of persons requirement in Rule 51 is normally satisfied when 10 different individuals/households have made separate complaints within 90 days. Odor complaints from a "considerable" number of persons or businesses in the area would be considered to be a significant, adverse odor impact.

5.0 AIR QUALITY IMPACT ANALYSIS

5.1 ISSUE 1: CONSISTENCY WITH THE REGIONAL AIR QUALITY PLAN

The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for ozone. In addition, the SDAPCD relies on the SIP, which includes the SDAPCD's plans and control measures for attaining the ozone NAAQS. These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the CalEPA and CARB, and the emissions and reduction strategies related to mobile sources are considered in the RAQS and SIP.

The RAQS relies on information from CARB and SANDAG, including projected growth in the County, and mobile, area, and all other source emissions in order to project future emissions and determine from that the strategies necessary for the reduction of stationary source emissions through regulatory controls. The CARB's mobile source emission projections and SANDAG's growth projections are based on population, employment and transportation trends, and land use plans developed by the local governments. Accordingly, projects that propose development that is consistent with the population and employment growth anticipated by these land use plans would be consistent with the RAQS. If a project proposes development that results in growth greater than that anticipated in the adopted land use plans and SANDAG's growth projections upon which the RAQS is based, the project may conflict with the RAQS and SIP and could have a potentially significant impact on air quality. This situation would warrant further analysis to determine if the project and the surrounding projects would exceed the growth projections used in the RAQS for the specific subregional area.

Implementation of the project would result in a change in the City of La Mesa (City) general plan land use designation for the project site from "Light Industrial" and "Region Serving Commercial" to a specific plan overlay that would allow higher density mixed use multi-family housing and commercial land uses within the design form guidelines of the Specific Plan. Relative to the current City general plan, the proposed project would result in an overall increase in the capacity for multi-family residential units in the City. Based on the CalEEMod default values (described in Section 5.2, below), the default population density for high-rise multi-family apartments for San Diego County would be 2.86 persons per dwelling unit (DU) and the project could increase the City's population by approximately 2,717 residents. Therefore, implementation of the project would potentially result in an increase of emissions of ozone precursors (i.e., ROG and NO_x) and PM greater than what is accounted for in the RAQS as a result.

Even though the project would result in a potential increase in the City's population, the project would be consistent with General Plan policy LU-3.1.7 (City of La Mesa 2013): "Encourage mixed-use transit-oriented development near public transportation facilities; new construction should be compact in form to take advantage of these transit-rich locations." and General Plan objective CS-3.1: "Facilitate a reduction of automobile dependency in favor of affordable alternative, sustainable modes of travel." The project is within ½ mile of the 70th Street Trolley Station, which serves the Metropolitan Transit System (MTS) Green Line Trolley. Due to the project's proposed higher density multi-family housing and proximity to a major transit stop, the project would be considered TOD. TOD is a key component of SANDAG's *2050 Regional Transportation Plan and Sustainable Communities Strategy* to mitigate the adverse effects of traffic congestion and reduce GHG emissions (SANDAG 2011).

Another measurement tool used to determine consistency with the RAQS is to determine how a project would accommodate the expected increase in population or employment. Generally, if a project is planned in a way that results in the minimization of VMT compared to regional averages, and consequently the minimization of air pollutant emissions, that aspect of the project would be consistent with the RAQS. The TIS analyzed the project's VMT per capita and compared it to the San Diego region. The regional VMT per capita is 15.3 miles and the project VMT per capita would be 13.5 miles, based primarily on proximity to the transit station (Kimley Horn 2020). Therefore, without consideration of other measures, the project would have a VMT estimate that is 88 percent below the regional total. The TIS also includes estimated VMT reductions that would further reduce the project's VMT, including an employer transit pass subsidy, transit-oriented development, parking pricing, pedestrian facility improvements, and bike facility improvements (see Table 4-2 in the TIS). Implementation of TOD alone would further reduce VMT by 5.2%, bringing the project's VMT below 85 percent of the regional average.

Therefore, although the project would increase population density over what was considered in the RAQS, it would result in VMT per capita that would be below the region-wide average, which would overall reduce vehicular air pollutant emissions consistent with regional goals such as SANDAG's Sustainable Communities Strategy, SB 743, and the City's General Plan and impacts would be less than significant.

5.2 ISSUE 2: CUMULATIVELY CONSIDERABLE NET INCREASE OF NONATTAINMENT CRITERIA POLLUTANTS

The project would generate criteria pollutants in the short-term during construction and the long-term during operation. To determine whether a project would result in a cumulatively considerable net increase in criteria pollutant emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, a project's emissions are evaluated based on the quantitative emission thresholds established by the SDAPCD (as shown in Table 8).

5.2.1 Construction (Short-term) Emissions

The project's temporary construction emissions were estimated using CalEEMod as described in Section 4.1. The results of the modeling of the project's construction emissions of criteria pollutants and precursors for Phases 1 and 2 are shown in Table 9, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the SDAPCD thresholds. The data assumes implementation of the construction BMPs and conformance with SDAPCD Rule 67, as described in Sections 2.4 and 4.1 4, specifically watering all exposed areas twice per day, enforcing a vehicle speed limit of 15 mph on all unpaved roads on the project site, and limiting the VOC content of architectural coatings to 50 g/L for flat coating and 100 g/L for non-flat coatings. The complete CalEEMod output is provided in Appendix A to this report.

Table 9
MAXIMUM DAILY CONSTRUCTION EMISSIONS

Construction Phase	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Phase 1						
Demolition	1.9	19.0	14.7	<0.1	1.3	1.9
Site Preparation	3.2	36.0	18.9	<0.1	7.4	4.5
Grading/Utilities	4.3	46.5	31.4	0.1	6.1	3.5
Paving	1.3	11.2	14.9	<0.1	0.7	0.6
Building Construction	4.8	33.0	37.2	0.1	7.8	2.7
Architectural Coatings	23.4	1.5	2.7	<0.1	0.4	0.2
Phase 1 Maximum Daily Emissions^{1, 2}	28.2	46.5	39.9	0.1	8.2	4.5
Phase 2						
Demolition	1.1	10.0	8.2	<0.1	0.6	0.5
Site Preparation	1.1	12.0	8.4	<0.1	3.4	2.0
Grading/Utilities	1.8	18.2	15.2	<0.1	3.8	2.3
Paving	0.9	8.3	12.6	<0.1	0.6	0.4
Building Construction	2.7	19.0	24.0	0.1	3.6	1.4
Architectural Coatings	15.9	1.3	2.6	<0.1	0.4	0.2
Phase 2 Maximum Daily Emissions^{1, 2}	18.6	20.3	26.6	<0.1	4.0	2.3
<i>SDAPCD Thresholds</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
<i>Exceed Thresholds?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>

Source: CalEEMod (output data is provided in Appendix A)

¹ Totals may not sum due to rounding.

² The maximum daily emissions of some pollutants would be the sum of Building Construction and Architectural Coatings which would occur concurrently for both Phases.

As shown in Table 9, the project's temporary Phase 1 and Phase 2 construction-related criteria pollutant and precursor emissions would be below the SDAPCD's significance thresholds. Therefore, the project's construction activities would not result in a cumulatively considerable net increase of criteria pollutants that would violate any air quality standard or contribute substantially to an existing or projected air quality violation. The project's construction activities would not, therefore, conflict with the NAAQS or CAAQS, or result in adverse human health effects, and would have less than significant impacts.

5.2.2 Operation (Long-term) Emissions

The project's long-term operational emissions were estimated using CalEEMod as described in Section 4.1. Because the long-term operation of the Phase 1 would occur concurrently with the temporary construction activities for the Phase 2, the maximum daily emissions during construction of the project phase 2 would be the aggregate of the phase 1 operational emissions, plus the phase 2 construction emissions, and minus the existing land use emissions. The net total emissions from Phase 1 operation and Phase 2 construction, minus the existing land use emissions, are shown in Table 10, *Phase 1 Operational and Phase 2 Construction Concurrent Emissions*. The operational data assumes implementation of the 2019 Title 24 building energy efficiency and CALGreen standards as described in Section 2.3. The complete CalEEMod output is provided in Appendix A to this report.

Table 10
PHASE 1 OPERATIONAL AND PHASE 2 CONSTRUCTION CONCURRENT EMISSIONS

Source Category	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Project Phase 1						
Area	17.8	6.5	55.8	<0.1	0.8	0.8
Energy	0.1	1.2	0.5	<0.1	0.1	0.1
Mobile	4.3	16.3	43.7	0.1	13.8	3.8
Phase 1 Operational Subtotal ¹	22.3	24.0	100.1	0.2	14.7	4.6
Phase 2 Construction (From Table 9)	18.6	20.3	26.6	<0.1	4.0	2.3
Less Existing Phase 1 Land Use (From Table 4)	(3.4)	(3.4)	(14.9)	(<0.1)	(1.9)	(0.6)
Net Maximum Daily Emissions	37.5	40.9	111.8	0.2	16.8	6.3
<i>SDAPCD Thresholds</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
Exceed Thresholds?	No	No	No	No	No	No

Source: CalEEMod (output data is provided in Appendix A)

¹ Total may not sum due to rounding.

The final total maximum daily operation emissions, after completion of construction for both Phase 1 and Phase 2, is shown in Table 11, *Net Total Operational Emissions*.

Table 11
NET TOTAL OPERATIONAL EMISSIONS

Source Category	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Project Phase 2						
Area	8.3	3.1	26.4	<0.1	0.4	0.4
Energy	<0.1	0.6	0.2	<0.1	<0.1	<0.1
Mobile	1.8	7.2	18.6	<0.1	6.5	1.8
Phase 2 Operational Subtotal ¹	10.2	10.9	45.2	<0.1	7.0	2.2
Phase 1 Operational Subtotal (From Table 10)	22.3	24.0	100.1	0.2	14.7	4.6
Less Existing Phase 1 Land Use (From Table 4)	(3.4)	(3.4)	(14.9)	(<0.1)	(1.9)	(0.6)
Less Existing Phase 2 Land Use (From Table 4)	(1.3)	(1.1)	(5.4)	(<0.1)	(0.7)	(0.2)
Net Maximum Daily Emissions	27.8	30.3	125.0	0.2	19.1	6.0
<i>SDAPCD Thresholds</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>55</i>
Exceed Thresholds?	No	No	No	No	No	No

Source: CalEEMod (output data is provided in Appendix A)

¹ Total may not sum due to rounding.

As shown in Table 10 and Table 11, all the project's maximum daily emissions of criteria pollutants and precursors for concurrent Phase 1 operation and Phase 2 construction, and for the final total operation would be below the SDAPCD's significance thresholds. Therefore, the project's operational maximum daily emissions would not result in a cumulatively considerable net increase of criteria pollutants that would violate any air quality standard or contribute substantially to an existing or projected air quality violation. Long-term operation of the would not, therefore, conflict with the NAAQS or CAAQS, or result in adverse human health effects, and would have less than significant impacts

5.3 ISSUE 3: IMPACTS TO SENSITIVE RECEPTORS

5.3.1 Construction Diesel Particulate Matter Emissions

Implementation of the project would result in the use of heavy-duty construction equipment, haul trucks, on-site generators, and construction worker vehicles. These vehicles and equipment could generate the TAC DPM. Generation of DPM from construction projects typically occurs in a localized area (e.g., at the project site) for a short period of time. Because construction activities and subsequent emissions vary depending on the phase of construction (e.g., grading, building construction), the construction-related emissions to which nearby receptors are exposed to would also vary throughout the construction period. During some equipment-intensive phases such as grading, construction-related emissions would be higher than other less equipment-intensive phases such as hangar construction. Concentrations of mobile-source DPM emissions are typically reduced by 70 percent at approximately 500 feet (CARB 2005).

The dose (of TAC) to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance in the environment and the extent of exposure a person has with the substance; a longer exposure period to a fixed amount of emissions would result in higher health risks. Current models and methodologies for conducting cancer health risk assessments are associated with longer-term exposure periods (typically 30 years for individual residents based on guidance from OEHHA) and are best suited for evaluation of long duration TAC emissions with predictable schedules and locations. These assessment models and methodologies do not correlate well with the temporary and highly variable nature of construction activities. Cancer potency factors are based on animal lifetime studies or worker studies where there is long-term exposure to the carcinogenic agent. There is considerable uncertainty in trying to evaluate the cancer risk from projects that will only last a small fraction of a lifetime (Office of Environmental Health Hazard Assessment [OEHHA] 2015). Considering this information, the highly dispersive nature of DPM, and the fact that construction activities would occur at various locations throughout the project site, it is not anticipated that construction of the project would expose sensitive receptors to substantial DPM concentrations. Therefore, this impact would be less than significant.

5.3.2 Construction Asbestos and Lead-Based Paint Emissions

Asbestos dust and lead are known carcinogens classified as TACs by CARB. Both may be found in buildings constructed prior to 1979 when lead was used in LBP and asbestos was used as a component of building materials such as walls, ceilings, insulation, or fireproofing. Demolition of existing structures erected prior to 1979 could result in the disturbance of ACMs and LBP.

Airborne asbestos is regulated in accordance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) asbestos regulations. Federal and state regulations prohibit emissions of asbestos from demolition or construction activities. Following identification of friable ACMs, federal and state Occupational and Safety Health Administration (OSHA) regulations require that asbestos trained, and certified abatement personnel perform asbestos abatement and that all asbestos-containing materials removed from on-site structures be hauled to a licensed receiving facility and disposed of under proper manifest by a transportation company certified to handle asbestos. In accordance with the SDAPCD Rule 1206, *Asbestos Removal, Renovation, and Demolition*, prior to commencement of demolition operations and prior to submitting the notifications required by Section (e) of Rule 1206, a facility survey shall be performed to determine the presence or absence of ACM, regardless of the age of the facility

(SDAPCD 2017). USEPA's Lead Renovation, Repair and Painting Rule (RRP Rule) requires that firms performing renovation, repair, and painting projects that disturb LBP in structures built before 1978 have their firm certified by USEPA (or an authorized state), use certified renovators who are trained by USEPA-approved training providers, and follow lead-safe work practices. These regulations specify precautions and safe work practices that must be followed to minimize the potential for release of asbestos fibers or lead dust and require notice to federal and/or local government agencies prior to beginning demolition or renovation that could disturb ACM. Therefore, compliance with established regulations would ensure that potential impacts associated with ACM and LBP during project demolition activities would be less than significant.

5.3.3 Carbon Monoxide Hotspots

A CO hotspot is an area of localized CO pollution in excess of the NAAQS concentration limit that is typically caused by severe vehicle congestion on major roadways. Transport of the criteria pollutant CO is extremely limited; CO disperses rapidly with distance from the source under normal meteorological conditions. Under certain meteorological conditions, however, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Areas of high CO concentrations, or “hot spots,” are typically associated with high volume intersections that are projected to operate at unacceptable levels of service during the peak commute hours.

Neither the City nor the SDAPCD have adopted screening methods for CO hotspots. Therefore, the screening methods of the Sacramento Metropolitan Air Quality Management District (SMAQMD) are used for this analysis because the SMAQMD jurisdiction is a metropolitan area in an interior valley with greater potential for inversion layers and increased CO concentrations than for the project area, resulting in a more conservative analysis. The SMAQMD states that a project would result in a less than significant impact to local CO concentrations if it meets all of the below criteria (SMAQMD 2016):

- The affected intersection carries less than 31,600 vehicles per hour;
- The project does not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, below-grade roadway, or other location where horizontal or vertical mixing of air would be substantially limited; and
- The affected intersection, which includes a mix of vehicle types, is not anticipated to be substantially different from the County average, as identified by EMFAC or CalEEMod models.

The project would not contribute traffic to a location where horizontal or vertical mixing of air would be substantially limited. All intersections affected by the project would include a mix of vehicle types that are not anticipated to be substantially different from the County average fleet mix, as identified in CalEEMod. According to the TIS, the busiest project-affected intersection would be the intersection of Fletcher Parkway and Baltimore Drive which would carry approximately 4,300 vehicles (including project trips) during the peak hour (Kimley Horn 2020). This would be far below the screening level of 31,600 vehicles per hour. Therefore, the project's contribution to future traffic would not result in CO hotspots and the impact would be less than significant.

5.3.4 New Sensitive Receptors

The incremental excess cancer risk is an estimate of the chance a person exposed to a specific source of a TAC may have of developing cancer from that exposure beyond the individual's risk of developing cancer from existing background levels of TACs in the ambient air. For context, the average cancer risk from TACs in the ambient air for an individual living in an urban area of California is 830 in 1 million (CARB 2015). Cancer risk estimates do not mean, and should not be interpreted to mean, that a person will develop cancer from estimated exposures to toxic air pollutants.

The potential health risks to future project residents from exposure to DPM emissions from vehicles on I-8 was modeled as described in Section 4.1, above. The resulting highest predicted incremental increased cancer risk for each residential floor of the project buildings is shown in Table 12, *project Residential Increased Incremental Cancer Risk from DPM*. As shown in Table 12, the highest estimated incremental increase in cancer risk to future project residents from DPM emissions on I-8 would be 6.2 in 1 million, measured on the apartment balconies facing I-8 on the second floor of Building 1. This increase in risk would be below the SDAPCD threshold of 10 in 1 million. The estimated risk assumes an individual standing and breathing on the apartment balcony every day between 17 and 21 hours per day for 30 years. The risk estimate does not account for future reductions of DPM emissions as more stringent CARB and USEPA diesel engine emissions standards take effect and older vehicles are retired.

Table 12
PROJECT RESIDENTIAL INCREMENTAL INCREASED CANCER RISK FROM DPM

Building	Risk by Residential Floor (chances per million)						
	2	3	4	5	6	7	8
Building 1	6.2	3.5	1.9	1.1	0.7	*	*
Building 2	*	*	1.7	1.1	0.7	0.5	0.4
Building 3	*	*	1.8	1.1	0.8	0.6	0.4
Building 4	*	*	1.9	1.2	0.8	0.6	0.5

Source: CalEEMod (output data is provided in Appendix A)

* = no residences facing the freeway on the floor.

5.4 ISSUE 4: ODORS

According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations (SCAQMD 1993). The project, involving a single-family residential development, would not include any of these uses nor are there any of these land uses in the project vicinity. project construction could result in minor amounts of odors associated with unburned hydrocarbons in diesel heavy equipment exhaust. The odor of these emissions is objectionable to some; however, emissions would be intermittent and would disperse rapidly and therefore, would not affect a substantial number of people. Therefore, impacts associated with odors during construction and operation of the project would be less than significant.

6.0 LIST OF PREPARERS

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Appendix A

CalEEMod Output

Alvarado SP Phase 1 Project - San Diego County, Annual

Alvarado SP Phase 1 Project

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	849.00	Space	0.00	339,600.00	0
Other Asphalt Surfaces	60.00	1000sqft	1.38	60,000.00	0
Other Non-Asphalt Surfaces	80.00	1000sqft	1.84	80,000.00	0
City Park	2.00	Acre	2.00	87,120.00	0
Apartments High Rise	645.00	Dwelling Unit	6.20	645,000.00	1845
Strip Mall	15.00	1000sqft	0.00	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Alvarado SP Phase 1 Project - San Diego County, Annual

Project Characteristics - Phase 1 project components and public improvements.

Land Use - Apartments above a 3-story parking structure.

Other asphalt surfaces = Alvarado Road improvements.

Other non-asphalt surfaces = Alvarado Creek channel improvements.

Construction Phase - Schedule adjust to fit 26 month overall duration.

Grading included creek channel improvements.

Paving includes street improvements.

Architectural coating assumed to be concurrent with last 50% of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Demolition equipment adjusted for existing structures size.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment added for grubbing and asphalt/concrete removal.

Trips and VMT - Maximum painting crew = 20.

Demolition -

Grading - 6,500 CY vegetation/soil/asphalt/concrete exported during site prep.

2,000 CY soil exported during excavation for underground utilities and creek channel improvements.

All other cut/fill assumed to be balanced onsite.

Architectural Coating - Coating VOC limits per SDAPCD Rule 67.

Vehicle Trips - Trip rates and distance per traffic study.

All project trips applied to apartments.

Woodstoves - No woodstoves or wood burning fireplaces.

Area Coating - Coating VOC limits per SCAPCD Rule 67.

Energy Use -

Construction Off-road Equipment Mitigation - Fugitive dust mitigation per SDCPCD Rule 55.

Water Mitigation - 20% water reduction per 2019 CALGreen.

Waste Mitigation - 25% solid waste reduction per AB341.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00

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tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	50.00
tblConstructionPhase	NumDays	30.00	93.00
tblConstructionPhase	NumDays	300.00	393.00
tblConstructionPhase	NumDays	20.00	196.00
tblFireplaces	NumberWood	225.75	0.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LotAcreage	7.64	0.00
tblLandUse	LotAcreage	10.40	6.20
tblLandUse	LotAcreage	0.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblTripsAndVMT	HaulingTripNumber	813.00	812.00
tblTripsAndVMT	HaulingTripNumber	250.00	0.00
tblTripsAndVMT	WorkerTripNumber	141.00	40.00
tblVehicleTrips	DV_TP	11.00	0.00

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tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.83
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	4.98	5.71
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	3.65	5.71
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	4.20	5.71
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	32.25	0.00
tblWoodstoves	NumberNoncatalytic	32.25	0.00

2.0 Emissions Summary

Alvarado SP Phase 1 Project - San Diego County, Annual

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	0.2434	2.6680	1.6752	3.6400e-003	0.6610	0.1145	0.7755	0.3029	0.1054	0.4083	0.0000	323.3407	323.3407	0.0941	0.0000	325.6921
2022	0.8019	4.1641	4.5426	0.0145	0.9331	0.1200	1.0531	0.2492	0.1125	0.3617	0.0000	1,326.7231	1,326.7231	0.1341	0.0000	1,330.0758
2023	2.3890	2.5868	3.3059	0.0109	0.6159	0.0719	0.6877	0.1658	0.0680	0.2338	0.0000	1,005.8932	1,005.8932	0.0847	0.0000	1,008.0113
Maximum	2.3890	4.1641	4.5426	0.0145	0.9331	0.1200	1.0531	0.3029	0.1125	0.4083	0.0000	1,326.7231	1,326.7231	0.1341	0.0000	1,330.0758

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	0.2434	2.6680	1.6752	3.6400e-003	0.3065	0.1145	0.4209	0.1387	0.1054	0.2442	0.0000	323.3404	323.3404	0.0941	0.0000	325.6918
2022	0.8019	4.1641	4.5426	0.0145	0.8304	0.1200	0.9505	0.2227	0.1125	0.3352	0.0000	1,326.7227	1,326.7227	0.1341	0.0000	1,330.0754
2023	2.3890	2.5868	3.3059	0.0109	0.6159	0.0719	0.6877	0.1658	0.0680	0.2338	0.0000	1,005.8929	1,005.8929	0.0847	0.0000	1,008.0110
Maximum	2.3890	4.1641	4.5426	0.0145	0.8304	0.1200	0.9505	0.2227	0.1125	0.3352	0.0000	1,326.7227	1,326.7227	0.1341	0.0000	1,330.0754

Alvarado SP Phase 1 Project - San Diego 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
Percent Reduction	0.00	0.00	0.00	0.00	20.69	0.00	18.17	26.55	0.00	18.99	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2021	9-30-2021	1.2286	1.2286
2	10-1-2021	12-31-2021	1.6665	1.6665
3	1-1-2022	3-31-2022	1.0149	1.0149
4	4-1-2022	6-30-2022	1.2131	1.2131
5	7-1-2022	9-30-2022	1.2264	1.2264
6	10-1-2022	12-31-2022	1.5169	1.5169
7	1-1-2023	3-31-2023	1.8451	1.8451
8	4-1-2023	6-30-2023	1.8507	1.8507
9	7-1-2023	9-30-2023	1.2609	1.2609
		Highest	1.8507	1.8507

Alvarado SP Phase 1 Project - San Diego County, Annual

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	3.0079	0.2965	4.8991	1.7900e-003		0.0461	0.0461		0.0461	0.0461	0.0000	287.2598	287.2598	0.0129	5.1200e-003	289.1091
Energy	0.0260	0.2224	0.0953	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	1,813.6240	1,813.6240	0.0676	0.0177	1,820.5818
Mobile	0.7652	2.9709	7.8252	0.0266	2.4398	0.0214	2.4611	0.6533	0.0199	0.6731	0.0000	2,459.5598	2,459.5598	0.1305	0.0000	2,462.8213
Waste						0.0000	0.0000		0.0000	0.0000	63.4590	0.0000	63.4590	3.7503	0.0000	157.2171
Water						0.0000	0.0000		0.0000	0.0000	13.6849	290.8765	304.5614	1.4173	0.0356	350.6053
Total	3.7992	3.4898	12.8196	0.0298	2.4398	0.0854	2.5252	0.6533	0.0839	0.7372	77.1439	4,851.3201	4,928.4641	5.3785	0.0584	5,080.3345

Alvarado SP Phase 1 Project - San Diego County, Annual

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	3.0079	0.2965	4.8991	1.7900e-003		0.0461	0.0461		0.0461	0.0461	0.0000	287.2598	287.2598	0.0129	5.1200e-003	289.1091
Energy	0.0260	0.2224	0.0953	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	1,813.6240	1,813.6240	0.0676	0.0177	1,820.5818
Mobile	0.7652	2.9709	7.8252	0.0266	2.4398	0.0214	2.4611	0.6533	0.0199	0.6731	0.0000	2,459.5598	2,459.5598	0.1305	0.0000	2,462.8213
Waste						0.0000	0.0000		0.0000	0.0000	47.5943	0.0000	47.5943	2.8127	0.0000	117.9128
Water						0.0000	0.0000		0.0000	0.0000	10.9479	232.7012	243.6491	1.1338	0.0285	280.4842
Total	3.7992	3.4898	12.8196	0.0298	2.4398	0.0854	2.5252	0.6533	0.0839	0.7372	58.5422	4,793.1449	4,851.6870	4.1575	0.0513	4,970.9092

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.11	1.20	1.56	22.70	12.19	2.15

3.0 Construction Detail**Construction Phase**

Alvarado SP Phase 1 Project - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2021	7/14/2021	5	10	
2	Site Preparation	Site Preparation	7/15/2021	9/22/2021	5	50	
3	Grading/Utilities/Creek	Grading	9/23/2021	1/31/2022	5	93	
4	Paving/Street	Paving	2/1/2022	2/28/2022	5	20	
5	Building Construction	Building Construction	3/1/2022	8/31/2023	5	393	
6	Architectural Coating	Architectural Coating	12/1/2022	8/31/2023	5	196	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.22

Residential Indoor: 1,306,125; Residential Outdoor: 435,375; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500; Striped Parking Area: 28,776 (Architectural Coating – sqft)

OffRoad Equipment

Alvarado SP Phase 1 Project - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading/Utilities/Creek	Excavators	2	8.00	158	0.38
Grading/Utilities/Creek	Graders	1	8.00	187	0.41
Grading/Utilities/Creek	Rubber Tired Dozers	1	8.00	247	0.40
Grading/Utilities/Creek	Scrapers	2	8.00	367	0.48
Grading/Utilities/Creek	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving/Street	Pavers	2	8.00	130	0.42
Paving/Street	Paving Equipment	2	8.00	132	0.36
Paving/Street	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Alvarado SP Phase 1 Project - San Diego County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	26.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	15.00	0.00	812.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Utilities/Creek	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving/Street	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	707.00	164.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					2.8900e-003	0.0000	2.8900e-003	4.4000e-004	0.0000	4.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4500e-003	0.0916	0.0713	1.3000e-004		4.5700e-003	4.5700e-003		4.2800e-003	4.2800e-003	0.0000	10.9788	10.9788	2.8400e-003	0.0000	11.0497
Total	9.4500e-003	0.0916	0.0713	1.3000e-004	2.8900e-003	4.5700e-003	7.4600e-003	4.4000e-004	4.2800e-003	4.7200e-003	0.0000	10.9788	10.9788	2.8400e-003	0.0000	11.0497

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3.2 Demolition - 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	1.0000e-004	3.4000e-003	8.4000e-004	1.0000e-005	2.2000e-004	1.0000e-005	2.3000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9901	0.9901	9.0000e-005	0.0000	0.9923
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	1.7000e-004	1.2000e-004	1.2500e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3503	0.3503	1.0000e-005	0.0000	0.3505
Total	2.7000e-004	3.5200e-003	2.0900e-003	1.0000e-005	6.2000e-004	1.0000e-005	6.3000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	1.3404	1.3404	1.0000e-004	0.0000	1.3429

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					1.3000e-003	0.0000	1.3000e-003	2.0000e-004	0.0000	2.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.4500e-003	0.0916	0.0713	1.3000e-004		4.5700e-003	4.5700e-003		4.2800e-003	4.2800e-003	0.0000	10.9787	10.9787	2.8400e-003	0.0000	11.0497
Total	9.4500e-003	0.0916	0.0713	1.3000e-004	1.3000e-003	4.5700e-003	5.8700e-003	2.0000e-004	4.2800e-003	4.4800e-003	0.0000	10.9787	10.9787	2.8400e-003	0.0000	11.0497

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3.2 Demolition - 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	1.0000e-004	3.4000e-003	8.4000e-004	1.0000e-005	2.2000e-004	1.0000e-005	2.3000e-004	6.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9901	0.9901	9.0000e-005	0.0000	0.9923
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	1.7000e-004	1.2000e-004	1.2500e-003	0.0000	4.0000e-004	0.0000	4.0000e-004	1.1000e-004	0.0000	1.1000e-004	0.0000	0.3503	0.3503	1.0000e-005	0.0000	0.3505
Total	2.7000e-004	3.5200e-003	2.0900e-003	1.0000e-005	6.2000e-004	1.0000e-005	6.3000e-004	1.7000e-004	1.0000e-005	1.8000e-004	0.0000	1.3404	1.3404	1.0000e-004	0.0000	1.3429

3.3 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					0.3016	0.0000	0.3016	0.1656	0.0000	0.1656	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0760	0.7938	0.4367	8.7000e-004		0.0380	0.0380		0.0350	0.0350	0.0000	76.2471	76.2471	0.0247	0.0000	76.8636
Total	0.0760	0.7938	0.4367	8.7000e-004	0.3016	0.0380	0.3396	0.1656	0.0350	0.2006	0.0000	76.2471	76.2471	0.0247	0.0000	76.8636

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3.3 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	3.0500e-003	0.1060	0.0262	3.1000e-004	6.9500e-003	3.2000e-004	7.2700e-003	1.9100e-003	3.1000e-004	2.2100e-003	0.0000	30.9218	30.9218	2.7900e-003	0.0000	30.9916
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	1.3000e-003	9.3000e-004	9.3700e-003	3.0000e-005	3.0100e-003	2.0000e-005	3.0300e-003	8.0000e-004	2.0000e-005	8.2000e-004	0.0000	2.6270	2.6270	8.0000e-005	0.0000	2.6288
Total	4.3500e-003	0.1070	0.0355	3.4000e-004	9.9600e-003	3.4000e-004	0.0103	2.7100e-003	3.3000e-004	3.0300e-003	0.0000	33.5488	33.5488	2.8700e-003	0.0000	33.6204

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.1357	0.0000	0.1357	0.0745	0.0000	0.0745	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0760	0.7938	0.4367	8.7000e-004		0.0380	0.0380		0.0350	0.0350	0.0000	76.2470	76.2470	0.0247	0.0000	76.8635
Total	0.0760	0.7938	0.4367	8.7000e-004	0.1357	0.0380	0.1737	0.0745	0.0350	0.1095	0.0000	76.2470	76.2470	0.0247	0.0000	76.8635

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3.3 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	3.0500e-003	0.1060	0.0262	3.1000e-004	6.9500e-003	3.2000e-004	7.2700e-003	1.9100e-003	3.1000e-004	2.2100e-003	0.0000	30.9218	30.9218	2.7900e-003	0.0000	30.9916
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	1.3000e-003	9.3000e-004	9.3700e-003	3.0000e-005	3.0100e-003	2.0000e-005	3.0300e-003	8.0000e-004	2.0000e-005	8.2000e-004	0.0000	2.6270	2.6270	8.0000e-005	0.0000	2.6288
Total	4.3500e-003	0.1070	0.0355	3.4000e-004	9.9600e-003	3.4000e-004	0.0103	2.7100e-003	3.3000e-004	3.0300e-003	0.0000	33.5488	33.5488	2.8700e-003	0.0000	33.6204

3.4 Grading/Utilities/Creek - 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					0.3402	0.0000	0.3402	0.1325	0.0000	0.1325	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1509	1.6704	1.1116	2.2300e-003		0.0715	0.0715		0.0658	0.0658	0.0000	196.1819	196.1819	0.0635	0.0000	197.7682
Total	0.1509	1.6704	1.1116	2.2300e-003	0.3402	0.0715	0.4117	0.1325	0.0658	0.1983	0.0000	196.1819	196.1819	0.0635	0.0000	197.7682

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3.4 Grading/Utilities/Creek - 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	2.5000e-003	1.7900e-003	0.0180	6.0000e-005	5.7700e-003	4.0000e-005	5.8100e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.0438	5.0438	1.4000e-004	0.0000	5.0474
Total	2.5000e-003	1.7900e-003	0.0180	6.0000e-005	5.7700e-003	4.0000e-005	5.8100e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.0438	5.0438	1.4000e-004	0.0000	5.0474

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.1531	0.0000	0.1531	0.0596	0.0000	0.0596	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1509	1.6704	1.1116	2.2300e-003		0.0715	0.0715		0.0658	0.0658	0.0000	196.1817	196.1817	0.0635	0.0000	197.7679
Total	0.1509	1.6704	1.1116	2.2300e-003	0.1531	0.0715	0.2246	0.0596	0.0658	0.1254	0.0000	196.1817	196.1817	0.0635	0.0000	197.7679

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3.4 Grading/Utilities/Creek - 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	2.5000e-003	1.7900e-003	0.0180	6.0000e-005	5.7700e-003	4.0000e-005	5.8100e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.0438	5.0438	1.4000e-004	0.0000	5.0474
Total	2.5000e-003	1.7900e-003	0.0180	6.0000e-005	5.7700e-003	4.0000e-005	5.8100e-003	1.5300e-003	4.0000e-005	1.5700e-003	0.0000	5.0438	5.0438	1.4000e-004	0.0000	5.0474

3.4 Grading/Utilities/Creek - 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					0.1867	0.0000	0.1867	0.0481	0.0000	0.0481	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0381	0.4079	0.3049	6.5000e-004		0.0172	0.0172		0.0158	0.0158	0.0000	57.2613	57.2613	0.0185	0.0000	57.7243
Total	0.0381	0.4079	0.3049	6.5000e-004	0.1867	0.0172	0.2038	0.0481	0.0158	0.0639	0.0000	57.2613	57.2613	0.0185	0.0000	57.7243

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3.4 Grading/Utilities/Creek - 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	6.9000e-004	4.7000e-004	4.8700e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.4172	1.4172	4.0000e-005	0.0000	1.4181
Total	6.9000e-004	4.7000e-004	4.8700e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.4172	1.4172	4.0000e-005	0.0000	1.4181

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0840	0.0000	0.0840	0.0216	0.0000	0.0216	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0381	0.4079	0.3049	6.5000e-004		0.0172	0.0172		0.0158	0.0158	0.0000	57.2613	57.2613	0.0185	0.0000	57.7243
Total	0.0381	0.4079	0.3049	6.5000e-004	0.0840	0.0172	0.1012	0.0216	0.0158	0.0374	0.0000	57.2613	57.2613	0.0185	0.0000	57.7243

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3.4 Grading/Utilities/Creek - 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	6.9000e-004	4.7000e-004	4.8700e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.4172	1.4172	4.0000e-005	0.0000	1.4181
Total	6.9000e-004	4.7000e-004	4.8700e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.4172	1.4172	4.0000e-005	0.0000	1.4181

3.5 Paving/Street - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	1.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0128	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895

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3.5 Paving/Street - 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	4.9000e-004	3.4000e-004	3.4800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0123	1.0123	3.0000e-005	0.0000	1.0130
Total	4.9000e-004	3.4000e-004	3.4800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0123	1.0123	3.0000e-005	0.0000	1.0130

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	1.8100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0128	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895

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3.5 Paving/Street - 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	4.9000e-004	3.4000e-004	3.4800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0123	1.0123	3.0000e-005	0.0000	1.0130
Total	4.9000e-004	3.4000e-004	3.4800e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	1.0123	1.0123	3.0000e-005	0.0000	1.0130

3.6 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1868	1.7099	1.7918	2.9500e-003		0.0886	0.0886		0.0834	0.0834	0.0000	253.7391	253.7391	0.0608	0.0000	255.2589
Total	0.1868	1.7099	1.7918	2.9500e-003		0.0886	0.0886		0.0834	0.0834	0.0000	253.7391	253.7391	0.0608	0.0000	255.2589

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3.6 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0517	1.7428	0.4660	4.7600e-003	0.1192	3.3600e-003	0.1226	0.0344	3.2200e-003	0.0376	0.0000	465.0479	465.0479	0.0338	0.0000	465.8918
Worker	0.2547	0.1751	1.7956	5.7800e-003	0.6208	4.3000e-003	0.6251	0.1650	3.9600e-003	0.1689	0.0000	522.4399	522.4399	0.0142	0.0000	522.7958
Total	0.3063	1.9178	2.2616	0.0105	0.7400	7.6600e-003	0.7477	0.1994	7.1800e-003	0.2066	0.0000	987.4877	987.4877	0.0480	0.0000	988.6875

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1868	1.7099	1.7918	2.9500e-003		0.0886	0.0886		0.0834	0.0834	0.0000	253.7388	253.7388	0.0608	0.0000	255.2586
Total	0.1868	1.7099	1.7918	2.9500e-003		0.0886	0.0886		0.0834	0.0834	0.0000	253.7388	253.7388	0.0608	0.0000	255.2586

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3.6 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0517	1.7428	0.4660	4.7600e-003	0.1192	3.3600e-003	0.1226	0.0344	3.2200e-003	0.0376	0.0000	465.0479	465.0479	0.0338	0.0000	465.8918
Worker	0.2547	0.1751	1.7956	5.7800e-003	0.6208	4.3000e-003	0.6251	0.1650	3.9600e-003	0.1689	0.0000	522.4399	522.4399	0.0142	0.0000	522.7958
Total	0.3063	1.9178	2.2616	0.0105	0.7400	7.6600e-003	0.7477	0.1994	7.1800e-003	0.2066	0.0000	987.4877	987.4877	0.0480	0.0000	988.6875

3.6 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1368	1.2515	1.4132	2.3400e-003		0.0609	0.0609		0.0573	0.0573	0.0000	201.6701	201.6701	0.0480	0.0000	202.8695
Total	0.1368	1.2515	1.4132	2.3400e-003		0.0609	0.0609		0.0573	0.0573	0.0000	201.6701	201.6701	0.0480	0.0000	202.8695

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3.6 Building Construction - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0317	1.0878	0.3371	3.6800e-003	0.0947	1.3000e-003	0.0960	0.0273	1.2500e-003	0.0286	0.0000	360.1886	360.1886	0.0245	0.0000	360.8009
Worker	0.1918	0.1270	1.3231	4.4100e-003	0.4933	3.3500e-003	0.4966	0.1311	3.0800e-003	0.1342	0.0000	399.2337	399.2337	0.0103	0.0000	399.4923
Total	0.2235	1.2148	1.6602	8.0900e-003	0.5880	4.6500e-003	0.5926	0.1584	4.3300e-003	0.1627	0.0000	759.4223	759.4223	0.0348	0.0000	760.2932

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.2515	1.4132	2.3400e-003		0.0609	0.0609		0.0573	0.0573	0.0000	201.6699	201.6699	0.0480	0.0000	202.8692
Total	0.1368	1.2515	1.4132	2.3400e-003		0.0609	0.0609		0.0573	0.0573	0.0000	201.6699	201.6699	0.0480	0.0000	202.8692

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3.6 Building Construction - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0317	1.0878	0.3371	3.6800e-003	0.0947	1.3000e-003	0.0960	0.0273	1.2500e-003	0.0286	0.0000	360.1886	360.1886	0.0245	0.0000	360.8009
Worker	0.1918	0.1270	1.3231	4.4100e-003	0.4933	3.3500e-003	0.4966	0.1311	3.0800e-003	0.1342	0.0000	399.2337	399.2337	0.0103	0.0000	399.4923
Total	0.2235	1.2148	1.6602	8.0900e-003	0.5880	4.6500e-003	0.5926	0.1584	4.3300e-003	0.1627	0.0000	759.4223	759.4223	0.0348	0.0000	760.2932

3.7 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2530					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2500e-003	0.0155	0.0200	3.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	2.8086	2.8086	1.8000e-004	0.0000	2.8132
Total	0.2553	0.0155	0.0200	3.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	2.8086	2.8086	1.8000e-004	0.0000	2.8132

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3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	1.4500e-003	9.9000e-004	0.0102	3.0000e-005	3.5300e-003	2.0000e-005	3.5500e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.9693	2.9693	8.0000e-005	0.0000	2.9713
Total	1.4500e-003	9.9000e-004	0.0102	3.0000e-005	3.5300e-003	2.0000e-005	3.5500e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.9693	2.9693	8.0000e-005	0.0000	2.9713

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2530					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.2500e-003	0.0155	0.0200	3.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	2.8086	2.8086	1.8000e-004	0.0000	2.8132
Total	0.2553	0.0155	0.0200	3.0000e-005		9.0000e-004	9.0000e-004		9.0000e-004	9.0000e-004	0.0000	2.8086	2.8086	1.8000e-004	0.0000	2.8132

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3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	1.4500e-003	9.9000e-004	0.0102	3.0000e-005	3.5300e-003	2.0000e-005	3.5500e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.9693	2.9693	8.0000e-005	0.0000	2.9713
Total	1.4500e-003	9.9000e-004	0.0102	3.0000e-005	3.5300e-003	2.0000e-005	3.5500e-003	9.4000e-004	2.0000e-005	9.6000e-004	0.0000	2.9693	2.9693	8.0000e-005	0.0000	2.9713

3.7 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.0012					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.1134	0.1576	2.6000e-004		6.1600e-003	6.1600e-003		6.1600e-003	6.1600e-003	0.0000	22.2133	22.2133	1.3300e-003	0.0000	22.2465
Total	2.0179	0.1134	0.1576	2.6000e-004		6.1600e-003	6.1600e-003		6.1600e-003	6.1600e-003	0.0000	22.2133	22.2133	1.3300e-003	0.0000	22.2465

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3.7 Architectural Coating - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0109	7.1800e-003	0.0749	2.5000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.7000e-004	7.5900e-003	0.0000	22.5875	22.5875	5.9000e-004	0.0000	22.6021
Total	0.0109	7.1800e-003	0.0749	2.5000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.7000e-004	7.5900e-003	0.0000	22.5875	22.5875	5.9000e-004	0.0000	22.6021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	2.0012					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0167	0.1134	0.1576	2.6000e-004		6.1600e-003	6.1600e-003		6.1600e-003	6.1600e-003	0.0000	22.2133	22.2133	1.3300e-003	0.0000	22.2465
Total	2.0179	0.1134	0.1576	2.6000e-004		6.1600e-003	6.1600e-003		6.1600e-003	6.1600e-003	0.0000	22.2133	22.2133	1.3300e-003	0.0000	22.2465

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3.7 Architectural Coating - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
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	0.0109	7.1800e-003	0.0749	2.5000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.7000e-004	7.5900e-003	0.0000	22.5875	22.5875	5.9000e-004	0.0000	22.6021
Total	0.0109	7.1800e-003	0.0749	2.5000e-004	0.0279	1.9000e-004	0.0281	7.4200e-003	1.7000e-004	7.5900e-003	0.0000	22.5875	22.5875	5.9000e-004	0.0000	22.6021

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7652	2.9709	7.8252	0.0266	2.4398	0.0214	2.4611	0.6533	0.0199	0.6731	0.0000	2,459.5598	2,459.5598	0.1305	0.0000	2,462.8213
Unmitigated	0.7652	2.9709	7.8252	0.0266	2.4398	0.0214	2.4611	0.6533	0.0199	0.6731	0.0000	2,459.5598	2,459.5598	0.1305	0.0000	2,462.8213

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	3,682.95	3,682.95	3,682.95	6,475,068	6,475,068
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	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		
Strip Mall	0.00	0.00	0.00		
Total	3,682.95	3,682.95	3,682.95	6,475,068	6,475,068

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	4.83	7.30	7.50	100.00	0.00	0.00	100	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
City Park	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Enclosed Parking with Elevator	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Other Asphalt Surfaces	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Other Non-Asphalt Surfaces	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Strip Mall	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1,556.144 3	1,556.144 3	0.0626	0.0130	1,561.572 0
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,556.144 3	1,556.144 3	0.0626	0.0130	1,561.572 0
NaturalGas Mitigated	0.0260	0.2224	0.0953	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.4797	257.4797	4.9400e-003	4.7200e-003	259.0098
NaturalGas Unmitigated	0.0260	0.2224	0.0953	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.4797	257.4797	4.9400e-003	4.7200e-003	259.0098

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	4.79154e+006	0.0258	0.2208	0.0940	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.6947	255.6947	4.9000e-003	4.6900e-003	257.2141
City Park	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
Enclosed Parking with Elevator	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 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
Strip Mall	33450	1.8000e-004	1.6400e-003	1.3800e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7850	1.7850	3.0000e-005	3.0000e-005	1.7956
Total		0.0260	0.2224	0.0953	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.4797	257.4797	4.9300e-003	4.7200e-003	259.0098

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5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	4.79154e+006	0.0258	0.2208	0.0940	1.4100e-003		0.0179	0.0179		0.0179	0.0179	0.0000	255.6947	255.6947	4.9000e-003	4.6900e-003	257.2141
City Park	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
Enclosed Parking with Elevator	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 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
Strip Mall	33450	1.8000e-004	1.6400e-003	1.3800e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7850	1.7850	3.0000e-005	3.0000e-005	1.7956
Total		0.0260	0.2224	0.0953	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.4797	257.4797	4.9300e-003	4.7200e-003	259.0098

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.58318e+006	844.2058	0.0340	7.0300e-003	847.1503
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.99006e+006	650.3678	0.0262	5.4200e-003	652.6362
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
Strip Mall	188400	61.5708	2.4800e-003	5.1000e-004	61.7855
Total		1,556.1443	0.0626	0.0130	1,561.5720

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5.3 Energy by Land Use - Electricity**Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	2.58318e+006	844.2058	0.0340	7.0300e-003	847.1503
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.99006e+006	650.3678	0.0262	5.4200e-003	652.6362
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
Strip Mall	188400	61.5708	2.4800e-003	5.1000e-004	61.7855
Total		1,556.1443	0.0626	0.0130	1,561.5720

6.0 Area Detail**6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	3.0079	0.2965	4.8991	1.7900e-003		0.0461	0.0461		0.0461	0.0461	0.0000	287.2598	287.2598	0.0129	5.1200e-003	289.1091
Unmitigated	3.0079	0.2965	4.8991	1.7900e-003		0.0461	0.0461		0.0461	0.0461	0.0000	287.2598	287.2598	0.0129	5.1200e-003	289.1091

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2254					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6095					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0282	0.2413	0.1027	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.4188	279.4188	5.3600e-003	5.1200e-003	281.0792
Landscaping	0.1448	0.0552	4.7964	2.5000e-004		0.0266	0.0266		0.0266	0.0266	0.0000	7.8411	7.8411	7.5500e-003	0.0000	8.0299
Total	3.0079	0.2965	4.8991	1.7900e-003		0.0461	0.0461		0.0461	0.0461	0.0000	287.2598	287.2598	0.0129	5.1200e-003	289.1091

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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	0.2254					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6095					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0282	0.2413	0.1027	1.5400e-003		0.0195	0.0195		0.0195	0.0195	0.0000	279.4188	279.4188	5.3600e-003	5.1200e-003	281.0792
Landscaping	0.1448	0.0552	4.7964	2.5000e-004		0.0266	0.0266		0.0266	0.0266	0.0000	7.8411	7.8411	7.5500e-003	0.0000	8.0299
Total	3.0079	0.2965	4.8991	1.7900e-003		0.0461	0.0461		0.0461	0.0461	0.0000	287.2598	287.2598	0.0129	5.1200e-003	289.1091

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

Alvarado SP Phase 1 Project - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	243.6491	1.1338	0.0285	280.4842
Unmitigated	304.5614	1.4173	0.0356	350.6053

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7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	42.0243 / 26.4936	288.3560	1.3804	0.0346	333.1848
City Park	0 / 2.38296	8.6522	3.5000e-004	7.0000e-005	8.6824
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	1.11109 / 0.680989	7.5532	0.0365	9.1000e-004	8.7382
Total		304.5614	1.4173	0.0356	350.6053

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	33.6195 / 21.1949	230.6848	1.1044	0.0277	266.5478
City Park	0 / 1.90637	6.9217	2.8000e-004	6.0000e-005	6.9459
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Strip Mall	0.88887 / 0.544791	6.0425	0.0292	7.3000e-004	6.9905
Total		243.6491	1.1338	0.0285	280.4842

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Alvarado SP Phase 1 Project - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	47.5943	2.8127	0.0000	117.9128
Unmitigated	63.4590	3.7503	0.0000	157.2171

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8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	296.7	60.2274	3.5593	0.0000	149.2109
City Park	0.17	0.0345	2.0400e-003	0.0000	0.0855
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	15.75	3.1971	0.1889	0.0000	7.9207
Total		63.4590	3.7503	0.0000	157.2171

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8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	222.525	45.1706	2.6695	0.0000	111.9082
City Park	0.1275	0.0259	1.5300e-003	0.0000	0.0641
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Strip Mall	11.8125	2.3978	0.1417	0.0000	5.9405
Total		47.5943	2.8127	0.0000	117.9128

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

Alvarado SP Phase 1 Project - San Diego County, Annual

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

Equipment Type	Number
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11.0 Vegetation

Alvarado SP Phase 1 Project - San Diego County, Winter

Alvarado SP Phase 1 Project

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	849.00	Space	0.00	339,600.00	0
Other Asphalt Surfaces	60.00	1000sqft	1.38	60,000.00	0
Other Non-Asphalt Surfaces	80.00	1000sqft	1.84	80,000.00	0
City Park	2.00	Acre	2.00	87,120.00	0
Apartments High Rise	645.00	Dwelling Unit	6.20	645,000.00	1845
Strip Mall	15.00	1000sqft	0.00	15,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	720.49	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Alvarado SP Phase 1 Project - San Diego County, Winter

Project Characteristics - Phase 1 project components and public improvements.

Land Use - Apartments above a 3-story parking structure.

Other asphalt surfaces = Alvarado Road improvements.

Other non-asphalt surfaces = Alvarado Creek channel improvements.

Construction Phase - Schedule adjust to fit 26 month overall duration.

Grading included creek channel improvements.

Paving includes street improvements.

Architectural coating assumed to be concurrent with last 50% of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Demolition equipment adjusted for existing structures size.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment added for grubbing and asphalt/concrete removal.

Trips and VMT - Maximum painting crew = 20.

Demolition -

Grading - 6,500 CY vegetation/soil/asphalt/concrete exported during site prep.

2,000 CY soil exported during excavation for underground utilities and creek channel improvements.

All other cut/fill assumed to be balanced onsite.

Architectural Coating - Coating VOC limits per SDAPCD Rule 67.

Vehicle Trips - Trip rates and distance per traffic study.

All project trips applied to apartments.

Woodstoves - No woodstoves or wood burning fireplaces.

Area Coating - Coating VOC limits per SCAPCD Rule 67.

Energy Use -

Construction Off-road Equipment Mitigation - Fugitive dust mitigation per SDCPCD Rule 55.

Water Mitigation - 20% water reduction per 2019 CALGreen.

Waste Mitigation - 25% solid waste reduction per AB341.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00

Alvarado SP Phase 1 Project - San Diego County, Winter

tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	50.00
tblConstructionPhase	NumDays	30.00	93.00
tblConstructionPhase	NumDays	300.00	393.00
tblConstructionPhase	NumDays	20.00	196.00
tblFireplaces	NumberWood	225.75	0.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialExported	0.00	6,500.00
tblLandUse	LotAcreage	7.64	0.00
tblLandUse	LotAcreage	10.40	6.20
tblLandUse	LotAcreage	0.34	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblTripsAndVMT	HaulingTripNumber	813.00	812.00
tblTripsAndVMT	HaulingTripNumber	250.00	0.00
tblTripsAndVMT	WorkerTripNumber	141.00	40.00
tblVehicleTrips	DV_TP	11.00	0.00

Alvarado SP Phase 1 Project - San Diego County, Winter

tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.83
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	4.98	5.71
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	ST_TR	42.04	0.00
tblVehicleTrips	SU_TR	3.65	5.71
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	SU_TR	20.43	0.00
tblVehicleTrips	WD_TR	4.20	5.71
tblVehicleTrips	WD_TR	1.89	0.00
tblVehicleTrips	WD_TR	44.32	0.00
tblWoodstoves	NumberCatalytic	32.25	0.00
tblWoodstoves	NumberNoncatalytic	32.25	0.00

2.0 Emissions Summary

Alvarado SP Phase 1 Project - San Diego County, Winter

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	4.2696	46.4503	31.3771	0.0636	12.4694	1.9865	14.0050	6.7337	1.8276	8.1469	0.0000	6,159.9530	6,159.9530	1.9472	0.0000	6,208.6328
2022	28.1759	38.8895	39.9456	0.1279	8.8407	1.6360	10.4767	3.6405	1.5051	5.1457	0.0000	12,947.7107	12,947.7107	1.9482	0.0000	12,975.9987
2023	27.7785	29.6252	38.1264	0.1246	7.2466	0.8267	8.0733	1.9473	0.7815	2.7287	0.0000	12,623.1146	12,623.1146	1.0815	0.0000	12,650.1522
Maximum	28.1759	46.4503	39.9456	0.1279	12.4694	1.9865	14.0050	6.7337	1.8276	8.1469	0.0000	12,947.7107	12,947.7107	1.9482	0.0000	12,975.9987

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	4.2696	46.4503	31.3771	0.0636	5.8351	1.9865	7.3707	3.0909	1.8276	4.5041	0.0000	6,159.9529	6,159.9529	1.9472	0.0000	6,208.6328
2022	28.1759	38.8895	39.9456	0.1279	7.2466	1.6360	8.2103	1.9473	1.5051	3.1673	0.0000	12,947.7107	12,947.7107	1.9482	0.0000	12,975.9987
2023	27.7785	29.6252	38.1264	0.1246	7.2466	0.8267	8.0733	1.9473	0.7815	2.7287	0.0000	12,623.1146	12,623.1146	1.0815	0.0000	12,650.1522
Maximum	28.1759	46.4503	39.9456	0.1279	7.2466	1.9865	8.2103	3.0909	1.8276	4.5041	0.0000	12,947.7107	12,947.7107	1.9482	0.0000	12,975.9987

Alvarado SP Phase 1 Project - San Diego 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
Percent Reduction	0.00	0.00	0.00	0.00	28.81	0.00	27.34	43.31	0.00	35.09	0.00	0.00	0.00	0.00	0.00	0.00

Alvarado SP Phase 1 Project - San Diego County, Winter

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	17.8310	6.4985	55.7976	0.0404		0.7710	0.7710		0.7710	0.7710	0.0000	7,608.389 3	7,608.389 3	0.2365	0.1377	7,655.344 2
Energy	0.1426	1.2188	0.5224	7.7800e-003		0.0985	0.0985		0.0985	0.0985		1,555.193 3	1,555.193 3	0.0298	0.0285	1,564.435 1
Mobile	4.3249	16.2605	43.7348	0.1445	13.7274	0.1179	13.8453	3.6683	0.1097	3.7780		14,735.24 26	14,735.24 26	0.8020		14,755.29 25
Total	22.2984	23.9777	100.0548	0.1926	13.7274	0.9874	14.7148	3.6683	0.9792	4.6475	0.0000	23,898.82 52	23,898.82 52	1.0683	0.1662	23,975.07 18

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	17.8310	6.4985	55.7976	0.0404		0.7710	0.7710		0.7710	0.7710	0.0000	7,608.389 3	7,608.389 3	0.2365	0.1377	7,655.344 2
Energy	0.1426	1.2188	0.5224	7.7800e-003		0.0985	0.0985		0.0985	0.0985		1,555.193 3	1,555.193 3	0.0298	0.0285	1,564.435 1
Mobile	4.3249	16.2605	43.7348	0.1445	13.7274	0.1179	13.8453	3.6683	0.1097	3.7780		14,735.24 26	14,735.24 26	0.8020		14,755.29 25
Total	22.2984	23.9777	100.0548	0.1926	13.7274	0.9874	14.7148	3.6683	0.9792	4.6475	0.0000	23,898.82 52	23,898.82 52	1.0683	0.1662	23,975.07 18

Alvarado SP Phase 1 Project - San Diego 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2021	7/14/2021	5	10	
2	Site Preparation	Site Preparation	7/15/2021	9/22/2021	5	50	
3	Grading/Utilities/Creek	Grading	9/23/2021	1/31/2022	5	93	
4	Paving/Street	Paving	2/1/2022	2/28/2022	5	20	
5	Building Construction	Building Construction	3/1/2022	8/31/2023	5	393	
6	Architectural Coating	Architectural Coating	12/1/2022	8/31/2023	5	196	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 3.22

Residential Indoor: 1,306,125; Residential Outdoor: 435,375; Non-Residential Indoor: 22,500; Non-Residential Outdoor: 7,500; Striped Parking Area: 28,776 (Architectural Coating – sqft)

OffRoad Equipment

Alvarado SP Phase 1 Project - San Diego County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	2	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Excavators	1	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	8.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading/Utilities/Creek	Excavators	2	8.00	158	0.38
Grading/Utilities/Creek	Graders	1	8.00	187	0.41
Grading/Utilities/Creek	Rubber Tired Dozers	1	8.00	247	0.40
Grading/Utilities/Creek	Scrapers	2	8.00	367	0.48
Grading/Utilities/Creek	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving/Street	Pavers	2	8.00	130	0.42
Paving/Street	Paving Equipment	2	8.00	132	0.36
Paving/Street	Rollers	2	8.00	80	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Alvarado SP Phase 1 Project - San Diego County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	26.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	15.00	0.00	812.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Utilities/Creek	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving/Street	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	707.00	164.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					0.5781	0.0000	0.5781	0.0875	0.0000	0.0875			0.0000			0.0000
Off-Road	1.8896	18.3160	14.2554	0.0251		0.9145	0.9145		0.8551	0.8551		2,420.4008	2,420.4008	0.6255		2,436.0393
Total	1.8896	18.3160	14.2554	0.0251	0.5781	0.9145	1.4925	0.0875	0.8551	0.9427		2,420.4008	2,420.4008	0.6255		2,436.0393

Alvarado SP Phase 1 Project - San Diego County, Winter

3.2 Demolition - 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	0.0198	0.6722	0.1733	1.9700e-003	0.0454	2.0800e-003	0.0475	0.0125	1.9900e-003	0.0144		216.0780	216.0780	0.0201		216.5795
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	0.0392	0.0252	0.2493	7.7000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		76.4548	76.4548	2.2000e-003		76.5097
Total	0.0591	0.6974	0.4226	2.7400e-003	0.1276	2.6500e-003	0.1302	0.0342	2.5100e-003	0.0368		292.5328	292.5328	0.0223		293.0892

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2601	0.0000	0.2601	0.0394	0.0000	0.0394			0.0000			0.0000
Off-Road	1.8896	18.3160	14.2554	0.0251		0.9145	0.9145		0.8551	0.8551	0.0000	2,420.4008	2,420.4008	0.6255		2,436.0393
Total	1.8896	18.3160	14.2554	0.0251	0.2601	0.9145	1.1746	0.0394	0.8551	0.8945	0.0000	2,420.4008	2,420.4008	0.6255		2,436.0393

Alvarado SP Phase 1 Project - San Diego County, Winter

3.2 Demolition - 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	0.0198	0.6722	0.1733	1.9700e-003	0.0454	2.0800e-003	0.0475	0.0125	1.9900e-003	0.0144		216.0780	216.0780	0.0201		216.5795
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	0.0392	0.0252	0.2493	7.7000e-004	0.0822	5.7000e-004	0.0827	0.0218	5.2000e-004	0.0223		76.4548	76.4548	2.2000e-003		76.5097
Total	0.0591	0.6974	0.4226	2.7400e-003	0.1276	2.6500e-003	0.1302	0.0342	2.5100e-003	0.0368		292.5328	292.5328	0.0223		293.0892

3.3 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					12.0624	0.0000	12.0624	6.6232	0.0000	6.6232			0.0000			0.0000
Off-Road	3.0395	31.7514	17.4665	0.0347		1.5217	1.5217		1.4000	1.4000		3,361.9227	3,361.9227	1.0873		3,389.1056
Total	3.0395	31.7514	17.4665	0.0347	12.0624	1.5217	13.5842	6.6232	1.4000	8.0232		3,361.9227	3,361.9227	1.0873		3,389.1056

Alvarado SP Phase 1 Project - San Diego County, Winter

3.3 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	0.1239	4.1988	1.0825	0.0123	0.2838	0.0130	0.2967	0.0778	0.0124	0.0902		1,349.656 4	1,349.656 4	0.1253		1,352.789 0
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0378	0.3740	1.1500e-003	0.1232	8.5000e-004	0.1241	0.0327	7.8000e-004	0.0335		114.6821	114.6821	3.2900e-003		114.7645
Total	0.1827	4.2366	1.4565	0.0135	0.4070	0.0138	0.4208	0.1105	0.0132	0.1237		1,464.338 6	1,464.338 6	0.1286		1,467.553 5

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					5.4281	0.0000	5.4281	2.9805	0.0000	2.9805			0.0000			0.0000
Off-Road	3.0395	31.7514	17.4665	0.0347		1.5217	1.5217		1.4000	1.4000	0.0000	3,361.922 7	3,361.922 7	1.0873		3,389.105 6
Total	3.0395	31.7514	17.4665	0.0347	5.4281	1.5217	6.9498	2.9805	1.4000	4.3805	0.0000	3,361.922 7	3,361.922 7	1.0873		3,389.105 6

Alvarado SP Phase 1 Project - San Diego County, Winter

3.3 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	0.1239	4.1988	1.0825	0.0123	0.2838	0.0130	0.2967	0.0778	0.0124	0.0902		1,349.6564	1,349.6564	0.1253		1,352.7890
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0378	0.3740	1.1500e-003	0.1232	8.5000e-004	0.1241	0.0327	7.8000e-004	0.0335		114.6821	114.6821	3.2900e-003		114.7645
Total	0.1827	4.2366	1.4565	0.0135	0.4070	0.0138	0.4208	0.1105	0.0132	0.1237		1,464.3386	1,464.3386	0.1286		1,467.5535

3.4 Grading/Utilities/Creek - 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					8.6764	0.0000	8.6764	3.5970	0.0000	3.5970			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6764	1.9853	10.6617	3.5970	1.8265	5.4235		6,007.0434	6,007.0434	1.9428		6,055.6134

Alvarado SP Phase 1 Project - San Diego County, Winter

3.4 Grading/Utilities/Creek - 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	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9044	0.0000	3.9044	1.6186	0.0000	1.6186			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	3.9044	1.9853	5.8897	1.6186	1.8265	3.4451	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Alvarado SP Phase 1 Project - San Diego County, Winter

3.4 Grading/Utilities/Creek - 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	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193

3.4 Grading/Utilities/Creek - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6764	0.0000	8.6764	3.5970	0.0000	3.5970			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6764	1.6349	10.3113	3.5970	1.5041	5.1011		6,011.4105	6,011.4105	1.9442		6,060.0158

Alvarado SP Phase 1 Project - San Diego County, Winter

3.4 Grading/Utilities/Creek - 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	0.0743	0.0460	0.4627	1.4800e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		147.3051	147.3051	4.0200e-003		147.4057
Total	0.0743	0.0460	0.4627	1.4800e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		147.3051	147.3051	4.0200e-003		147.4057

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.9044	0.0000	3.9044	1.6186	0.0000	1.6186			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	3.9044	1.6349	5.5393	1.6186	1.5041	3.1227	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Alvarado SP Phase 1 Project - San Diego County, Winter

3.4 Grading/Utilities/Creek - 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	0.0743	0.0460	0.4627	1.4800e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		147.3051	147.3051	4.0200e-003		147.4057
Total	0.0743	0.0460	0.4627	1.4800e-003	0.1643	1.1100e-003	0.1654	0.0436	1.0200e-003	0.0446		147.3051	147.3051	4.0200e-003		147.4057

3.5 Paving/Street - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1808					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2836	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104

Alvarado SP Phase 1 Project - San Diego County, Winter

3.5 Paving/Street - 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	0.0558	0.0345	0.3470	1.1100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		110.4788	110.4788	3.0200e-003		110.5543
Total	0.0558	0.0345	0.3470	1.1100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		110.4788	110.4788	3.0200e-003		110.5543

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	0.1808					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2836	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104

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3.5 Paving/Street - 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	0.0558	0.0345	0.3470	1.1100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		110.4788	110.4788	3.0200e-003		110.5543
Total	0.0558	0.0345	0.3470	1.1100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		110.4788	110.4788	3.0200e-003		110.5543

3.6 Building Construction - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Alvarado SP Phase 1 Project - San Diego County, Winter

3.6 Building Construction - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4863	15.7288	4.4867	0.0428	1.1102	0.0315	1.1417	0.3196	0.0301	0.3497		4,610.0829	4,610.0829	0.3510		4,618.8587
Worker	2.6280	1.6258	16.3564	0.0522	5.8078	0.0393	5.8471	1.5405	0.0362	1.5767		5,207.2359	5,207.2359	0.1422		5,210.7903
Total	3.1143	17.3546	20.8432	0.0950	6.9181	0.0707	6.9888	1.8601	0.0662	1.9263		9,817.3188	9,817.3188	0.4932		9,829.6490

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Alvarado SP Phase 1 Project - San Diego County, Winter

3.6 Building Construction - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4863	15.7288	4.4867	0.0428	1.1102	0.0315	1.1417	0.3196	0.0301	0.3497		4,610.0829	4,610.0829	0.3510		4,618.8587
Worker	2.6280	1.6258	16.3564	0.0522	5.8078	0.0393	5.8471	1.5405	0.0362	1.5767		5,207.2359	5,207.2359	0.1422		5,210.7903
Total	3.1143	17.3546	20.8432	0.0950	6.9181	0.0707	6.9888	1.8601	0.0662	1.9263		9,817.3188	9,817.3188	0.4932		9,829.6490

3.6 Building Construction - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Alvarado SP Phase 1 Project - San Diego County, Winter

3.6 Building Construction - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3754	12.3691	4.0527	0.0416	1.1102	0.0155	1.1257	0.3196	0.0148	0.3344		4,494.737 0	4,494.737 0	0.3195		4,502.725 0
Worker	2.4954	1.4843	15.1608	0.0502	5.8078	0.0385	5.8463	1.5405	0.0354	1.5759		5,008.361 2	5,008.361 2	0.1300		5,011.6098
Total	2.8708	13.8534	19.2135	0.0919	6.9181	0.0539	6.9720	1.8601	0.0502	1.9103		9,503.098 1	9,503.098 1	0.4495		9,514.334 8

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Alvarado SP Phase 1 Project - San Diego County, Winter

3.6 Building Construction - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3754	12.3691	4.0527	0.0416	1.1102	0.0155	1.1257	0.3196	0.0148	0.3344		4,494.7370	4,494.7370	0.3195		4,502.7250
Worker	2.4954	1.4843	15.1608	0.0502	5.8078	0.0385	5.8463	1.5405	0.0354	1.5759		5,008.3612	5,008.3612	0.1300		5,011.6098
Total	2.8708	13.8534	19.2135	0.0919	6.9181	0.0539	6.9720	1.8601	0.0502	1.9103		9,503.0981	9,503.0981	0.4495		9,514.3348

3.7 Architectural Coating - 2022**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.0021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	23.2067	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Alvarado SP Phase 1 Project - San Diego County, Winter

3.7 Architectural Coating - 2022**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1487	0.0920	0.9254	2.9600e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		294.6102	294.6102	8.0400e-003		294.8113
Total	0.1487	0.0920	0.9254	2.9600e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		294.6102	294.6102	8.0400e-003		294.8113

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.0021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	23.2067	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Alvarado SP Phase 1 Project - San Diego County, Winter

3.7 Architectural Coating - 2022**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1487	0.0920	0.9254	2.9600e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		294.6102	294.6102	8.0400e-003		294.8113
Total	0.1487	0.0920	0.9254	2.9600e-003	0.3286	2.2200e-003	0.3308	0.0872	2.0500e-003	0.0892		294.6102	294.6102	8.0400e-003		294.8113

3.7 Architectural Coating - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.0021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	23.1938	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Alvarado SP Phase 1 Project - San Diego County, Winter

3.7 Architectural Coating - 2023**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1412	0.0840	0.8578	2.8400e-003	0.3286	2.1800e-003	0.3308	0.0872	2.0000e-003	0.0892		283.3585	283.3585	7.3500e-003		283.5423
Total	0.1412	0.0840	0.8578	2.8400e-003	0.3286	2.1800e-003	0.3308	0.0872	2.0000e-003	0.0892		283.3585	283.3585	7.3500e-003		283.5423

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	23.0021					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	23.1938	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Alvarado SP Phase 1 Project - San Diego County, Winter

3.7 Architectural Coating - 2023**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
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	0.1412	0.0840	0.8578	2.8400e-003	0.3286	2.1800e-003	0.3308	0.0872	2.0000e-003	0.0892		283.3585	283.3585	7.3500e-003		283.5423
Total	0.1412	0.0840	0.8578	2.8400e-003	0.3286	2.1800e-003	0.3308	0.0872	2.0000e-003	0.0892		283.3585	283.3585	7.3500e-003		283.5423

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Alvarado SP Phase 1 Project - San Diego 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					
Mitigated	4.3249	16.2605	43.7348	0.1445	13.7274	0.1179	13.8453	3.6683	0.1097	3.7780		14,735.24 26	14,735.24 26	0.8020		14,755.29 25
Unmitigated	4.3249	16.2605	43.7348	0.1445	13.7274	0.1179	13.8453	3.6683	0.1097	3.7780		14,735.24 26	14,735.24 26	0.8020		14,755.29 25

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	3,682.95	3,682.95	3,682.95	6,475,068	6,475,068
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	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		
Strip Mall	0.00	0.00	0.00		
Total	3,682.95	3,682.95	3,682.95	6,475,068	6,475,068

4.3 Trip Type Information

Alvarado SP Phase 1 Project - San Diego County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	4.83	7.30	7.50	100.00	0.00	0.00	100	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
City Park	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Enclosed Parking with Elevator	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Other Asphalt Surfaces	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Other Non-Asphalt Surfaces	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998
Strip Mall	0.606234	0.039465	0.179154	0.102641	0.014368	0.005395	0.016820	0.024508	0.001929	0.001857	0.005869	0.000761	0.000998

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Alvarado SP Phase 1 Project - San Diego 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	0.1426	1.2188	0.5224	7.7800e-003		0.0985	0.0985		0.0985	0.0985		1,555.1933	1,555.1933	0.0298	0.0285	1,564.4351
NaturalGas Unmitigated	0.1426	1.2188	0.5224	7.7800e-003		0.0985	0.0985		0.0985	0.0985		1,555.1933	1,555.1933	0.0298	0.0285	1,564.4351

Alvarado SP Phase 1 Project - San Diego County, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments High Rise	13127.5	0.1416	1.2098	0.5148	7.7200e-003		0.0978	0.0978		0.0978	0.0978		1,544.4117	1,544.4117	0.0296	0.0283	1,553.5894
City Park	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
Enclosed Parking with Elevator	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 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
Strip Mall	91.6438	9.9000e-004	8.9800e-003	7.5500e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004		10.7816	10.7816	2.1000e-004	2.0000e-004	10.8457
Total		0.1426	1.2188	0.5224	7.7700e-003		0.0985	0.0985		0.0985	0.0985		1,555.1933	1,555.1933	0.0298	0.0285	1,564.4351

Alvarado SP Phase 1 Project - San Diego County, Winter

5.2 Energy by Land Use - NaturalGas**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments High Rise	13.1275	0.1416	1.2098	0.5148	7.7200e-003		0.0978	0.0978		0.0978	0.0978		1,544.4117	1,544.4117	0.0296	0.0283	1,553.5894
City Park	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
Enclosed Parking with Elevator	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 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
Strip Mall	0.0916438	9.9000e-004	8.9800e-003	7.5500e-003	5.0000e-005		6.8000e-004	6.8000e-004		6.8000e-004	6.8000e-004		10.7816	10.7816	2.1000e-004	2.0000e-004	10.8457
Total		0.1426	1.2188	0.5224	7.7700e-003		0.0985	0.0985		0.0985	0.0985		1,555.1933	1,555.1933	0.0298	0.0285	1,564.4351

6.0 Area Detail**6.1 Mitigation Measures Area**

Alvarado SP Phase 1 Project - San Diego 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					
Mitigated	17.8310	6.4985	55.7976	0.0404		0.7710	0.7710		0.7710	0.7710	0.0000	7,608.389 3	7,608.389 3	0.2365	0.1377	7,655.344 2
Unmitigated	17.8310	6.4985	55.7976	0.0404		0.7710	0.7710		0.7710	0.7710	0.0000	7,608.389 3	7,608.389 3	0.2365	0.1377	7,655.344 2

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	1.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.2984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.6886	5.8847	2.5041	0.0376		0.4758	0.4758		0.4758	0.4758	0.0000	7,512.352 9	7,512.352 9	0.1440	0.1377	7,556.995 1
Landscaping	1.6088	0.6138	53.2935	2.8200e-003		0.2952	0.2952		0.2952	0.2952		96.0364	96.0364	0.0925		98.3491
Total	17.8310	6.4985	55.7976	0.0404		0.7710	0.7710		0.7710	0.7710	0.0000	7,608.389 3	7,608.389 3	0.2365	0.1377	7,655.344 2

Alvarado SP Phase 1 Project - San Diego County, Winter

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	1.2352					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.2984					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.6886	5.8847	2.5041	0.0376		0.4758	0.4758		0.4758	0.4758	0.0000	7,512.3529	7,512.3529	0.1440	0.1377	7,556.9951
Landscaping	1.6088	0.6138	53.2935	2.8200e-003		0.2952	0.2952		0.2952	0.2952		96.0364	96.0364	0.0925		98.3491
Total	17.8310	6.4985	55.7976	0.0404		0.7710	0.7710		0.7710	0.7710	0.0000	7,608.3893	7,608.3893	0.2365	0.1377	7,655.3442

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Alvarado SP Phase 1 Project - San Diego County, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Alvarado SP Phase 2 Project - San Diego County, Annual

Alvarado SP Phase 2 Project

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	427.00	Space	0.00	170,800.00	0
City Park	0.95	Acre	0.95	41,382.00	0
Apartments High Rise	305.00	Dwelling Unit	2.85	305,000.00	872

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2026
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Alvarado SP Phase 2 Project - San Diego County, Annual

Project Characteristics - Phase 2 project components.

Land Use - Apartments above a 3-level parking structure.

Construction Phase - Schedule adjust to fit 20 month overall duration.

Architectural coating assumed to be concurrent with last 50% of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Demolition equipment adjusted for existing structures size.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment added for grubbing and asphalt/concrete removal.

Trips and VMT - Maximum painting crew = 20.

Demolition -

Grading - 3,060 CY vegetation/soil/asphalt/concrete exported during site prep.

1,000 CY soil exported during excavation for underground utilities and creek channel improvements.

All other cut/fill assumed to be balanced onsite.

Architectural Coating - Coating VOC limits per SDAPCD Rule 67.

Vehicle Trips - Trip rates and distance per traffic study.

All project trips applied to apartments.

Woodstoves - No woodstoves or wood burning fireplaces.

Area Coating - Coating VOC limits per SDAPCD Rule 67.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Fugitive dust mitigation per SDCPCD Rule 55.

Water Mitigation - 20% water reduction per 2019 CALGreen.

Waste Mitigation - 25% solid waste reduction per AB341.

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Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	130.00
tblConstructionPhase	NumDays	230.00	261.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	8.00	93.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	50.00
tblFireplaces	NumberWood	106.75	0.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialExported	0.00	3,060.00
tblLandUse	LotAcreage	3.84	0.00
tblLandUse	LotAcreage	4.92	2.85
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	WorkerTripNumber	62.00	40.00

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tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.83
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	4.98	5.71
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	3.65	5.71
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	4.20	5.71
tblVehicleTrips	WD_TR	1.89	0.00
tblWoodstoves	NumberCatalytic	15.25	0.00
tblWoodstoves	NumberNoncatalytic	15.25	0.00

2.0 Emissions Summary

Alvarado SP Phase 2 Project - San Diego County, Annual

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					
2023	0.0567	0.5883	0.4490	1.0900e-003	0.2631	0.0245	0.2876	0.1309	0.0225	0.1534	0.0000	98.0981	98.0981	0.0268	0.0000	98.7676
2024	0.6379	2.3585	2.7828	7.1100e-003	0.4959	0.0853	0.5812	0.1861	0.0798	0.2658	0.0000	640.9310	640.9310	0.0963	0.0000	643.3392
2025	0.7852	0.8251	1.1154	3.0100e-003	0.1395	0.0259	0.1654	0.0375	0.0245	0.0620	0.0000	272.3197	272.3197	0.0310	0.0000	273.0950
Maximum	0.7852	2.3585	2.7828	7.1100e-003	0.4959	0.0853	0.5812	0.1861	0.0798	0.2658	0.0000	640.9310	640.9310	0.0963	0.0000	643.3392

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					
2023	0.0567	0.5883	0.4490	1.0900e-003	0.1229	0.0245	0.1473	0.0601	0.0225	0.0826	0.0000	98.0981	98.0981	0.0268	0.0000	98.7675
2024	0.6379	2.3585	2.7828	7.1100e-003	0.3713	0.0853	0.4567	0.1236	0.0798	0.2033	0.0000	640.9306	640.9306	0.0963	0.0000	643.3389
2025	0.7852	0.8251	1.1154	3.0100e-003	0.1395	0.0259	0.1654	0.0375	0.0245	0.0620	0.0000	272.3196	272.3196	0.0310	0.0000	273.0949
Maximum	0.7852	2.3585	2.7828	7.1100e-003	0.3713	0.0853	0.4567	0.1236	0.0798	0.2033	0.0000	640.9306	640.9306	0.0963	0.0000	643.3389

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	29.47	0.00	25.60	37.59	0.00	27.69	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2023	11-30-2023	0.4352	0.4352
2	12-1-2023	2-29-2024	0.6279	0.6279
3	3-1-2024	5-31-2024	0.5543	0.5543
4	6-1-2024	8-31-2024	0.7064	0.7064
5	9-1-2024	11-30-2024	0.8932	0.8932
6	12-1-2024	2-28-2025	1.2216	1.2216
7	3-1-2025	5-31-2025	0.8158	0.8158
		Highest	1.2216	1.2216

Alvarado SP Phase 2 Project - San Diego County, Annual

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.3856	0.1402	2.3150	8.5000e-004		0.0218	0.0218		0.0218	0.0218	0.0000	135.8352	135.8352	6.0900e-003	2.4200e-003	136.7094
Energy	0.0122	0.1044	0.0444	6.7000e-004		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	847.2070	847.2070	0.0316	8.2700e-003	850.4587
Mobile	0.3287	1.3207	3.3293	0.0118	1.1535	9.4500e-003	1.1629	0.3088	8.7800e-003	0.3176	0.0000	1,092.4881	1,092.4881	0.0570	0.0000	1,093.9134
Waste						0.0000	0.0000		0.0000	0.0000	28.4959	0.0000	28.4959	1.6841	0.0000	70.5973
Water						0.0000	0.0000		0.0000	0.0000	6.3045	134.1597	140.4642	0.6529	0.0164	161.6766
Total	1.7265	1.5653	5.6888	0.0133	1.1535	0.0397	1.1932	0.3088	0.0390	0.3478	34.8003	2,209.6900	2,244.4903	2.4316	0.0271	2,313.3554

Alvarado SP Phase 2 Project - San Diego County, Annual

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	1.3856	0.1402	2.3150	8.5000e-004		0.0218	0.0218		0.0218	0.0218	0.0000	135.8352	135.8352	6.0900e-003	2.4200e-003	136.7094
Energy	0.0122	0.1044	0.0444	6.7000e-004		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	847.2070	847.2070	0.0316	8.2700e-003	850.4587
Mobile	0.3287	1.3207	3.3293	0.0118	1.1535	9.4500e-003	1.1629	0.3088	8.7800e-003	0.3176	0.0000	1,092.4881	1,092.4881	0.0570	0.0000	1,093.9134
Waste						0.0000	0.0000		0.0000	0.0000	21.3719	0.0000	21.3719	1.2630	0.0000	52.9480
Water						0.0000	0.0000		0.0000	0.0000	5.0436	107.3278	112.3713	0.5223	0.0131	129.3413
Total	1.7265	1.5653	5.6888	0.0133	1.1535	0.0397	1.1932	0.3088	0.0390	0.3478	26.4155	2,182.8580	2,209.2735	1.8800	0.0238	2,263.3708

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.09	1.21	1.57	22.68	12.10	2.16

3.0 Construction Detail**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2023	9/14/2023	5	10	
2	Site Preparation	Site Preparation	9/15/2023	11/23/2023	5	50	
3	Grading/Utilities	Grading	11/24/2023	4/2/2024	5	93	
4	Paving	Paving	4/3/2024	4/30/2024	5	20	
5	Building Construction	Building Construction	5/1/2024	4/30/2025	5	261	
6	Architectural Coating	Architectural Coating	10/31/2024	4/30/2025	5	130	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 617,625; Residential Outdoor: 205,875; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 10,248 (Architectural Coating – sqft)

OffRoad Equipment

Alvarado SP Phase 2 Project - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	4.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Excavators	1	4.00	158	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	4.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading/Utilities	Excavators	1	8.00	158	0.38
Grading/Utilities	Graders	1	8.00	187	0.41
Grading/Utilities	Rubber Tired Dozers	1	8.00	247	0.40
Grading/Utilities	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	8.00	0.00	11.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	383.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Utilities	6	15.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	309.00	67.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 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					1.2000e-003	0.0000	1.2000e-003	1.8000e-004	0.0000	1.8000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-003	0.0498	0.0410	8.0000e-005		2.3000e-003	2.3000e-003		2.1500e-003	2.1500e-003	0.0000	7.3638	7.3638	2.0100e-003	0.0000	7.4141
Total	5.2000e-003	0.0498	0.0410	8.0000e-005	1.2000e-003	2.3000e-003	3.5000e-003	1.8000e-004	2.1500e-003	2.3300e-003	0.0000	7.3638	7.3638	2.0100e-003	0.0000	7.4141

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3.2 Demolition - 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	3.0000e-005	9.0000e-004	3.3000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.3994	0.3994	4.0000e-005	0.0000	0.4003
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	1.2000e-004	8.0000e-005	8.6000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2596	0.2596	1.0000e-005	0.0000	0.2598
Total	1.5000e-004	9.8000e-004	1.1900e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.6590	0.6590	5.0000e-005	0.0000	0.6601

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					5.4000e-004	0.0000	5.4000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-003	0.0498	0.0410	8.0000e-005		2.3000e-003	2.3000e-003		2.1500e-003	2.1500e-003	0.0000	7.3638	7.3638	2.0100e-003	0.0000	7.4141
Total	5.2000e-003	0.0498	0.0410	8.0000e-005	5.4000e-004	2.3000e-003	2.8400e-003	8.0000e-005	2.1500e-003	2.2300e-003	0.0000	7.3638	7.3638	2.0100e-003	0.0000	7.4141

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3.2 Demolition - 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	3.0000e-005	9.0000e-004	3.3000e-004	0.0000	9.0000e-005	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.3994	0.3994	4.0000e-005	0.0000	0.4003
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	1.2000e-004	8.0000e-005	8.6000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2596	0.2596	1.0000e-005	0.0000	0.2598
Total	1.5000e-004	9.8000e-004	1.1900e-003	0.0000	4.1000e-004	0.0000	4.2000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.6590	0.6590	5.0000e-005	0.0000	0.6601

3.3 Site Preparation - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1508	0.0000	0.1508	0.0828	0.0000	0.0828	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2691	0.1930	4.3000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	38.1338	38.1338	0.0123	0.0000	38.4421
Total	0.0266	0.2691	0.1930	4.3000e-004	0.1508	0.0120	0.1628	0.0828	0.0110	0.0938	0.0000	38.1338	38.1338	0.0123	0.0000	38.4421

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3.3 Site Preparation - 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	9.7000e-004	0.0314	0.0115	1.4000e-004	3.2800e-003	6.0000e-005	3.3300e-003	9.0000e-004	6.0000e-005	9.6000e-004	0.0000	13.9057	13.9057	1.2400e-003	0.0000	13.9368
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	7.8000e-004	5.2000e-004	5.3800e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.5000e-004	0.0000	1.6227	1.6227	4.0000e-005	0.0000	1.6237
Total	1.7500e-003	0.0319	0.0169	1.6000e-004	5.2800e-003	7.0000e-005	5.3500e-003	1.4300e-003	7.0000e-005	1.5100e-003	0.0000	15.5283	15.5283	1.2800e-003	0.0000	15.5605

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0679	0.0000	0.0679	0.0373	0.0000	0.0373	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2691	0.1930	4.3000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	38.1337	38.1337	0.0123	0.0000	38.4420
Total	0.0266	0.2691	0.1930	4.3000e-004	0.0679	0.0120	0.0798	0.0373	0.0110	0.0483	0.0000	38.1337	38.1337	0.0123	0.0000	38.4420

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3.3 Site Preparation - 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	9.7000e-004	0.0314	0.0115	1.4000e-004	3.2800e-003	6.0000e-005	3.3300e-003	9.0000e-004	6.0000e-005	9.6000e-004	0.0000	13.9057	13.9057	1.2400e-003	0.0000	13.9368
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	7.8000e-004	5.2000e-004	5.3800e-003	2.0000e-005	2.0000e-003	1.0000e-005	2.0200e-003	5.3000e-004	1.0000e-005	5.5000e-004	0.0000	1.6227	1.6227	4.0000e-005	0.0000	1.6237
Total	1.7500e-003	0.0319	0.0169	1.6000e-004	5.2800e-003	7.0000e-005	5.3500e-003	1.4300e-003	7.0000e-005	1.5100e-003	0.0000	15.5283	15.5283	1.2800e-003	0.0000	15.5605

3.4 Grading/Utilities - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1030	0.0000	0.1030	0.0457	0.0000	0.0457	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.2332	0.1918	3.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	33.8788	33.8788	0.0110	0.0000	34.1527
Total	0.0222	0.2332	0.1918	3.9000e-004	0.1030	0.0101	0.1131	0.0457	9.2700e-003	0.0550	0.0000	33.8788	33.8788	0.0110	0.0000	34.1527

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3.4 Grading/Utilities - 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	9.0000e-005	2.8700e-003	1.0500e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	1.2688	1.2688	1.1000e-004	0.0000	1.2716
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	6.1000e-004	4.0000e-004	4.1900e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2657	1.2657	3.0000e-005	0.0000	1.2665
Total	7.0000e-004	3.2700e-003	5.2400e-003	2.0000e-005	2.4400e-003	2.0000e-005	2.4500e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.5345	2.5345	1.4000e-004	0.0000	2.5381

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0464	0.0000	0.0464	0.0206	0.0000	0.0206	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0222	0.2332	0.1918	3.9000e-004		0.0101	0.0101		9.2700e-003	9.2700e-003	0.0000	33.8788	33.8788	0.0110	0.0000	34.1527
Total	0.0222	0.2332	0.1918	3.9000e-004	0.0464	0.0101	0.0564	0.0206	9.2700e-003	0.0298	0.0000	33.8788	33.8788	0.0110	0.0000	34.1527

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3.4 Grading/Utilities - 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	9.0000e-005	2.8700e-003	1.0500e-003	1.0000e-005	8.8000e-004	1.0000e-005	8.8000e-004	2.2000e-004	1.0000e-005	2.3000e-004	0.0000	1.2688	1.2688	1.1000e-004	0.0000	1.2716
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	6.1000e-004	4.0000e-004	4.1900e-003	1.0000e-005	1.5600e-003	1.0000e-005	1.5700e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2657	1.2657	3.0000e-005	0.0000	1.2665
Total	7.0000e-004	3.2700e-003	5.2400e-003	2.0000e-005	2.4400e-003	2.0000e-005	2.4500e-003	6.4000e-004	2.0000e-005	6.6000e-004	0.0000	2.5345	2.5345	1.4000e-004	0.0000	2.5381

3.4 Grading/Utilities - 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					
Fugitive Dust					0.2265	0.0000	0.2265	0.1136	0.0000	0.1136	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0557	0.5705	0.4944	9.9000e-004		0.0243	0.0243		0.0223	0.0223	0.0000	87.3141	87.3141	0.0282	0.0000	88.0201
Total	0.0557	0.5705	0.4944	9.9000e-004	0.2265	0.0243	0.2507	0.1136	0.0223	0.1359	0.0000	87.3141	87.3141	0.0282	0.0000	88.0201

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3.4 Grading/Utilities - 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	2.2000e-004	7.2000e-003	2.7200e-003	3.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	3.2469	3.2469	2.9000e-004	0.0000	3.2542
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	1.4900e-003	9.5000e-004	0.0101	3.0000e-005	4.0300e-003	3.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.1000e-003	0.0000	3.1332	3.1332	8.0000e-005	0.0000	3.1351
Total	1.7100e-003	8.1500e-003	0.0128	6.0000e-005	5.0300e-003	4.0000e-005	5.0700e-003	1.3400e-003	3.0000e-005	1.3800e-003	0.0000	6.3800	6.3800	3.7000e-004	0.0000	6.3893

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.1019	0.0000	0.1019	0.0511	0.0000	0.0511	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0557	0.5705	0.4944	9.9000e-004		0.0243	0.0243		0.0223	0.0223	0.0000	87.3140	87.3140	0.0282	0.0000	88.0200
Total	0.0557	0.5705	0.4944	9.9000e-004	0.1019	0.0243	0.1262	0.0511	0.0223	0.0734	0.0000	87.3140	87.3140	0.0282	0.0000	88.0200

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3.4 Grading/Utilities - 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	2.2000e-004	7.2000e-003	2.7200e-003	3.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.8000e-004	0.0000	3.2469	3.2469	2.9000e-004	0.0000	3.2542
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	1.4900e-003	9.5000e-004	0.0101	3.0000e-005	4.0300e-003	3.0000e-005	4.0600e-003	1.0700e-003	2.0000e-005	1.1000e-003	0.0000	3.1332	3.1332	8.0000e-005	0.0000	3.1351
Total	1.7100e-003	8.1500e-003	0.0128	6.0000e-005	5.0300e-003	4.0000e-005	5.0700e-003	1.3400e-003	3.0000e-005	1.3800e-003	0.0000	6.3800	6.3800	3.7000e-004	0.0000	6.3893

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	8.8100e-003	0.0827	0.1222	1.9000e-004		3.9900e-003	3.9900e-003		3.6800e-003	3.6800e-003	0.0000	16.3803	16.3803	5.1500e-003	0.0000	16.5090
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.8100e-003	0.0827	0.1222	1.9000e-004		3.9900e-003	3.9900e-003		3.6800e-003	3.6800e-003	0.0000	16.3803	16.3803	5.1500e-003	0.0000	16.5090

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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	5.9000e-004	3.8000e-004	4.0200e-003	1.0000e-005	1.6000e-003	1.0000e-005	1.6100e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.2470	1.2470	3.0000e-005	0.0000	1.2478
Total	5.9000e-004	3.8000e-004	4.0200e-003	1.0000e-005	1.6000e-003	1.0000e-005	1.6100e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.2470	1.2470	3.0000e-005	0.0000	1.2478

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	8.8100e-003	0.0827	0.1222	1.9000e-004		3.9900e-003	3.9900e-003		3.6800e-003	3.6800e-003	0.0000	16.3803	16.3803	5.1500e-003	0.0000	16.5090
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.8100e-003	0.0827	0.1222	1.9000e-004		3.9900e-003	3.9900e-003		3.6800e-003	3.6800e-003	0.0000	16.3803	16.3803	5.1500e-003	0.0000	16.5090

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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	5.9000e-004	3.8000e-004	4.0200e-003	1.0000e-005	1.6000e-003	1.0000e-005	1.6100e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.2470	1.2470	3.0000e-005	0.0000	1.2478
Total	5.9000e-004	3.8000e-004	4.0200e-003	1.0000e-005	1.6000e-003	1.0000e-005	1.6100e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.2470	1.2470	3.0000e-005	0.0000	1.2478

3.6 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	0.1288	1.1763	1.4146	2.3600e-003		0.0537	0.0537		0.0505	0.0505	0.0000	202.8680	202.8680	0.0480	0.0000	204.0673
Total	0.1288	1.1763	1.4146	2.3600e-003		0.0537	0.0537		0.0505	0.0505	0.0000	202.8680	202.8680	0.0480	0.0000	204.0673

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3.6 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	0.0126	0.4407	0.1341	1.5000e-003	0.0389	5.2000e-004	0.0394	0.0112	5.0000e-004	0.0117	0.0000	147.0553	147.0553	9.9400e-003	0.0000	147.3038
Worker	0.0802	0.0512	0.5431	1.8600e-003	0.2168	1.4400e-003	0.2183	0.0576	1.3300e-003	0.0589	0.0000	168.5822	168.5822	4.1800e-003	0.0000	168.6866
Total	0.0927	0.4919	0.6773	3.3600e-003	0.2557	1.9600e-003	0.2577	0.0688	1.8300e-003	0.0707	0.0000	315.6375	315.6375	0.0141	0.0000	315.9904

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1288	1.1763	1.4146	2.3600e-003		0.0537	0.0537		0.0505	0.0505	0.0000	202.8677	202.8677	0.0480	0.0000	204.0670
Total	0.1288	1.1763	1.4146	2.3600e-003		0.0537	0.0537		0.0505	0.0505	0.0000	202.8677	202.8677	0.0480	0.0000	204.0670

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3.6 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	0.0126	0.4407	0.1341	1.5000e-003	0.0389	5.2000e-004	0.0394	0.0112	5.0000e-004	0.0117	0.0000	147.0553	147.0553	9.9400e-003	0.0000	147.3038
Worker	0.0802	0.0512	0.5431	1.8600e-003	0.2168	1.4400e-003	0.2183	0.0576	1.3300e-003	0.0589	0.0000	168.5822	168.5822	4.1800e-003	0.0000	168.6866
Total	0.0927	0.4919	0.6773	3.3600e-003	0.2557	1.9600e-003	0.2577	0.0688	1.8300e-003	0.0707	0.0000	315.6375	315.6375	0.0141	0.0000	315.9904

3.6 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	0.0588	0.5362	0.6916	1.1600e-003		0.0227	0.0227		0.0213	0.0213	0.0000	99.7254	99.7254	0.0234	0.0000	100.3114
Total	0.0588	0.5362	0.6916	1.1600e-003		0.0227	0.0227		0.0213	0.0213	0.0000	99.7254	99.7254	0.0234	0.0000	100.3114

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3.6 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	5.9800e-003	0.2134	0.0646	7.3000e-004	0.0191	2.5000e-004	0.0194	5.5200e-003	2.4000e-004	5.7600e-003	0.0000	71.8275	71.8275	4.8300e-003	0.0000	71.9483
Worker	0.0376	0.0232	0.2491	8.8000e-004	0.1066	7.0000e-004	0.1073	0.0283	6.4000e-004	0.0290	0.0000	79.4970	79.4970	1.8900e-003	0.0000	79.5443
Total	0.0436	0.2366	0.3137	1.6100e-003	0.1257	9.5000e-004	0.1266	0.0338	8.8000e-004	0.0347	0.0000	151.3245	151.3245	6.7200e-003	0.0000	151.4927

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0588	0.5362	0.6916	1.1600e-003		0.0227	0.0227		0.0213	0.0213	0.0000	99.7253	99.7253	0.0234	0.0000	100.3113
Total	0.0588	0.5362	0.6916	1.1600e-003		0.0227	0.0227		0.0213	0.0213	0.0000	99.7253	99.7253	0.0234	0.0000	100.3113

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3.6 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	5.9800e-003	0.2134	0.0646	7.3000e-004	0.0191	2.5000e-004	0.0194	5.5200e-003	2.4000e-004	5.7600e-003	0.0000	71.8275	71.8275	4.8300e-003	0.0000	71.9483
Worker	0.0376	0.0232	0.2491	8.8000e-004	0.1066	7.0000e-004	0.1073	0.0283	6.4000e-004	0.0290	0.0000	79.4970	79.4970	1.8900e-003	0.0000	79.5443
Total	0.0436	0.2366	0.3137	1.6100e-003	0.1257	9.5000e-004	0.1266	0.0338	8.8000e-004	0.0347	0.0000	151.3245	151.3245	6.7200e-003	0.0000	151.4927

3.7 Architectural Coating - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3431					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9800e-003	0.0268	0.0398	7.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	5.6172	5.6172	3.2000e-004	0.0000	5.6251
Total	0.3471	0.0268	0.0398	7.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	5.6172	5.6172	3.2000e-004	0.0000	5.6251

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3.7 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	2.6100e-003	1.6700e-003	0.0177	6.0000e-005	7.0600e-003	5.0000e-005	7.1000e-003	1.8800e-003	4.0000e-005	1.9200e-003	0.0000	5.4869	5.4869	1.4000e-004	0.0000	5.4903
Total	2.6100e-003	1.6700e-003	0.0177	6.0000e-005	7.0600e-003	5.0000e-005	7.1000e-003	1.8800e-003	4.0000e-005	1.9200e-003	0.0000	5.4869	5.4869	1.4000e-004	0.0000	5.4903

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.3431					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.9800e-003	0.0268	0.0398	7.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	5.6172	5.6172	3.2000e-004	0.0000	5.6251
Total	0.3471	0.0268	0.0398	7.0000e-005		1.3400e-003	1.3400e-003		1.3400e-003	1.3400e-003	0.0000	5.6172	5.6172	3.2000e-004	0.0000	5.6251

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3.7 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	2.6100e-003	1.6700e-003	0.0177	6.0000e-005	7.0600e-003	5.0000e-005	7.1000e-003	1.8800e-003	4.0000e-005	1.9200e-003	0.0000	5.4869	5.4869	1.4000e-004	0.0000	5.4903
Total	2.6100e-003	1.6700e-003	0.0177	6.0000e-005	7.0600e-003	5.0000e-005	7.1000e-003	1.8800e-003	4.0000e-005	1.9200e-003	0.0000	5.4869	5.4869	1.4000e-004	0.0000	5.4903

3.7 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	0.6705					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3500e-003	0.0493	0.0778	1.3000e-004		2.2100e-003	2.2100e-003		2.2100e-003	2.2100e-003	0.0000	10.9790	10.9790	6.0000e-004	0.0000	10.9940
Total	0.6779	0.0493	0.0778	1.3000e-004		2.2100e-003	2.2100e-003		2.2100e-003	2.2100e-003	0.0000	10.9790	10.9790	6.0000e-004	0.0000	10.9940

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3.7 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	4.8700e-003	3.0000e-003	0.0323	1.1000e-004	0.0138	9.0000e-005	0.0139	3.6700e-003	8.0000e-005	3.7500e-003	0.0000	10.2909	10.2909	2.5000e-004	0.0000	10.2970
Total	4.8700e-003	3.0000e-003	0.0323	1.1000e-004	0.0138	9.0000e-005	0.0139	3.6700e-003	8.0000e-005	3.7500e-003	0.0000	10.2909	10.2909	2.5000e-004	0.0000	10.2970

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6705					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.3500e-003	0.0493	0.0778	1.3000e-004		2.2100e-003	2.2100e-003		2.2100e-003	2.2100e-003	0.0000	10.9790	10.9790	6.0000e-004	0.0000	10.9940
Total	0.6779	0.0493	0.0778	1.3000e-004		2.2100e-003	2.2100e-003		2.2100e-003	2.2100e-003	0.0000	10.9790	10.9790	6.0000e-004	0.0000	10.9940

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3.7 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	4.8700e-003	3.0000e-003	0.0323	1.1000e-004	0.0138	9.0000e-005	0.0139	3.6700e-003	8.0000e-005	3.7500e-003	0.0000	10.2909	10.2909	2.5000e-004	0.0000	10.2970
Total	4.8700e-003	3.0000e-003	0.0323	1.1000e-004	0.0138	9.0000e-005	0.0139	3.6700e-003	8.0000e-005	3.7500e-003	0.0000	10.2909	10.2909	2.5000e-004	0.0000	10.2970

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.3287	1.3207	3.3293	0.0118	1.1535	9.4500e-003	1.1629	0.3088	8.7800e-003	0.3176	0.0000	1,092.4881	1,092.4881	0.0570	0.0000	1,093.9134
Unmitigated	0.3287	1.3207	3.3293	0.0118	1.1535	9.4500e-003	1.1629	0.3088	8.7800e-003	0.3176	0.0000	1,092.4881	1,092.4881	0.0570	0.0000	1,093.9134

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	1,741.55	1,741.55	1,741.55	3,061,854	3,061,854
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Total	1,741.55	1,741.55	1,741.55	3,061,854	3,061,854

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	4.83	0.00	0.00	100.00	0.00	0.00	100	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908
City Park	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908
Enclosed Parking with Elevator	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	726.2971	726.2971	0.0292	6.0500e-003	728.8303
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	726.2971	726.2971	0.0292	6.0500e-003	728.8303
NaturalGas Mitigated	0.0122	0.1044	0.0444	6.7000e-004		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	120.9099	120.9099	2.3200e-003	2.2200e-003	121.6284
NaturalGas Unmitigated	0.0122	0.1044	0.0444	6.7000e-004		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	120.9099	120.9099	2.3200e-003	2.2200e-003	121.6284

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	2.26577e+006	0.0122	0.1044	0.0444	6.7000e-004		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	120.9099	120.9099	2.3200e-003	2.2200e-003	121.6284
City Park	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
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0122	0.1044	0.0444	6.7000e-004		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	120.9099	120.9099	2.3200e-003	2.2200e-003	121.6284

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments High Rise	2.26577e+006	0.0122	0.1044	0.0444	6.7000e-004		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	120.9099	120.9099	2.3200e-003	2.2200e-003	121.6284
City Park	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
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0122	0.1044	0.0444	6.7000e-004		8.4400e-003	8.4400e-003		8.4400e-003	8.4400e-003	0.0000	120.9099	120.9099	2.3200e-003	2.2200e-003	121.6284

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.2215e+006	399.1981	0.0161	3.3200e-003	400.5905
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.00089e+006	327.0990	0.0132	2.7200e-003	328.2399
Total		726.2971	0.0292	6.0400e-003	728.8303

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments High Rise	1.2215e+006	399.1981	0.0161	3.3200e-003	400.5905
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.00089e+006	327.0990	0.0132	2.7200e-003	328.2399
Total		726.2971	0.0292	6.0400e-003	728.8303

6.0 Area Detail

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6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3856	0.1402	2.3150	8.5000e-004		0.0218	0.0218		0.0218	0.0218	0.0000	135.8352	135.8352	6.0900e-003	2.4200e-003	136.7094
Unmitigated	1.3856	0.1402	2.3150	8.5000e-004		0.0218	0.0218		0.0218	0.0218	0.0000	135.8352	135.8352	6.0900e-003	2.4200e-003	136.7094

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1014					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2026					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0134	0.1141	0.0486	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	132.1283	132.1283	2.5300e-003	2.4200e-003	132.9134
Landscaping	0.0683	0.0261	2.2664	1.2000e-004		0.0126	0.0126		0.0126	0.0126	0.0000	3.7069	3.7069	3.5600e-003	0.0000	3.7960
Total	1.3856	0.1402	2.3150	8.5000e-004		0.0218	0.0218		0.0218	0.0218	0.0000	135.8352	135.8352	6.0900e-003	2.4200e-003	136.7094

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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	0.1014					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.2026					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0134	0.1141	0.0486	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003	0.0000	132.1283	132.1283	2.5300e-003	2.4200e-003	132.9134
Landscaping	0.0683	0.0261	2.2664	1.2000e-004		0.0126	0.0126		0.0126	0.0126	0.0000	3.7069	3.7069	3.5600e-003	0.0000	3.7960
Total	1.3856	0.1402	2.3150	8.5000e-004		0.0218	0.0218		0.0218	0.0218	0.0000	135.8352	135.8352	6.0900e-003	2.4200e-003	136.7094

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

Alvarado SP Phase 2 Project - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	112.3713	0.5223	0.0131	129.3413
Unmitigated	140.4642	0.6529	0.0164	161.6766

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	19.872 / 12.528	136.3544	0.6528	0.0164	157.5525
City Park	0 / 1.13191	4.1098	1.7000e-004	3.0000e-005	4.1241
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		140.4642	0.6529	0.0164	161.6766

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments High Rise	15.8976 / 10.0224	109.0835	0.5222	0.0131	126.0420
City Park	0 / 0.905526	3.2878	1.3000e-004	3.0000e-005	3.2993
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		112.3713	0.5223	0.0131	129.3413

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Alvarado SP Phase 2 Project - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	21.3719	1.2630	0.0000	52.9480
Unmitigated	28.4959	1.6841	0.0000	70.5973

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	140.3	28.4796	1.6831	0.0000	70.5571
City Park	0.08	0.0162	9.6000e-004	0.0000	0.0402
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		28.4959	1.6841	0.0000	70.5973

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8.2 Waste by Land Use**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments High Rise	105.225	21.3597	1.2623	0.0000	52.9178
City Park	0.06	0.0122	7.2000e-004	0.0000	0.0302
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Total		21.3719	1.2630	0.0000	52.9480

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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Alvarado SP Phase 2 Project - San Diego County, Annual

11.0 Vegetation

Alvarado SP Phase 2 Project - San Diego County, Winter

Alvarado SP Phase 2 Project

San Diego County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	427.00	Space	0.00	170,800.00	0
City Park	0.95	Acre	0.95	41,382.00	0
Apartments High Rise	305.00	Dwelling Unit	2.85	305,000.00	872

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2026
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Alvarado SP Phase 2 Project - San Diego County, Winter

Project Characteristics - Phase 2 project components.

Land Use - Apartments above a 3-level parking structure.

Construction Phase - Schedule adjust to fit 20 month overall duration.

Architectural coating assumed to be concurrent with last 50% of building construction.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Demolition equipment adjusted for existing structures size.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment - Equipment added for grubbing and asphalt/concrete removal.

Trips and VMT - Maximum painting crew = 20.

Demolition -

Grading - 3,060 CY vegetation/soil/asphalt/concrete exported during site prep.

1,000 CY soil exported during excavation for underground utilities and creek channel improvements.

All other cut/fill assumed to be balanced onsite.

Architectural Coating - Coating VOC limits per SDAPCD Rule 67.

Vehicle Trips - Trip rates and distance per traffic study.

All project trips applied to apartments.

Woodstoves - No woodstoves or wood burning fireplaces.

Area Coating - Coating VOC limits per SDAPCD Rule 67.

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Fugitive dust mitigation per SDCPCD Rule 55.

Water Mitigation - 20% water reduction per 2019 CALGreen.

Waste Mitigation - 25% solid waste reduction per AB341.

Alvarado SP Phase 2 Project - San Diego County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	100
tblAreaCoating	Area_EF_Nonresidential_Interior	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	130.00
tblConstructionPhase	NumDays	230.00	261.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	8.00	93.00
tblConstructionPhase	NumDays	18.00	20.00
tblConstructionPhase	NumDays	5.00	50.00
tblFireplaces	NumberWood	106.75	0.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialExported	0.00	3,060.00
tblLandUse	LotAcreage	3.84	0.00
tblLandUse	LotAcreage	4.92	2.85
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	WorkerTripNumber	62.00	40.00

Alvarado SP Phase 2 Project - San Diego County, Winter

tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.83
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	4.98	5.71
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	3.65	5.71
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	4.20	5.71
tblVehicleTrips	WD_TR	1.89	0.00
tblWoodstoves	NumberCatalytic	15.25	0.00
tblWoodstoves	NumberNoncatalytic	15.25	0.00

2.0 Emissions Summary

Alvarado SP Phase 2 Project - San Diego County, Winter

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					
2023	1.7707	18.1855	15.1549	0.0317	6.7464	0.7762	7.5225	3.4181	0.7141	4.1322	0.0000	3,085.4408	3,085.4408	0.9416	0.0000	3,108.9811
2024	18.5677	20.3173	26.5664	0.0706	6.7075	0.7256	7.4331	3.4085	0.6676	4.0761	0.0000	7,036.9247	7,036.9247	0.9415	0.0000	7,057.1230
2025	18.3984	19.1454	25.9831	0.0695	3.3205	0.6034	3.9239	0.8910	0.5703	1.4613	0.0000	6,930.7803	6,930.7803	0.7980	0.0000	6,950.7298
Maximum	18.5677	20.3173	26.5664	0.0706	6.7464	0.7762	7.5225	3.4181	0.7141	4.1322	0.0000	7,036.9247	7,036.9247	0.9416	0.0000	7,057.1230

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					
2023	1.7707	18.1855	15.1549	0.0317	3.1417	0.7762	3.9179	1.5658	0.7141	2.2799	0.0000	3,085.4408	3,085.4408	0.9416	0.0000	3,108.9811
2024	18.5677	20.3173	26.5664	0.0706	3.3205	0.7256	4.0195	1.5563	0.6676	2.2239	0.0000	7,036.9247	7,036.9247	0.9415	0.0000	7,057.1230
2025	18.3984	19.1454	25.9831	0.0695	3.3205	0.6034	3.9239	0.8910	0.5703	1.4613	0.0000	6,930.7803	6,930.7803	0.7980	0.0000	6,950.7298
Maximum	18.5677	20.3173	26.5664	0.0706	3.3205	0.7762	4.0195	1.5658	0.7141	2.2799	0.0000	7,036.9247	7,036.9247	0.9416	0.0000	7,057.1230

Alvarado SP Phase 2 Project - San Diego 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
Percent Reduction	0.00	0.00	0.00	0.00	41.68	0.00	37.17	48.00	0.00	38.31	0.00	0.00	0.00	0.00	0.00	0.00

Alvarado SP Phase 2 Project - San Diego County, Winter

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	8.2295	3.0726	26.3667	0.0191		0.3646	0.3646		0.3646	0.3646	0.0000	3,597.755 1	3,597.755 1	0.1117	0.0651	3,619.955 7
Energy	0.0669	0.5721	0.2434	3.6500e-003		0.0463	0.0463		0.0463	0.0463		730.3032	730.3032	0.0140	0.0134	734.6430
Mobile	1.8573	7.2249	18.6058	0.0640	6.4902	0.0521	6.5423	1.7341	0.0485	1.7826		6,544.365 6	6,544.365 6	0.3505		6,553.127 7
Total	10.1537	10.8696	45.2160	0.0868	6.4902	0.4630	6.9532	1.7341	0.4593	2.1935	0.0000	10,872.42 39	10,872.42 39	0.4762	0.0785	10,907.72 64

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	8.2295	3.0726	26.3667	0.0191		0.3646	0.3646		0.3646	0.3646	0.0000	3,597.755 1	3,597.755 1	0.1117	0.0651	3,619.955 7
Energy	0.0669	0.5721	0.2434	3.6500e-003		0.0463	0.0463		0.0463	0.0463		730.3032	730.3032	0.0140	0.0134	734.6430
Mobile	1.8573	7.2249	18.6058	0.0640	6.4902	0.0521	6.5423	1.7341	0.0485	1.7826		6,544.365 6	6,544.365 6	0.3505		6,553.127 7
Total	10.1537	10.8696	45.2160	0.0868	6.4902	0.4630	6.9532	1.7341	0.4593	2.1935	0.0000	10,872.42 39	10,872.42 39	0.4762	0.0785	10,907.72 64

Alvarado SP Phase 2 Project - San Diego 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2023	9/14/2023	5	10	
2	Site Preparation	Site Preparation	9/15/2023	11/23/2023	5	50	
3	Grading/Utilities	Grading	11/24/2023	4/2/2024	5	93	
4	Paving	Paving	4/3/2024	4/30/2024	5	20	
5	Building Construction	Building Construction	5/1/2024	4/30/2025	5	261	
6	Architectural Coating	Architectural Coating	10/31/2024	4/30/2025	5	130	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 617,625; Residential Outdoor: 205,875; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 10,248 (Architectural Coating – sqft)

OffRoad Equipment

Alvarado SP Phase 2 Project - San Diego County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	4.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Excavators	1	4.00	158	0.38
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Rubber Tired Loaders	1	4.00	203	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading/Utilities	Excavators	1	8.00	158	0.38
Grading/Utilities	Graders	1	8.00	187	0.41
Grading/Utilities	Rubber Tired Dozers	1	8.00	247	0.40
Grading/Utilities	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Alvarado SP Phase 2 Project - San Diego County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	8.00	0.00	11.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	383.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading/Utilities	6	15.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	309.00	67.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	40.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2023**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2392	0.0000	0.2392	0.0362	0.0000	0.0362			0.0000			0.0000
Off-Road	1.0402	9.9679	8.1928	0.0168		0.4609	0.4609		0.4291	0.4291		1,623.439 2	1,623.439 2	0.4438		1,634.534 5
Total	1.0402	9.9679	8.1928	0.0168	0.2392	0.4609	0.7001	0.0362	0.4291	0.4654		1,623.439 2	1,623.439 2	0.4438		1,634.534 5

Alvarado SP Phase 2 Project - San Diego County, Winter

3.2 Demolition - 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	5.6300e-003	0.1786	0.0676	7.9000e-004	0.0192	3.4000e-004	0.0196	5.2700e-003	3.3000e-004	5.5900e-003		87.1517	87.1517	7.9900e-003		87.3516
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	0.0282	0.0168	0.1716	5.7000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		56.6717	56.6717	1.4700e-003		56.7085
Total	0.0339	0.1954	0.2391	1.3600e-003	0.0849	7.8000e-004	0.0857	0.0227	7.3000e-004	0.0234		143.8234	143.8234	9.4600e-003		144.0600

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.1076	0.0000	0.1076	0.0163	0.0000	0.0163			0.0000			0.0000
Off-Road	1.0402	9.9679	8.1928	0.0168		0.4609	0.4609		0.4291	0.4291	0.0000	1,623.4392	1,623.4392	0.4438		1,634.5345
Total	1.0402	9.9679	8.1928	0.0168	0.1076	0.4609	0.5685	0.0163	0.4291	0.4454	0.0000	1,623.4392	1,623.4392	0.4438		1,634.5345

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3.2 Demolition - 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	5.6300e-003	0.1786	0.0676	7.9000e-004	0.0192	3.4000e-004	0.0196	5.2700e-003	3.3000e-004	5.5900e-003		87.1517	87.1517	7.9900e-003		87.3516
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	0.0282	0.0168	0.1716	5.7000e-004	0.0657	4.4000e-004	0.0662	0.0174	4.0000e-004	0.0178		56.6717	56.6717	1.4700e-003		56.7085
Total	0.0339	0.1954	0.2391	1.3600e-003	0.0849	7.8000e-004	0.0857	0.0227	7.3000e-004	0.0234		143.8234	143.8234	9.4600e-003		144.0600

3.3 Site Preparation - 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					6.0307	0.0000	6.0307	3.3115	0.0000	3.3115			0.0000			0.0000
Off-Road	1.0656	10.7645	7.7214	0.0174		0.4791	0.4791		0.4408	0.4408		1,681.4106	1,681.4106	0.5438		1,695.0056
Total	1.0656	10.7645	7.7214	0.0174	6.0307	0.4791	6.5098	3.3115	0.4408	3.7523		1,681.4106	1,681.4106	0.5438		1,695.0056

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3.3 Site Preparation - 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	0.0392	1.2435	0.4705	5.5000e-003	0.1339	2.3700e-003	0.1362	0.0367	2.2700e-003	0.0390		606.8928	606.8928	0.0557		608.2845
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	0.0353	0.0210	0.2144	7.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		70.8396	70.8396	1.8400e-003		70.8856
Total	0.0745	1.2645	0.6849	6.2100e-003	0.2160	2.9100e-003	0.2189	0.0585	2.7700e-003	0.0612		677.7325	677.7325	0.0575		679.1700

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.7138	0.0000	2.7138	1.4902	0.0000	1.4902			0.0000			0.0000
Off-Road	1.0656	10.7645	7.7214	0.0174		0.4791	0.4791		0.4408	0.4408	0.0000	1,681.4106	1,681.4106	0.5438		1,695,0056
Total	1.0656	10.7645	7.7214	0.0174	2.7138	0.4791	3.1929	1.4902	0.4408	1.9310	0.0000	1,681.4106	1,681.4106	0.5438		1,695,0056

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3.3 Site Preparation - 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	0.0392	1.2435	0.4705	5.5000e-003	0.1339	2.3700e-003	0.1362	0.0367	2.2700e-003	0.0390		606.8928	606.8928	0.0557		608.2845
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	0.0353	0.0210	0.2144	7.1000e-004	0.0822	5.4000e-004	0.0827	0.0218	5.0000e-004	0.0223		70.8396	70.8396	1.8400e-003		70.8856
Total	0.0745	1.2645	0.6849	6.2100e-003	0.2160	2.9100e-003	0.2189	0.0585	2.7700e-003	0.0612		677.7325	677.7325	0.0575		679.1700

3.4 Grading/Utilities - 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					6.5539	0.0000	6.5539	3.3677	0.0000	3.3677			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895,9182
Total	1.7109	17.9359	14.7507	0.0297	6.5539	0.7749	7.3288	3.3677	0.7129	4.0806		2,872.6910	2,872.6910	0.9291		2,895,9182

Alvarado SP Phase 2 Project - San Diego County, Winter

3.4 Grading/Utilities - 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	6.8900e-003	0.2182	0.0826	9.6000e-004	0.0693	4.2000e-004	0.0697	0.0177	4.0000e-004	0.0181		106.4904	106.4904	9.7700e-003		106.7346
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	0.0529	0.0315	0.3217	1.0700e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		106.2594	106.2594	2.7600e-003		106.3284
Total	0.0598	0.2497	0.4042	2.0300e-003	0.1925	1.2400e-003	0.1937	0.0504	1.1500e-003	0.0515		212.7498	212.7498	0.0125		213.0629

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9492	0.0000	2.9492	1.5155	0.0000	1.5155			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895,918.2
Total	1.7109	17.9359	14.7507	0.0297	2.9492	0.7749	3.7242	1.5155	0.7129	2.2284	0.0000	2,872.6910	2,872.6910	0.9291		2,895,918.2

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3.4 Grading/Utilities - 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	6.8900e-003	0.2182	0.0826	9.6000e-004	0.0693	4.2000e-004	0.0697	0.0177	4.0000e-004	0.0181		106.4904	106.4904	9.7700e-003		106.7346
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	0.0529	0.0315	0.3217	1.0700e-003	0.1232	8.2000e-004	0.1240	0.0327	7.5000e-004	0.0334		106.2594	106.2594	2.7600e-003		106.3284
Total	0.0598	0.2497	0.4042	2.0300e-003	0.1925	1.2400e-003	0.1937	0.0504	1.1500e-003	0.0515		212.7498	212.7498	0.0125		213.0629

3.4 Grading/Utilities - 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					
Fugitive Dust					6.5539	0.0000	6.5539	3.3677	0.0000	3.3677			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665		2,873.054 1	2,873.054 1	0.9292		2,896.284 2
Total	1.6617	17.0310	14.7594	0.0297	6.5539	0.7244	7.2783	3.3677	0.6665	4.0342		2,873.054 1	2,873.054 1	0.9292		2,896.284 2

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3.4 Grading/Utilities - 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	6.7700e-003	0.2127	0.0832	9.6000e-004	0.0304	4.1000e-004	0.0308	8.1300e-003	3.9000e-004	8.5200e-003		105.7583	105.7583	9.8100e-003		106.0035
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	0.0504	0.0289	0.3003	1.0200e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		102.0768	102.0768	2.5300e-003		102.1401
Total	0.0572	0.2416	0.3835	1.9800e-003	0.1536	1.2100e-003	0.1548	0.0408	1.1300e-003	0.0419		207.8351	207.8351	0.0123		208.1436

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.9492	0.0000	2.9492	1.5155	0.0000	1.5155			0.0000			0.0000
Off-Road	1.6617	17.0310	14.7594	0.0297		0.7244	0.7244		0.6665	0.6665	0.0000	2,873.054 1	2,873.054 1	0.9292		2,896.284 2
Total	1.6617	17.0310	14.7594	0.0297	2.9492	0.7244	3.6737	1.5155	0.6665	2.1819	0.0000	2,873.054 1	2,873.054 1	0.9292		2,896.284 2

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3.4 Grading/Utilities - 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	6.7700e-003	0.2127	0.0832	9.6000e-004	0.0304	4.1000e-004	0.0308	8.1300e-003	3.9000e-004	8.5200e-003		105.7583	105.7583	9.8100e-003		106.0035
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	0.0504	0.0289	0.3003	1.0200e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		102.0768	102.0768	2.5300e-003		102.1401
Total	0.0572	0.2416	0.3835	1.9800e-003	0.1536	1.2100e-003	0.1548	0.0408	1.1300e-003	0.0419		207.8351	207.8351	0.0123		208.1436

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	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039

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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	0.0673	0.0385	0.4004	1.3600e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		136.1024	136.1024	3.3800e-003		136.1868
Total	0.0673	0.0385	0.4004	1.3600e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		136.1024	136.1024	3.3800e-003		136.1868

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039

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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	0.0673	0.0385	0.4004	1.3600e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		136.1024	136.1024	3.3800e-003		136.1868
Total	0.0673	0.0385	0.4004	1.3600e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		136.1024	136.1024	3.3800e-003		136.1868

3.6 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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

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3.6 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	0.1479	4.9828	1.6031	0.0169	0.4536	6.1300e-003	0.4597	0.1306	5.8600e-003	0.1364		1,824.7911	1,824.7911	0.1288		1,828.0119
Worker	1.0391	0.5950	6.1856	0.0211	2.5384	0.0165	2.5549	0.6733	0.0152	0.6885		2,102.7819	2,102.7819	0.0522		2,104.0856
Total	1.1870	5.5778	7.7887	0.0380	2.9919	0.0226	3.0146	0.8039	0.0211	0.8249		3,927.5729	3,927.5729	0.1810		3,932.0975

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

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3.6 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	0.1479	4.9828	1.6031	0.0169	0.4536	6.1300e-003	0.4597	0.1306	5.8600e-003	0.1364		1,824.7911	1,824.7911	0.1288		1,828.0119
Worker	1.0391	0.5950	6.1856	0.0211	2.5384	0.0165	2.5549	0.6733	0.0152	0.6885		2,102.7819	2,102.7819	0.0522		2,104.0856
Total	1.1870	5.5778	7.7887	0.0380	2.9919	0.0226	3.0146	0.8039	0.0211	0.8249		3,927.5729	3,927.5729	0.1810		3,932.0975

3.6 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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Alvarado SP Phase 2 Project - San Diego County, Winter

3.6 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	0.1434	4.9107	1.5703	0.0168	0.4536	5.9300e-003	0.4595	0.1306	5.6700e-003	0.1362		1,813.8687	1,813.8687	0.1273		1,817.0522
Worker	0.9941	0.5485	5.7719	0.0202	2.5384	0.0163	2.5546	0.6733	0.0150	0.6883		2,017.7869	2,017.7869	0.0481		2,018.9898
Total	1.1375	5.4592	7.3421	0.0370	2.9919	0.0222	3.0141	0.8039	0.0206	0.8245		3,831.6557	3,831.6557	0.1755		3,836.0420

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Alvarado SP Phase 2 Project - San Diego County, Winter

3.6 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	0.1434	4.9107	1.5703	0.0168	0.4536	5.9300e-003	0.4595	0.1306	5.6700e-003	0.1362		1,813.8687	1,813.8687	0.1273		1,817.0522
Worker	0.9941	0.5485	5.7719	0.0202	2.5384	0.0163	2.5546	0.6733	0.0150	0.6883		2,017.7869	2,017.7869	0.0481		2,018.9898
Total	1.1375	5.4592	7.3421	0.0370	2.9919	0.0222	3.0141	0.8039	0.0206	0.8245		3,831.6557	3,831.6557	0.1755		3,836.0420

3.7 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	15.5939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	15.7747	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Alvarado SP Phase 2 Project - San Diego County, Winter

3.7 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	0.1345	0.0770	0.8007	2.7300e-003	0.3286	2.1400e-003	0.3307	0.0872	1.9700e-003	0.0891		272.2048	272.2048	6.7500e-003		272.3735
Total	0.1345	0.0770	0.8007	2.7300e-003	0.3286	2.1400e-003	0.3307	0.0872	1.9700e-003	0.0891		272.2048	272.2048	6.7500e-003		272.3735

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	15.5939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	15.7747	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Alvarado SP Phase 2 Project - San Diego County, Winter

3.7 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	0.1345	0.0770	0.8007	2.7300e-003	0.3286	2.1400e-003	0.3307	0.0872	1.9700e-003	0.0891		272.2048	272.2048	6.7500e-003		272.3735
Total	0.1345	0.0770	0.8007	2.7300e-003	0.3286	2.1400e-003	0.3307	0.0872	1.9700e-003	0.0891		272.2048	272.2048	6.7500e-003		272.3735

3.7 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	15.5939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	15.7648	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Alvarado SP Phase 2 Project - San Diego County, Winter

3.7 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	0.1287	0.0710	0.7472	2.6200e-003	0.3286	2.1000e-003	0.3307	0.0872	1.9400e-003	0.0891		261.2022	261.2022	6.2300e-003		261.3579
Total	0.1287	0.0710	0.7472	2.6200e-003	0.3286	2.1000e-003	0.3307	0.0872	1.9400e-003	0.0891		261.2022	261.2022	6.2300e-003		261.3579

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	15.5939					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	15.7648	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319

Alvarado SP Phase 2 Project - San Diego County, Winter

3.7 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	0.1287	0.0710	0.7472	2.6200e-003	0.3286	2.1000e-003	0.3307	0.0872	1.9400e-003	0.0891		261.2022	261.2022	6.2300e-003		261.3579
Total	0.1287	0.0710	0.7472	2.6200e-003	0.3286	2.1000e-003	0.3307	0.0872	1.9400e-003	0.0891		261.2022	261.2022	6.2300e-003		261.3579

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Alvarado SP Phase 2 Project - San Diego 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					
Mitigated	1.8573	7.2249	18.6058	0.0640	6.4902	0.0521	6.5423	1.7341	0.0485	1.7826		6,544.365 6	6,544.365 6	0.3505		6,553.127 7
Unmitigated	1.8573	7.2249	18.6058	0.0640	6.4902	0.0521	6.5423	1.7341	0.0485	1.7826		6,544.365 6	6,544.365 6	0.3505		6,553.127 7

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments High Rise	1,741.55	1,741.55	1,741.55	3,061,854	3,061,854
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
Total	1,741.55	1,741.55	1,741.55	3,061,854	3,061,854

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments High Rise	4.83	0.00	0.00	100.00	0.00	0.00	100	0	0
City Park	9.50	7.30	7.30	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Alvarado SP Phase 2 Project - San Diego County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments High Rise	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908
City Park	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908
Enclosed Parking with Elevator	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0669	0.5721	0.2434	3.6500e-003		0.0463	0.0463		0.0463	0.0463		730.3032	730.3032	0.0140	0.0134	734.6430
NaturalGas Unmitigated	0.0669	0.5721	0.2434	3.6500e-003		0.0463	0.0463		0.0463	0.0463		730.3032	730.3032	0.0140	0.0134	734.6430

Alvarado SP Phase 2 Project - San Diego County, Winter

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments High Rise	6207.58	0.0669	0.5721	0.2434	3.6500e-003		0.0463	0.0463		0.0463	0.0463		730.3032	730.3032	0.0140	0.0134	734.6430
City Park	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
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0669	0.5721	0.2434	3.6500e-003		0.0463	0.0463		0.0463	0.0463		730.3032	730.3032	0.0140	0.0134	734.6430

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments High Rise	6.20758	0.0669	0.5721	0.2434	3.6500e-003		0.0463	0.0463		0.0463	0.0463		730.3032	730.3032	0.0140	0.0134	734.6430
City Park	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
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0669	0.5721	0.2434	3.6500e-003		0.0463	0.0463		0.0463	0.0463		730.3032	730.3032	0.0140	0.0134	734.6430

6.0 Area Detail

Alvarado SP Phase 2 Project - San Diego County, Winter

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	8.2295	3.0726	26.3667	0.0191		0.3646	0.3646		0.3646	0.3646	0.0000	3,597.755 1	3,597.755 1	0.1117	0.0651	3,619.955 7
Unmitigated	8.2295	3.0726	26.3667	0.0191		0.3646	0.3646		0.3646	0.3646	0.0000	3,597.755 1	3,597.755 1	0.1117	0.0651	3,619.955 7

Alvarado SP Phase 2 Project - San Diego County, Winter

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5554					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.5896					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3256	2.7827	1.1841	0.0178		0.2250	0.2250		0.2250	0.2250	0.0000	3,552.3529	3,552.3529	0.0681	0.0651	3,573.4628
Landscaping	0.7588	0.2900	25.1826	1.3300e-003		0.1396	0.1396		0.1396	0.1396		45.4021	45.4021	0.0436		46.4929
Total	8.2295	3.0727	26.3668	0.0191		0.3646	0.3646		0.3646	0.3646	0.0000	3,597.7551	3,597.7551	0.1117	0.0651	3,619.9557

Alvarado SP Phase 2 Project - San Diego County, Winter

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	0.5554					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	6.5896					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.3256	2.7827	1.1841	0.0178		0.2250	0.2250		0.2250	0.2250	0.0000	3,552.3529	3,552.3529	0.0681	0.0651	3,573.4628
Landscaping	0.7588	0.2900	25.1826	1.3300e-003		0.1396	0.1396		0.1396	0.1396		45.4021	45.4021	0.0436		46.4929
Total	8.2295	3.0727	26.3668	0.0191		0.3646	0.3646		0.3646	0.3646	0.0000	3,597.7551	3,597.7551	0.1117	0.0651	3,619.9557

7.0 Water Detail**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

8.0 Waste Detail**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Alvarado SP Phase 2 Project - San Diego County, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Alvarado SP Phase 1 Existing - San Diego County, Annual

Alvarado SP Phase 1 Existing

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Mobile Home Park	93.00	Dwelling Unit	8.20	111,600.00	266

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Alvarado SP Phase 1 Existing - San Diego County, Annual

Project Characteristics - Phase 1 existing use operational emissions.

Land Use - Existing use = RV park.

Construction Phase - No construction.

Off-road Equipment -

Off-road Equipment - No construction.

Trips and VMT - No construction.

Demolition -

Grading -

Architectural Coating - Coating VOC limits per SDAPCD Rule 67.

Vehicle Trips - Existing use trips and distance per traffic study.

Woodstoves - No hearths.

Area Coating - No residential painting.

Energy Use -

Construction Off-road Equipment Mitigation -

Alvarado SP Phase 1 Existing - San Diego County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	75330	0
tblAreaCoating	Area_Residential_Interior	225990	0
tblFireplaces	NumberGas	51.15	0.00
tblFireplaces	NumberWood	32.55	0.00
tblLandUse	LotAcreage	11.72	8.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.83
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	5.00	5.17
tblVehicleTrips	SU_TR	4.36	5.17
tblVehicleTrips	WD_TR	4.99	5.17
tblWoodstoves	NumberCatalytic	4.65	0.00
tblWoodstoves	NumberNoncatalytic	4.65	0.00

2.0 Emissions Summary

Alvarado SP Phase 1 Existing - San Diego County, Annual

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Alvarado SP Phase 1 Existing - San Diego County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4568	7.9900e-003	0.6920	4.0000e-005		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	1.1280	1.1280	1.0900e-003	0.0000	1.1553
Energy	0.0116	0.0990	0.0421	6.3000e-004		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	279.4921	279.4921	8.8300e-003	3.4700e-003	280.7483
Mobile	0.1226	0.5026	1.2514	3.8400e-003	0.3186	3.3700e-003	0.3219	0.0853	3.1500e-003	0.0885	0.0000	354.4943	354.4943	0.0204	0.0000	355.0044
Waste						0.0000	0.0000		0.0000	0.0000	8.6840	0.0000	8.6840	0.5132	0.0000	21.5141
Water						0.0000	0.0000		0.0000	0.0000	1.9223	39.6546	41.5769	0.1990	4.9900e-003	48.0406
Total	0.5910	0.6096	1.9856	4.5100e-003	0.3186	0.0152	0.3338	0.0853	0.0150	0.1003	10.6063	674.7690	685.3753	0.7426	8.4600e-003	706.4628

Alvarado SP Phase 1 Existing - San Diego County, Annual

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	0.4568	7.9900e-003	0.6920	4.0000e-005		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	1.1280	1.1280	1.0900e-003	0.0000	1.1553
Energy	0.0116	0.0990	0.0421	6.3000e-004		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	279.4921	279.4921	8.8300e-003	3.4700e-003	280.7483
Mobile	0.1226	0.5026	1.2514	3.8400e-003	0.3186	3.3700e-003	0.3219	0.0853	3.1500e-003	0.0885	0.0000	354.4943	354.4943	0.0204	0.0000	355.0044
Waste						0.0000	0.0000		0.0000	0.0000	8.6840	0.0000	8.6840	0.5132	0.0000	21.5141
Water						0.0000	0.0000		0.0000	0.0000	1.9223	39.6546	41.5769	0.1990	4.9900e-003	48.0406
Total	0.5910	0.6096	1.9856	4.5100e-003	0.3186	0.0152	0.3338	0.0853	0.0150	0.1003	10.6063	674.7690	685.3753	0.7426	8.4600e-003	706.4628

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

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2020	7/28/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Alvarado SP Phase 1 Existing - San Diego County, Annual

Acres of Grading (Grading Phase): 0**Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Alvarado SP Phase 1 Existing - San Diego County, Annual

3.2 Demolition - 2020

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Alvarado SP Phase 1 Existing - San Diego County, Annual

3.2 Demolition - 2020**Mitigated Construction On-Site**

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Alvarado SP Phase 1 Existing - San Diego County, Annual

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	0.1226	0.5026	1.2514	3.8400e-003	0.3186	3.3700e-003	0.3219	0.0853	3.1500e-003	0.0885	0.0000	354.4943	354.4943	0.0204	0.0000	355.0044
Unmitigated	0.1226	0.5026	1.2514	3.8400e-003	0.3186	3.3700e-003	0.3219	0.0853	3.1500e-003	0.0885	0.0000	354.4943	354.4943	0.0204	0.0000	355.0044

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Mobile Home Park	480.81	480.81	480.81	845,322	845,322
Total	480.81	480.81	480.81	845,322	845,322

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Mobile Home Park	4.83	0.00	0.00	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Mobile Home Park	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Alvarado SP Phase 1 Existing - San Diego County, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	164.8662	164.8662	6.6400e-003	1.3700e-003	165.4412
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	164.8662	164.8662	6.6400e-003	1.3700e-003	165.4412
NaturalGas Mitigated	0.0116	0.0990	0.0421	6.3000e-004		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	114.6259	114.6259	2.2000e-003	2.1000e-003	115.3071
NaturalGas Unmitigated	0.0116	0.0990	0.0421	6.3000e-004		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	114.6259	114.6259	2.2000e-003	2.1000e-003	115.3071

Alvarado SP Phase 1 Existing - San Diego County, Annual

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					
Mobile Home Park	2.14801e+006	0.0116	0.0990	0.0421	6.3000e-004		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	114.6259	114.6259	2.2000e-003	2.1000e-003	115.3071
Total		0.0116	0.0990	0.0421	6.3000e-004		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	114.6259	114.6259	2.2000e-003	2.1000e-003	115.3071

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					
Mobile Home Park	2.14801e+006	0.0116	0.0990	0.0421	6.3000e-004		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	114.6259	114.6259	2.2000e-003	2.1000e-003	115.3071
Total		0.0116	0.0990	0.0421	6.3000e-004		8.0000e-003	8.0000e-003		8.0000e-003	8.0000e-003	0.0000	114.6259	114.6259	2.2000e-003	2.1000e-003	115.3071

Alvarado SP Phase 1 Existing - San Diego County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Mobile Home Park	504473	164.8662	6.6400e-003	1.3700e-003	165.4412
Total		164.8662	6.6400e-003	1.3700e-003	165.4412

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Mobile Home Park	504473	164.8662	6.6400e-003	1.3700e-003	165.4412
Total		164.8662	6.6400e-003	1.3700e-003	165.4412

6.0 Area Detail**6.1 Mitigation Measures Area**

Alvarado SP Phase 1 Existing - San Diego 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					
Mitigated	0.4568	7.9900e-003	0.6920	4.0000e-005		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	1.1280	1.1280	1.0900e-003	0.0000	1.1553
Unmitigated	0.4568	7.9900e-003	0.6920	4.0000e-005		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	1.1280	1.1280	1.0900e-003	0.0000	1.1553

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4359					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0210	7.9900e-003	0.6920	4.0000e-005		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	1.1280	1.1280	1.0900e-003	0.0000	1.1553
Total	0.4568	7.9900e-003	0.6920	4.0000e-005		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	1.1280	1.1280	1.0900e-003	0.0000	1.1553

Alvarado SP Phase 1 Existing - San Diego County, Annual

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.4359					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0210	7.9900e-003	0.6920	4.0000e-005		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	1.1280	1.1280	1.0900e-003	0.0000	1.1553
Total	0.4568	7.9900e-003	0.6920	4.0000e-005		3.8100e-003	3.8100e-003		3.8100e-003	3.8100e-003	0.0000	1.1280	1.1280	1.0900e-003	0.0000	1.1553

7.0 Water Detail**7.1 Mitigation Measures Water**

Alvarado SP Phase 1 Existing - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	41.5769	0.1990	4.9900e-003	48.0406
Unmitigated	41.5769	0.1990	4.9900e-003	48.0406

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Mobile Home Park	6.05932 / 3.82001	41.5769	0.1990	4.9900e-003	48.0406
Total		41.5769	0.1990	4.9900e-003	48.0406

Alvarado SP Phase 1 Existing - San Diego County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Mobile Home Park	6.05932 / 3.82001	41.5769	0.1990	4.9900e-003	48.0406
Total		41.5769	0.1990	4.9900e-003	48.0406

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	8.6840	0.5132	0.0000	21.5141
Unmitigated	8.6840	0.5132	0.0000	21.5141

Alvarado SP Phase 1 Existing - San Diego County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Mobile Home Park	42.78	8.6840	0.5132	0.0000	21.5141
Total		8.6840	0.5132	0.0000	21.5141

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Mobile Home Park	42.78	8.6840	0.5132	0.0000	21.5141
Total		8.6840	0.5132	0.0000	21.5141

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Alvarado SP Phase 1 Existing - San Diego County, Annual

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

Alvarado SP Phase 1 Existing - San Diego County, Winter

Alvarado SP Phase 1 Existing
San Diego County, Winter**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Mobile Home Park	93.00	Dwelling Unit	8.20	111,600.00	266

1.2 Other Project Characteristics

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

1.3 User Entered Comments & Non-Default Data

Alvarado SP Phase 1 Existing - San Diego County, Winter

Project Characteristics - Phase 1 existing use operational emissions.

Land Use - Existing use = RV park.

Construction Phase - No construction.

Off-road Equipment -

Off-road Equipment - No construction.

Trips and VMT - No construction.

Demolition -

Grading -

Architectural Coating - Coating VOC limits per SDAPCD Rule 67.

Vehicle Trips - Existing use trips and distance per traffic study.

Woodstoves - No hearths.

Area Coating - No residential painting.

Energy Use -

Construction Off-road Equipment Mitigation -

Alvarado SP Phase 1 Existing - San Diego County, Winter

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	75330	0
tblAreaCoating	Area_Residential_Interior	225990	0
tblFireplaces	NumberGas	51.15	0.00
tblFireplaces	NumberWood	32.55	0.00
tblLandUse	LotAcreage	11.72	8.20
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.83
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	5.00	5.17
tblVehicleTrips	SU_TR	4.36	5.17
tblVehicleTrips	WD_TR	4.99	5.17
tblWoodstoves	NumberCatalytic	4.65	0.00
tblWoodstoves	NumberNoncatalytic	4.65	0.00

2.0 Emissions Summary

Alvarado SP Phase 1 Existing - San Diego County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Alvarado SP Phase 1 Existing - San Diego County, Winter

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	2.6212	0.0888	7.6893	4.1000e-004		0.0424	0.0424		0.0424	0.0424	0.0000	13.8154	13.8154	0.0134	0.0000	14.1501
Energy	0.0635	0.5423	0.2308	3.4600e-003		0.0439	0.0439		0.0439	0.0439		692.3478	692.3478	0.0133	0.0127	696.4620
Mobile	0.6935	2.7485	7.0073	0.0209	1.7925	0.0186	1.8111	0.4791	0.0174	0.4965		2,124.2293	2,124.2293	0.1256		2,127.3686
Total	3.3782	3.3796	14.9274	0.0248	1.7925	0.1049	1.8973	0.4791	0.1037	0.5827	0.0000	2,830.3925	2,830.3925	0.1522	0.0127	2,837.9807

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	2.6212	0.0888	7.6893	4.1000e-004		0.0424	0.0424		0.0424	0.0424	0.0000	13.8154	13.8154	0.0134	0.0000	14.1501
Energy	0.0635	0.5423	0.2308	3.4600e-003		0.0439	0.0439		0.0439	0.0439		692.3478	692.3478	0.0133	0.0127	696.4620
Mobile	0.6935	2.7485	7.0073	0.0209	1.7925	0.0186	1.8111	0.4791	0.0174	0.4965		2,124.2293	2,124.2293	0.1256		2,127.3686
Total	3.3782	3.3796	14.9274	0.0248	1.7925	0.1049	1.8973	0.4791	0.1037	0.5827	0.0000	2,830.3925	2,830.3925	0.1522	0.0127	2,837.9807

Alvarado SP Phase 1 Existing - San Diego 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2020	7/28/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Alvarado SP Phase 1 Existing - San Diego County, Winter

3.1 Mitigation Measures Construction**3.2 Demolition - 2020****Unmitigated Construction On-Site**

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

Unmitigated Construction Off-Site

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

Alvarado SP Phase 1 Existing - San Diego County, Winter

3.2 Demolition - 2020**Mitigated Construction On-Site**

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Alvarado SP Phase 1 Existing - San Diego County, Winter

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	0.6935	2.7485	7.0073	0.0209	1.7925	0.0186	1.8111	0.4791	0.0174	0.4965		2,124.2293	2,124.2293	0.1256		2,127.3686
Unmitigated	0.6935	2.7485	7.0073	0.0209	1.7925	0.0186	1.8111	0.4791	0.0174	0.4965		2,124.2293	2,124.2293	0.1256		2,127.3686

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Mobile Home Park	480.81	480.81	480.81	845,322	845,322
Total	480.81	480.81	480.81	845,322	845,322

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
Mobile Home Park	4.83	0.00	0.00	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Mobile Home Park	0.593936	0.041843	0.182569	0.108325	0.016436	0.005513	0.015940	0.023523	0.001912	0.001972	0.006090	0.000748	0.001193

Alvarado SP Phase 1 Existing - San Diego County, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0635	0.5423	0.2308	3.4600e-003		0.0439	0.0439		0.0439	0.0439		692.3478	692.3478	0.0133	0.0127	696.4620
NaturalGas Unmitigated	0.0635	0.5423	0.2308	3.4600e-003		0.0439	0.0439		0.0439	0.0439		692.3478	692.3478	0.0133	0.0127	696.4620

Alvarado SP Phase 1 Existing - San Diego County, Winter

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					
Mobile Home Park	5884.96	0.0635	0.5423	0.2308	3.4600e-003		0.0439	0.0439		0.0439	0.0439		692.3478	692.3478	0.0133	0.0127	696.4620
Total		0.0635	0.5423	0.2308	3.4600e-003		0.0439	0.0439		0.0439	0.0439		692.3478	692.3478	0.0133	0.0127	696.4620

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					
Mobile Home Park	5.88496	0.0635	0.5423	0.2308	3.4600e-003		0.0439	0.0439		0.0439	0.0439		692.3478	692.3478	0.0133	0.0127	696.4620
Total		0.0635	0.5423	0.2308	3.4600e-003		0.0439	0.0439		0.0439	0.0439		692.3478	692.3478	0.0133	0.0127	696.4620

6.0 Area Detail**6.1 Mitigation Measures Area**

Alvarado SP Phase 1 Existing - San Diego 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					
Mitigated	2.6212	0.0888	7.6893	4.1000e-004		0.0424	0.0424		0.0424	0.0424	0.0000	13.8154	13.8154	0.0134	0.0000	14.1501
Unmitigated	2.6212	0.0888	7.6893	4.1000e-004		0.0424	0.0424		0.0424	0.0424	0.0000	13.8154	13.8154	0.0134	0.0000	14.1501

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2330	0.0888	7.6893	4.1000e-004		0.0424	0.0424		0.0424	0.0424		13.8154	13.8154	0.0134		14.1501
Total	2.6212	0.0888	7.6893	4.1000e-004		0.0424	0.0424		0.0424	0.0424	0.0000	13.8154	13.8154	0.0134	0.0000	14.1501

Alvarado SP Phase 1 Existing - San Diego County, Winter

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.3882					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.2330	0.0888	7.6893	4.1000e-004		0.0424	0.0424		0.0424	0.0424		13.8154	13.8154	0.0134		14.1501
Total	2.6212	0.0888	7.6893	4.1000e-004		0.0424	0.0424		0.0424	0.0424	0.0000	13.8154	13.8154	0.0134	0.0000	14.1501

7.0 Water Detail**7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

Alvarado SP Phase 1 Existing - San Diego County, Winter

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Alvarado SP Phase 2 Existing - San Diego County, Annual

Alvarado SP Phase 2 Existing

San Diego County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Mobile Home Park	36.00	Dwelling Unit	3.80	43,200.00	103

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Alvarado SP Phase 2 Existing - San Diego County, Annual

Project Characteristics - Phase 2 existing use operational emissions.

Land Use - Existing use = RV park.

Construction Phase - No construction.

Off-road Equipment -

Off-road Equipment - No construction.

Trips and VMT - No construction.

Demolition -

Grading -

Architectural Coating - Coating VOC limits per SDAPCD Rule 67.

Vehicle Trips - Existing use trips and distance per traffic study.

Woodstoves - No hearths.

Area Coating - No residential painting.

Energy Use -

Construction Off-road Equipment Mitigation -

Alvarado SP Phase 2 Existing - San Diego County, Annual

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	29160	0
tblAreaCoating	Area_Residential_Interior	87480	0
tblFireplaces	NumberGas	19.80	0.00
tblFireplaces	NumberWood	12.60	0.00
tblLandUse	LotAcreage	4.54	3.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.83
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	5.00	5.20
tblVehicleTrips	SU_TR	4.36	5.20
tblVehicleTrips	WD_TR	4.99	5.20
tblWoodstoves	NumberCatalytic	1.80	0.00
tblWoodstoves	NumberNoncatalytic	1.80	0.00

2.0 Emissions Summary

Alvarado SP Phase 2 Existing - San Diego County, Annual

2.1 Overall Construction

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Alvarado SP Phase 2 Existing - San Diego County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.1768	3.0800e-003	0.2674	1.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	0.4366	0.4366	4.2000e-004	0.0000	0.4471
Energy	4.4800e-003	0.0383	0.0163	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	108.1905	108.1905	3.4200e-003	1.3400e-003	108.6768
Mobile	0.0412	0.1563	0.4226	1.4000e-003	0.1240	1.1200e-003	0.1251	0.0332	1.0400e-003	0.0343	0.0000	129.2064	129.2064	6.9500e-003	0.0000	129.3802
Waste						0.0000	0.0000		0.0000	0.0000	3.3615	0.0000	3.3615	0.1987	0.0000	8.3281
Water						0.0000	0.0000		0.0000	0.0000	0.7441	15.3502	16.0943	0.0771	1.9300e-003	18.5964
Total	0.2225	0.1977	0.7063	1.6500e-003	0.1240	5.7000e-003	0.1297	0.0332	5.6200e-003	0.0388	4.1057	253.1837	257.2893	0.2865	3.2700e-003	265.4286

Alvarado SP Phase 2 Existing - San Diego County, Annual

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	0.1768	3.0800e-003	0.2674	1.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	0.4366	0.4366	4.2000e-004	0.0000	0.4471
Energy	4.4800e-003	0.0383	0.0163	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	108.1905	108.1905	3.4200e-003	1.3400e-003	108.6768
Mobile	0.0412	0.1563	0.4226	1.4000e-003	0.1240	1.1200e-003	0.1251	0.0332	1.0400e-003	0.0343	0.0000	129.2064	129.2064	6.9500e-003	0.0000	129.3802
Waste						0.0000	0.0000		0.0000	0.0000	3.3615	0.0000	3.3615	0.1987	0.0000	8.3281
Water						0.0000	0.0000		0.0000	0.0000	0.7441	15.3502	16.0943	0.0771	1.9300e-003	18.5964
Total	0.2225	0.1977	0.7063	1.6500e-003	0.1240	5.7000e-003	0.1297	0.0332	5.6200e-003	0.0388	4.1057	253.1837	257.2893	0.2865	3.2700e-003	265.4286

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

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2020	7/28/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Alvarado SP Phase 2 Existing - San Diego County, Annual

Acres of Grading (Grading Phase): 0**Acres of Paving: 0****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Alvarado SP Phase 2 Existing - San Diego County, Annual

3.2 Demolition - 2020

Unmitigated Construction On-Site

[illegible]

Unmitigated Construction Off-Site

[illegible]

Alvarado SP Phase 2 Existing - San Diego County, Annual

3.2 Demolition - 2020**Mitigated Construction On-Site**

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

Alvarado SP Phase 2 Existing - San Diego County, Annual

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	0.0412	0.1563	0.4226	1.4000e-003	0.1240	1.1200e-003	0.1251	0.0332	1.0400e-003	0.0343	0.0000	129.2064	129.2064	6.9500e-003	0.0000	129.3802
Unmitigated	0.0412	0.1563	0.4226	1.4000e-003	0.1240	1.1200e-003	0.1251	0.0332	1.0400e-003	0.0343	0.0000	129.2064	129.2064	6.9500e-003	0.0000	129.3802

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Mobile Home Park	187.20	187.20	187.20	329,120	329,120
Total	187.20	187.20	187.20	329,120	329,120

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Mobile Home Park	4.83	0.00	0.00	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Mobile Home Park	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

Alvarado SP Phase 2 Existing - San Diego County, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.8192	63.8192	2.5700e-003	5.3000e-004	64.0418
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.8192	63.8192	2.5700e-003	5.3000e-004	64.0418
NaturalGas Mitigated	4.4800e-003	0.0383	0.0163	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3713	44.3713	8.5000e-004	8.1000e-004	44.6350
NaturalGas Unmitigated	4.4800e-003	0.0383	0.0163	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3713	44.3713	8.5000e-004	8.1000e-004	44.6350

Alvarado SP Phase 2 Existing - San Diego County, Annual

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					
Mobile Home Park	831487	4.4800e-003	0.0383	0.0163	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3713	44.3713	8.5000e-004	8.1000e-004	44.6350
Total		4.4800e-003	0.0383	0.0163	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3713	44.3713	8.5000e-004	8.1000e-004	44.6350

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					
Mobile Home Park	831487	4.4800e-003	0.0383	0.0163	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3713	44.3713	8.5000e-004	8.1000e-004	44.6350
Total		4.4800e-003	0.0383	0.0163	2.4000e-004		3.1000e-003	3.1000e-003		3.1000e-003	3.1000e-003	0.0000	44.3713	44.3713	8.5000e-004	8.1000e-004	44.6350

Alvarado SP Phase 2 Existing - San Diego County, Annual

5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Mobile Home Park	195280	63.8192	2.5700e-003	5.3000e-004	64.0418
Total		63.8192	2.5700e-003	5.3000e-004	64.0418

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Mobile Home Park	195280	63.8192	2.5700e-003	5.3000e-004	64.0418
Total		63.8192	2.5700e-003	5.3000e-004	64.0418

6.0 Area Detail**6.1 Mitigation Measures Area**

Alvarado SP Phase 2 Existing - San Diego 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					
Mitigated	0.1768	3.0800e-003	0.2674	1.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	0.4366	0.4366	4.2000e-004	0.0000	0.4471
Unmitigated	0.1768	3.0800e-003	0.2674	1.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	0.4366	0.4366	4.2000e-004	0.0000	0.4471

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1687					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0500e-003	3.0800e-003	0.2674	1.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	0.4366	0.4366	4.2000e-004	0.0000	0.4471
Total	0.1768	3.0800e-003	0.2674	1.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	0.4366	0.4366	4.2000e-004	0.0000	0.4471

Alvarado SP Phase 2 Existing - San Diego County, Annual

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1687					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0500e-003	3.0800e-003	0.2674	1.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	0.4366	0.4366	4.2000e-004	0.0000	0.4471
Total	0.1768	3.0800e-003	0.2674	1.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	0.4366	0.4366	4.2000e-004	0.0000	0.4471

7.0 Water Detail**7.1 Mitigation Measures Water**

Alvarado SP Phase 2 Existing - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	16.0943	0.0771	1.9300e-003	18.5964
Unmitigated	16.0943	0.0771	1.9300e-003	18.5964

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Mobile Home Park	2.34554 / 1.47871	16.0943	0.0771	1.9300e-003	18.5964
Total		16.0943	0.0771	1.9300e-003	18.5964

Alvarado SP Phase 2 Existing - San Diego County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Mobile Home Park	2.34554 / 1.47871	16.0943	0.0771	1.9300e-003	18.5964
Total		16.0943	0.0771	1.9300e-003	18.5964

8.0 Waste Detail

8.1 Mitigation Measures Waste**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.3615	0.1987	0.0000	8.3281
Unmitigated	3.3615	0.1987	0.0000	8.3281

Alvarado SP Phase 2 Existing - San Diego County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Mobile Home Park	16.56	3.3615	0.1987	0.0000	8.3281
Total		3.3615	0.1987	0.0000	8.3281

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Mobile Home Park	16.56	3.3615	0.1987	0.0000	8.3281
Total		3.3615	0.1987	0.0000	8.3281

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Alvarado SP Phase 2 Existing - San Diego County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

Alvarado SP Phase 2 Existing - San Diego County, Winter

Alvarado SP Phase 2 Existing
San Diego County, Winter**1.0 Project Characteristics**

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Mobile Home Park	36.00	Dwelling Unit	3.80	43,200.00	103

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Alvarado SP Phase 2 Existing - San Diego County, Winter

Project Characteristics - Phase 2 existing use operational emissions.

Land Use - Existing use = RV park.

Construction Phase - No construction.

Off-road Equipment -

Off-road Equipment - No construction.

Trips and VMT - No construction.

Demolition -

Grading -

Architectural Coating - Coating VOC limits per SDAPCD Rule 67.

Vehicle Trips - Existing use trips and distance per traffic study.

Woodstoves - No hearths.

Area Coating - No residential painting.

Energy Use -

Construction Off-road Equipment Mitigation -

Alvarado SP Phase 2 Existing - San Diego County, Winter

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Residential_Exterior	29160	0
tblAreaCoating	Area_Residential_Interior	87480	0
tblFireplaces	NumberGas	19.80	0.00
tblFireplaces	NumberWood	12.60	0.00
tblLandUse	LotAcreage	4.54	3.80
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	DV_TP	11.00	0.00
tblVehicleTrips	HO_TL	7.50	0.00
tblVehicleTrips	HO_TTP	39.60	0.00
tblVehicleTrips	HS_TL	7.30	0.00
tblVehicleTrips	HS_TTP	18.80	0.00
tblVehicleTrips	HW_TL	10.80	4.83
tblVehicleTrips	HW_TTP	41.60	100.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	86.00	100.00
tblVehicleTrips	ST_TR	5.00	5.20
tblVehicleTrips	SU_TR	4.36	5.20
tblVehicleTrips	WD_TR	4.99	5.20
tblWoodstoves	NumberCatalytic	1.80	0.00
tblWoodstoves	NumberNoncatalytic	1.80	0.00

2.0 Emissions Summary

Alvarado SP Phase 2 Existing - San Diego County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

[illegible]

Mitigated Construction

[illegible][illegible]

Alvarado SP Phase 2 Existing - San Diego County, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0140	0.0342	2.9707	1.6000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	5.3479	5.3479	5.1400e-003	0.0000	5.4765
Energy	0.0246	0.2099	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170		268.0056	268.0056	5.1400e-003	4.9100e-003	269.5982
Mobile	0.2330	0.8560	2.3626	7.6000e-003	0.6978	6.1700e-003	0.7040	0.1865	5.7400e-003	0.1922		774.1181	774.1181	0.0428		775.1869
Total	1.2716	1.1001	5.4227	9.1000e-003	0.6978	0.0396	0.7374	0.1865	0.0392	0.2256	0.0000	1,047.4716	1,047.4716	0.0530	4.9100e-003	1,050.2615

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.0140	0.0342	2.9707	1.6000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	5.3479	5.3479	5.1400e-003	0.0000	5.4765
Energy	0.0246	0.2099	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170		268.0056	268.0056	5.1400e-003	4.9100e-003	269.5982
Mobile	0.2330	0.8560	2.3626	7.6000e-003	0.6978	6.1700e-003	0.7040	0.1865	5.7400e-003	0.1922		774.1181	774.1181	0.0428		775.1869
Total	1.2716	1.1001	5.4227	9.1000e-003	0.6978	0.0396	0.7374	0.1865	0.0392	0.2256	0.0000	1,047.4716	1,047.4716	0.0530	4.9100e-003	1,050.2615

Alvarado SP Phase 2 Existing - San Diego 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
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	7/1/2020	7/28/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Alvarado SP Phase 2 Existing - San Diego County, Winter

3.1 Mitigation Measures Construction**3.2 Demolition - 2020****Unmitigated Construction On-Site**

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

Unmitigated Construction Off-Site

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

Alvarado SP Phase 2 Existing - San Diego County, Winter

3.2 Demolition - 2020**Mitigated Construction On-Site**

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

Alvarado SP Phase 2 Existing - San Diego County, Winter

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	0.2330	0.8560	2.3626	7.6000e-003	0.6978	6.1700e-003	0.7040	0.1865	5.7400e-003	0.1922		774.1181	774.1181	0.0428		775.1869
Unmitigated	0.2330	0.8560	2.3626	7.6000e-003	0.6978	6.1700e-003	0.7040	0.1865	5.7400e-003	0.1922		774.1181	774.1181	0.0428		775.1869

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Mobile Home Park	187.20	187.20	187.20	329,120	329,120
Total	187.20	187.20	187.20	329,120	329,120

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
Mobile Home Park	4.83	0.00	0.00	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Mobile Home Park	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

Alvarado SP Phase 2 Existing - San Diego County, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0246	0.2099	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170		268.0056	268.0056	5.1400e-003	4.9100e-003	269.5982
NaturalGas Unmitigated	0.0246	0.2099	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170		268.0056	268.0056	5.1400e-003	4.9100e-003	269.5982

Alvarado SP Phase 2 Existing - San Diego County, Winter

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					
Mobile Home Park	2278.05	0.0246	0.2099	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170		268.0056	268.0056	5.1400e-003	4.9100e-003	269.5982
Total		0.0246	0.2099	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170		268.0056	268.0056	5.1400e-003	4.9100e-003	269.5982

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					
Mobile Home Park	2.27805	0.0246	0.2099	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170		268.0056	268.0056	5.1400e-003	4.9100e-003	269.5982
Total		0.0246	0.2099	0.0893	1.3400e-003		0.0170	0.0170		0.0170	0.0170		268.0056	268.0056	5.1400e-003	4.9100e-003	269.5982

6.0 Area Detail**6.1 Mitigation Measures Area**

Alvarado SP Phase 2 Existing - San Diego 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					
Mitigated	1.0140	0.0342	2.9707	1.6000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	5.3479	5.3479	5.1400e-003	0.0000	5.4765
Unmitigated	1.0140	0.0342	2.9707	1.6000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	5.3479	5.3479	5.1400e-003	0.0000	5.4765

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0895	0.0342	2.9707	1.6000e-004		0.0164	0.0164		0.0164	0.0164		5.3479	5.3479	5.1400e-003		5.4765
Total	1.0140	0.0342	2.9707	1.6000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	5.3479	5.3479	5.1400e-003	0.0000	5.4765

Alvarado SP Phase 2 Existing - San Diego County, Winter

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.9245					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0895	0.0342	2.9707	1.6000e-004		0.0164	0.0164		0.0164	0.0164		5.3479	5.3479	5.1400e-003		5.4765
Total	1.0140	0.0342	2.9707	1.6000e-004		0.0164	0.0164		0.0164	0.0164	0.0000	5.3479	5.3479	5.1400e-003	0.0000	5.4765

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

Alvarado SP Phase 2 Existing - San Diego County, Winter

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Appendix B

HRA Calculations and Model Output

Diesel Particulate Matter Emissions

I-8 West of Fletcher Parkway 2024 Traffic					
AADT	% HD and MD Trucks	% Diesel Trucks	Diesel HD and MD AADT	% Other Diesel	Other Diesel AADT
209,824	1.49%	82.18%	2,569	5.38%	11,286

Diesel PM Emissions											
Volume Source	Distance (miles)	Trucks (55 mph)				Other Vehicles (65 mph)				Total	
		factor (lb/VMT)	Annual (lb/year)	Peak Hour % of AADT	Max Hour (lb/hour)	factor (lb/VMT)	Annual (lb/year)	Peak Hour % of AADT	Max Hour (lb/hour)	Annual (lb/year)	Max Hour (lb/hour)
Eastbound											
E1	0.973					7.9412E-06	7.9577E+00	7.60%	1.6569E-03	7.9577E+00	1.6569E-03
E2	0.971	3.3801E-05	1.5390E+01	7.60%	3.2045E-03	7.9412E-06	7.9413E+00	7.60%	1.6535E-03	2.3331E+01	4.8580E-03
Westbound											
W1	0.977					7.9412E-06	7.9904E+00	7.60%	1.6638E-03	7.9904E+00	1.6638E-03
W2	0.979	3.3801E-05	1.5517E+01	7.60%	3.2309E-03	7.9412E-06	8.0068E+00	7.60%	1.6672E-03	2.3523E+01	4.8980E-03

Notes:

1. I-8 AADT and Truck AADT from Caltrans 2018 traffic count data for state highways.
2. Percent diesel truck and percent other diesel vehicles calculated from CARB EMFAC2017 web database data for trips in San Diego County in 2024.
3. Emission factors calculated from CARB EMFAC2017 web database data for VMT in San Diego County in 2024.
4. Peak hour percent of AADT from studies of hourly traffic distribution on San Diego Freeways: Wyle Laboratories, "Development of Ground Transportation Systems Noise Contours for the San Diego Region" (December 1973) and Ogden International, "Road Travel Survey" (1986).

Fleet Average DPM Emissions Per VMT

Heavy and Medium Trucks								
EMFAC2017 (v1.0.2) Emissions Inventory								
Region Type: County								
Region: SAN DIEGO								
Calendar Year: 2024								
Season: Annual								
Vehicle Classification: EMFAC2007 Categories								
Units: miles/day for VMT, tons/day for Emissions, 1000 gallons/day for Fuel Consumption								
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	PM10_RUNEX	lb/day
SAN DIEGO	2024	HHDT	Aggregated	55	DSL	188201.3	4.6503E-03	9.3006E+00
SAN DIEGO	2024	MHDT	Aggregated	55	DSL	226106.4	2.3518E-03	4.7037E+00
Total						414307.7	lb/VMT	3.3801E-05

All Other Diesel Vehicles								
EMFAC2017 (v1.0.2) Emissions Inventory								
Region Type: County								
Region: SAN DIEGO								
Calendar Year: 2024								
Season: Annual								
Vehicle Classification: EMFAC2007 Categories								
Units: miles/day for VMT, tons/day for Emissions, 1000 gallons/day for Fuel Consumption								
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	PM10_RUNEX	lb/day
SAN DIEGO	2024	LDA	Aggregated	65	DSL	249902.6	1.3217E-03	1.0578E-05
SAN DIEGO	2024	LDT1	Aggregated	65	DSL	639.1	1.0419E-04	3.2607E-04
SAN DIEGO	2024	LDT2	Aggregated	65	DSL	51752.9	2.2816E-04	8.8172E-06
SAN DIEGO	2024	LHDT1	Aggregated	55	DSL	111958.7	1.7469E-03	3.4937E+00
SAN DIEGO	2024	LHDT2	Aggregated	55	DSL	41081.0	6.2592E-04	1.2518E+00
SAN DIEGO	2024	MDV	Aggregated	65	DSL	123900.2	4.7314E-04	7.6375E-06
SAN DIEGO	2024	MH	Aggregated	65	DSL	906.6	1.3776E-04	3.0389E-04
SAN DIEGO	2024	OBUS	Aggregated	65	DSL	12290.0	4.2927E-04	6.9857E-05
SAN DIEGO	2024	SBUS	Aggregated	65	DSL	5259.4	2.4420E-04	9.2863E-05
SAN DIEGO	2024	UBUS	Aggregated	65	DSL	0.0	0.0000E+00	0.0000E+00
Total						597690.4	lb/VMT	7.9412E-06

San Diego County Fleet Mix

Diesel Truck Trip Percentage									
EMFAC2017 (v1.0.2) Emissions Inventory									
Region Type: County									
Region: SAN DIEGO									
Calendar Year: 2024									
Season: Annual									
Vehicle Classification: EMFAC2007 Categories									
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption									
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	% of Trips
SAN DIEGO	2024	HHDT	Aggregated	Aggregated	DSL	16331.7	1974261.1	171699.1	38.380%
SAN DIEGO	2024	MHDT	Aggregated	Aggregated	DSL	20531.3	1263348.4	195954.8	43.802%
Diesel Trucks %									82.182%
SAN DIEGO	2024	HHDT	Aggregated	Aggregated	GAS	16.7	2126.1	334.8	0.075%
SAN DIEGO	2024	MHDT	Aggregated	Aggregated	GAS	3757.7	218406.0	75184.1	16.806%
SAN DIEGO	2024	HHDT	Aggregated	Aggregated	NG	1075.5	43785.8	4194.4	0.938%
Total								447367.2	

Other Diesel Vehicle Trips Percentage of Total County Trips									
EMFAC2017 (v1.0.2) Emissions Inventory									
Region Type: County									
Region: SAN DIEGO									
Calendar Year: 2024									
Season: Annual									
Vehicle Classification: EMFAC2007 Categories									
Units: miles/day for VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption									
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	VMT	Trips	% of Trips
SAN DIEGO	2024	LDA	Aggregated	Aggregated	DSL	18223.1	679769.0	85364.7	19.082%
SAN DIEGO	2024	LDT1	Aggregated	Aggregated	DSL	96.4	1738.4	315.6	0.071%
SAN DIEGO	2024	LDT2	Aggregated	Aggregated	DSL	3522.5	140774.8	17108.7	3.824%
SAN DIEGO	2024	LHDT1	Aggregated	Aggregated	DSL	32930.6	1227536.0	414226.0	92.592%
SAN DIEGO	2024	LHDT2	Aggregated	Aggregated	DSL	11942.8	450420.1	150225.1	33.580%
SAN DIEGO	2024	MDV	Aggregated	Aggregated	DSL	8369.3	337025.3	40314.6	9.012%
SAN DIEGO	2024	MH	Aggregated	Aggregated	DSL	3878.8	33988.3	387.9	0.087%
SAN DIEGO	2024	OBUS	Aggregated	Aggregated	DSL	733.8	55937.5	7309.9	1.634%
SAN DIEGO	2024	SBUS	Aggregated	Aggregated	DSL	2381.4	74434.1	27481.2	6.143%
SAN DIEGO	2024	UBUS	Aggregated	Aggregated	DSL	0.0	0.0	0.0	0.000%
All Other Diesel % of Total Trips									5.379%
SAN DIEGO	2024	HHDT	Aggregated	Aggregated	DSL	16331.7	1974261.1	171699.1	38.380%
SAN DIEGO	2024	MHDT	Aggregated	Aggregated	DSL	20531.3	1263348.4	195954.8	43.802%
SAN DIEGO	2024	HHDT	Aggregated	Aggregated	GAS	16.7	2126.1	334.8	0.075%
SAN DIEGO	2024	MHDT	Aggregated	Aggregated	GAS	3757.7	218406.0	75184.1	16.806%
SAN DIEGO	2024	LHDT1	Aggregated	Aggregated	GAS	34122.6	1225429.8	508376.4	113.637%
SAN DIEGO	2024	LHDT2	Aggregated	Aggregated	GAS	5491.3	196903.0	81812.4	18.288%
SAN DIEGO	2024	LDA	Aggregated	Aggregated	ELEC	40479.1	1747836.5	200513.1	44.821%
SAN DIEGO	2024	LDT1	Aggregated	Aggregated	ELEC	1672.0	76193.0	8421.0	1.882%
SAN DIEGO	2024	LDT2	Aggregated	Aggregated	ELEC	6515.8	211904.1	32815.4	7.335%
SAN DIEGO	2024	MDV	Aggregated	Aggregated	ELEC	3952.2	132009.9	20079.5	4.488%
SAN DIEGO	2024	LDA	Aggregated	Aggregated	GAS	1492734.9	56261566.0	7054038.6	1576.789%
SAN DIEGO	2024	LDT1	Aggregated	Aggregated	GAS	172336.7	5946393.2	784881.7	175.445%
SAN DIEGO	2024	LDT2	Aggregated	Aggregated	GAS	487524.3	17427995.2	2265657.6	506.442%
SAN DIEGO	2024	MCY	Aggregated	Aggregated	GAS	80503.3	625860.7	161006.6	35.990%
SAN DIEGO	2024	MDV	Aggregated	Aggregated	GAS	318776.7	11271527.3	1467171.5	327.957%
SAN DIEGO	2024	MH	Aggregated	Aggregated	GAS	9885.0	85692.6	988.9	0.221%
SAN DIEGO	2024	OBUS	Aggregated	Aggregated	GAS	1234.1	61109.5	24692.0	5.519%
SAN DIEGO	2024	SBUS	Aggregated	Aggregated	GAS	317.9	16394.6	1271.7	0.284%
SAN DIEGO	2024	UBUS	Aggregated	Aggregated	GAS	427.7	44934.8	1710.7	0.382%
SAN DIEGO	2024	HHDT	Aggregated	Aggregated	NG	1075.5	43785.8	4194.4	0.938%
SAN DIEGO	2024	UBUS	Aggregated	Aggregated	NG	1147.5	128970.1	4590.0	1.026%
Total								13808128.2	

Traffic Hour Distribution

I-8 2024 Traffic		
2018 AADT	2018-2024 Growth	2024 AADT
201,000	4.39%	209,824

San Diego Region Freeway Traffic Distribution by Hour			
Hour Ending	% of AADT	Hourly Traffic	Fraction of Peak Hour
1:00 AM	0.80%	1,679	0.105
2:00 AM	0.60%	1,259	0.079
3:00 AM	0.70%	1,469	0.092
4:00 AM	0.70%	1,469	0.092
5:00 AM	1.80%	3,777	0.237
6:00 AM	3.50%	7,344	0.461
7:00 AM	4.80%	10,072	0.632
8:00 AM	6.80%	14,268	0.895
9:00 AM	6.10%	12,799	0.803
10:00 AM	5.10%	10,701	0.671
11:00 AM	5.00%	10,491	0.658
12:00 PM	5.20%	10,911	0.684
1:00 PM	5.80%	12,170	0.763
2:00 PM	6.00%	12,589	0.789
3:00 PM	6.20%	13,009	0.816
4:00 PM	6.80%	14,268	0.895
5:00 PM	7.20%	15,107	0.947
6:00 PM	7.60%	15,947	1.000
7:00 PM	5.80%	12,170	0.763
8:00 PM	4.00%	8,393	0.526
9:00 PM	3.30%	6,924	0.434
10:00 PM	2.70%	5,665	0.355
11:00 PM	2.10%	4,406	0.276
12:00 AM	1.50%	3,147	0.197

Notes: Data from Wyle Laboratories, "Development of Ground Transportation Systems Noise Contours for the San Diego Region" (December 1973) and Ogden International, "Road Travel Survey" (1986).

Heavy Truck PM10 Emissions vs. Speed

EMFAC2017 (v1.0.2) Emissions Inventory

Region Type: County

Region: SAN DIEGO

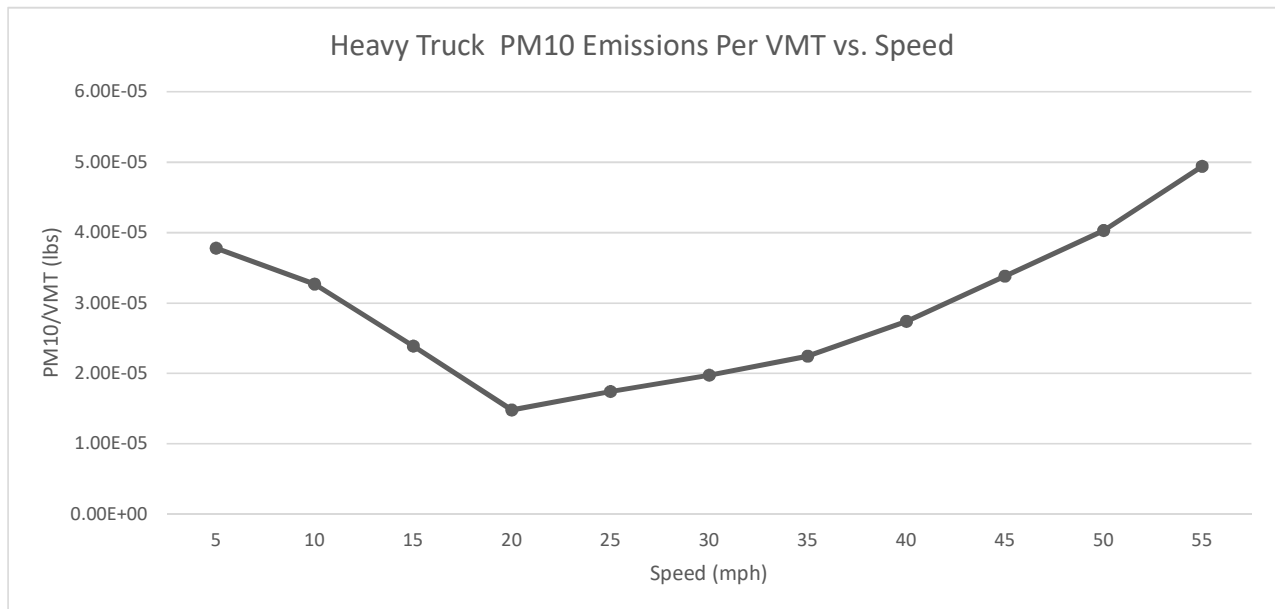
Calendar Year: 2024

Season: Annual

Vehicle Classification: EMFAC2007 Categories

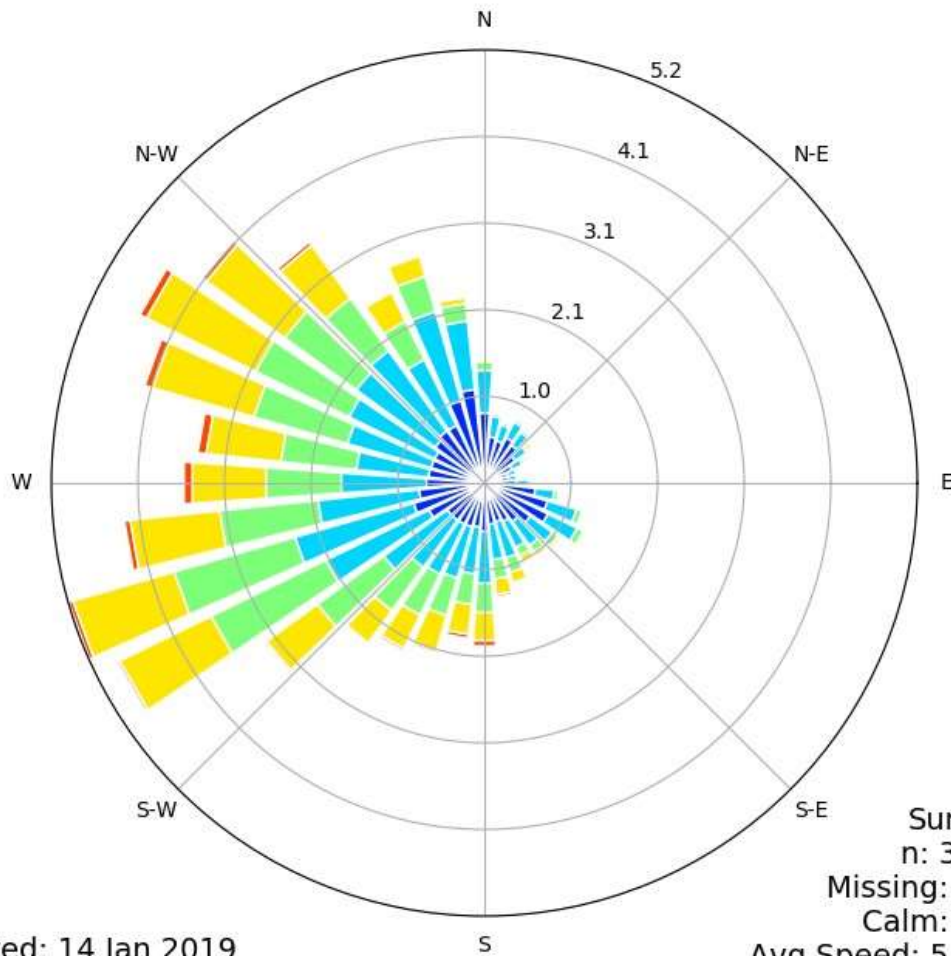
Units: miles/day for VMT, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Fuel	VMT	PM10_RUNEX	PM10/VMT	Speed
SAN DIEGO	2024	HHDT	Aggregated	DSL	40912.1	7.73E-04	3.78E-05	5
SAN DIEGO	2024	HHDT	Aggregated	DSL	54747.1	8.95E-04	3.27E-05	10
SAN DIEGO	2024	HHDT	Aggregated	DSL	42830.9	5.12E-04	2.39E-05	15
SAN DIEGO	2024	HHDT	Aggregated	DSL	78118.6	5.78E-04	1.48E-05	20
SAN DIEGO	2024	HHDT	Aggregated	DSL	53433.0	4.66E-04	1.74E-05	25
SAN DIEGO	2024	HHDT	Aggregated	DSL	52846.4	5.21E-04	1.97E-05	30
SAN DIEGO	2024	HHDT	Aggregated	DSL	60987.8	6.84E-04	2.24E-05	35
SAN DIEGO	2024	HHDT	Aggregated	DSL	64059.7	8.77E-04	2.74E-05	40
SAN DIEGO	2024	HHDT	Aggregated	DSL	72844.5	1.23E-03	3.38E-05	45
SAN DIEGO	2024	HHDT	Aggregated	DSL	96848.2	1.95E-03	4.03E-05	50
SAN DIEGO	2024	HHDT	Aggregated	DSL	188201.3	4.65E-03	4.94E-05	55





[MYF] SAN DIEGO/MONTG
Windrose Plot [All Year]
Period of Record: 01 Jan 1973 - 14 Jan 2019

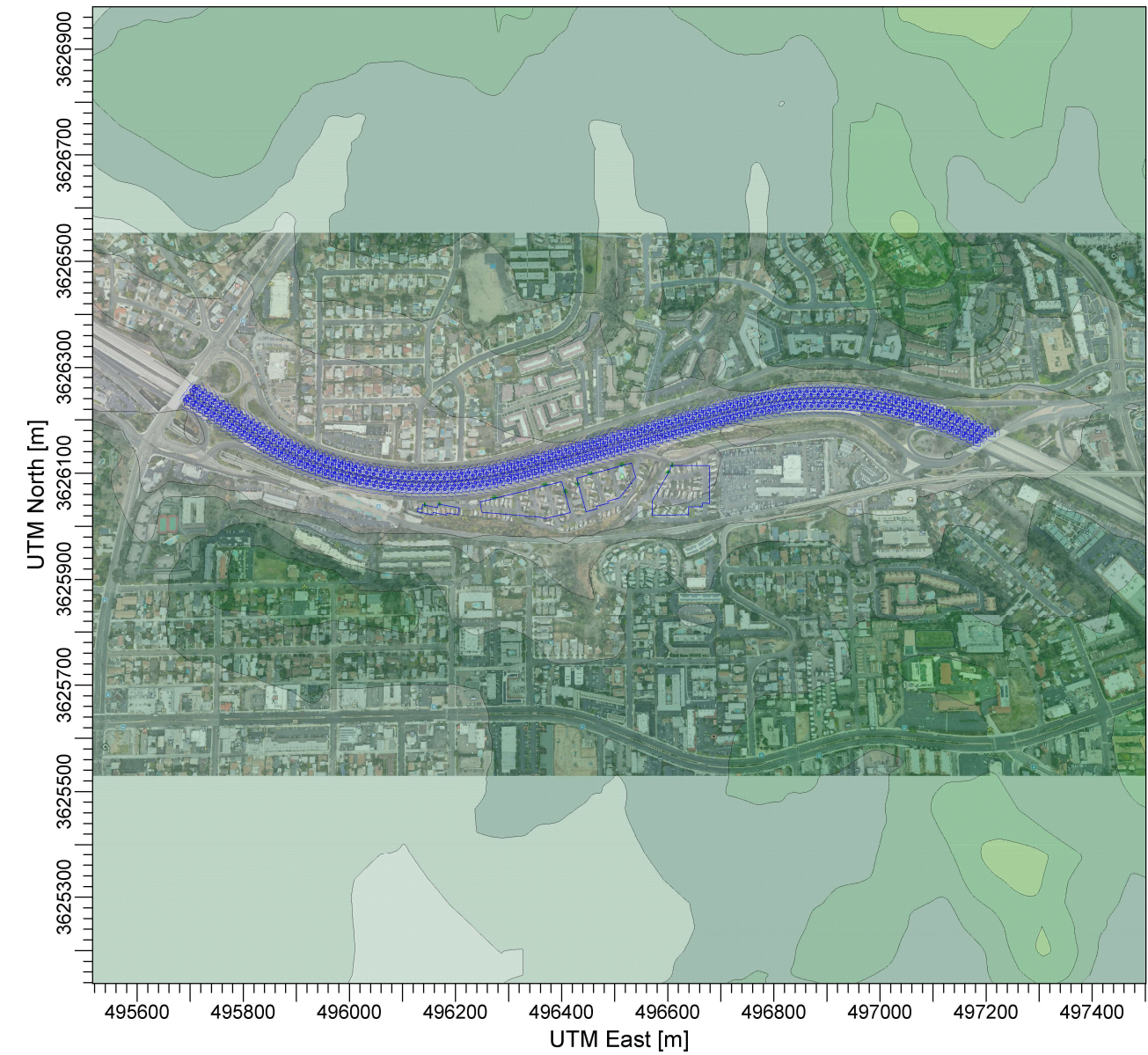


Generated: 14 Jan 2019



PROJECT TITLE:
Alvarado Specific Plan
HRA Sources and Receptors

COMMENTS:



meters

Terrain Contours

- 258
- 250
- 240
- 230
- 220
- 210
- 200
- 190
- 180
- 170
- 160
- 150
- 140
- 130
- 120
- 110
- 103

SOURCES:

4

RECEPTORS:

50

COMPANY NAME:

MODELER:

DATE:

4/17/2020

SCALE:

1:12,538

0

0.3 km

PROJECT NO.:

Control Pathway

AERMOD

Dispersion Options

Titles C:\Users\mdrol\Desktop\LAM-08 HRA\LAM-08 Alvarado SP\LAM-08 Alvarado	
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	Exponential Decay ☒ Half-life of 4 hrs will be used
Averaging Time Options Hours ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 6 ☐ 8 ☐ 12 ☐ 24 ☐ Month ☒ Period ☐ Annual	Terrain Height Options ☐ Flat ☒ Elevated SO: Meters RE: Meters TG: Meters
Flagpole Receptors ☒ Yes ☐ No Default Height = 1.20 m	

Optional Files



Re-Start File



Init File



Multi-Year Analyses



Event Input File



Error Listing File

Detailed Error Listing File

Filename: LAM-08 Alvarado SP.err

Source Pathway - Source Inputs

AERMOD

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 Dimension [m]	Initial Vertical Dimension [m]
E2	L0000372	495695.01	3626234.55	119.94	3.40	0.00855	13.40		6.23	3.16
	L0000373	495706.48	3626227.62	120.08	3.40	0.00855	13.40		6.23	3.16
	L0000374	495717.93	3626220.66	120.24	3.40	0.00855	13.40		6.23	3.16
	L0000375	495729.35	3626213.64	120.58	3.40	0.00855	13.40		6.23	3.16
	L0000376	495740.76	3626206.62	120.46	3.40	0.00855	13.40		6.23	3.16
	L0000377	495752.18	3626199.60	120.68	3.40	0.00855	13.40		6.23	3.16
	L0000378	495763.59	3626192.58	120.80	3.40	0.00855	13.40		6.23	3.16
	L0000379	495775.01	3626185.57	120.94	3.40	0.00855	13.40		6.23	3.16
	L0000380	495786.42	3626178.55	121.25	3.40	0.00855	13.40		6.23	3.16
	L0000381	495797.84	3626171.53	121.60	3.40	0.00855	13.40		6.23	3.16
	L0000382	495809.25	3626164.51	121.89	3.40	0.00855	13.40		6.23	3.16
	L0000383	495820.78	3626157.69	122.17	3.40	0.00855	13.40		6.23	3.16
	L0000384	495832.41	3626151.04	122.38	3.40	0.00855	13.40		6.23	3.16
	L0000385	495844.07	3626144.43	122.57	3.40	0.00855	13.40		6.23	3.16
	L0000386	495855.95	3626138.23	122.67	3.40	0.00855	13.40		6.23	3.16
	L0000387	495867.87	3626132.12	122.81	3.40	0.00855	13.40		6.23	3.16
	L0000388	495880.03	3626126.48	122.94	3.40	0.00855	13.40		6.23	3.16
	L0000389	495892.25	3626120.98	123.06	3.40	0.00855	13.40		6.23	3.16
	L0000390	495904.63	3626115.87	123.19	3.40	0.00855	13.40		6.23	3.16
	L0000391	495917.06	3626110.86	123.33	3.40	0.00855	13.40		6.23	3.16
	L0000392	495929.67	3626106.33	123.47	3.40	0.00855	13.40		6.23	3.16
	L0000393	495942.32	3626101.91	123.61	3.40	0.00855	13.40		6.23	3.16
	L0000394	495955.07	3626097.77	123.76	3.40	0.00855	13.40		6.23	3.16
	L0000395	495967.93	3626094.02	123.88	3.40	0.00855	13.40		6.23	3.16

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 Dimension [m]	Initial Vertical Dimension [m]
E2	L0000396	495980.85	3626090.48	124.04	3.40	0.00855	13.40		6.23	3.16
	L0000397	495993.81	3626087.07	124.20	3.40	0.00855	13.40		6.23	3.16
	L0000398	496006.85	3626084.00	124.36	3.40	0.00855	13.40		6.23	3.16
	L0000399	496019.97	3626081.26	124.52	3.40	0.00855	13.40		6.23	3.16
	L0000400	496033.13	3626078.76	124.67	3.40	0.00855	13.40		6.23	3.16
	L0000401	496046.33	3626076.45	124.84	3.40	0.00855	13.40		6.23	3.16
	L0000402	496059.59	3626074.52	124.99	3.40	0.00855	13.40		6.23	3.16
	L0000403	496072.89	3626072.94	125.13	3.40	0.00855	13.40		6.23	3.16
	L0000404	496086.23	3626071.62	125.26	3.40	0.00855	13.40		6.23	3.16
	L0000405	496099.57	3626070.42	125.38	3.40	0.00855	13.40		6.23	3.16
	L0000406	496112.95	3626069.70	125.49	3.40	0.00855	13.40		6.23	3.16
	L0000407	496126.34	3626069.08	125.61	3.40	0.00855	13.40		6.23	3.16
	L0000408	496139.74	3626069.16	125.69	3.40	0.00855	13.40		6.23	3.16
	L0000409	496153.13	3626069.23	125.79	3.40	0.00855	13.40		6.23	3.16
	L0000410	496166.53	3626069.31	125.90	3.40	0.00855	13.40		6.23	3.16
	L0000411	496179.93	3626069.48	126.01	3.40	0.00855	13.40		6.23	3.16
	L0000412	496193.32	3626070.12	126.11	3.40	0.00855	13.40		6.23	3.16
	L0000413	496206.67	3626071.19	126.20	3.40	0.00855	13.40		6.23	3.16
	L0000414	496220.00	3626072.58	126.30	3.40	0.00855	13.40		6.23	3.16
	L0000415	496233.29	3626074.22	126.40	3.40	0.00855	13.40		6.23	3.16
	L0000416	496246.54	3626076.26	126.48	3.40	0.00855	13.40		6.23	3.16
	L0000417	496259.78	3626078.30	126.59	3.40	0.00855	13.40		6.23	3.16
	L0000418	496272.93	3626080.85	126.68	3.40	0.00855	13.40		6.23	3.16
	L0000419	496286.01	3626083.76	126.78	3.40	0.00855	13.40		6.23	3.16
	L0000420	496299.09	3626086.67	126.86	3.40	0.00855	13.40		6.23	3.16

Source Pathway - Source Inputs

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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 Dimension [m]	Initial Vertical Dimension [m]
E2	L0000421	496312.17	3626089.57	126.93	3.40	0.00855	13.40		6.23	3.16
	L0000422	496325.24	3626092.55	127.00	3.40	0.00855	13.40		6.23	3.16
	L0000423	496338.18	3626096.00	127.03	3.40	0.00855	13.40		6.23	3.16
	L0000424	496351.13	3626099.46	127.09	3.40	0.00855	13.40		6.23	3.16
	L0000425	496364.07	3626102.92	127.13	3.40	0.00855	13.40		6.23	3.16
	L0000426	496377.04	3626106.31	127.20	3.40	0.00855	13.40		6.23	3.16
	L0000427	496390.00	3626109.70	127.30	3.40	0.00855	13.40		6.23	3.16
	L0000428	496402.96	3626113.11	127.42	3.40	0.00855	13.40		6.23	3.16
	L0000429	496415.87	3626116.70	127.60	3.40	0.00855	13.40		6.23	3.16
	L0000430	496428.78	3626120.29	127.79	3.40	0.00855	13.40		6.23	3.16
	L0000431	496441.69	3626123.88	127.98	3.40	0.00855	13.40		6.23	3.16
	L0000432	496454.60	3626127.47	128.16	3.40	0.00855	13.40		6.23	3.16
	L0000433	496467.51	3626131.06	128.35	3.40	0.00855	13.40		6.23	3.16
	L0000434	496480.42	3626134.65	128.53	3.40	0.00855	13.40		6.23	3.16
	L0000435	496493.33	3626138.24	128.73	3.40	0.00855	13.40		6.23	3.16
	L0000436	496506.24	3626141.83	128.92	3.40	0.00855	13.40		6.23	3.16
	L0000437	496519.15	3626145.43	129.11	3.40	0.00855	13.40		6.23	3.16
	L0000438	496532.06	3626149.02	129.30	3.40	0.00855	13.40		6.23	3.16
	L0000439	496544.95	3626152.69	129.49	3.40	0.00855	13.40		6.23	3.16
	L0000440	496557.83	3626156.36	129.68	3.40	0.00855	13.40		6.23	3.16
	L0000441	496570.72	3626160.04	129.87	3.40	0.00855	13.40		6.23	3.16
	L0000442	496583.61	3626163.71	130.06	3.40	0.00855	13.40		6.23	3.16
	L0000443	496596.49	3626167.38	130.26	3.40	0.00855	13.40		6.23	3.16
	L0000444	496609.38	3626171.06	130.45	3.40	0.00855	13.40		6.23	3.16
	L0000445	496622.27	3626174.70	130.63	3.40	0.00855	13.40		6.23	3.16

Source Pathway - Source Inputs

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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 Dimension [m]	Initial Vertical Dimension [m]
E2	L0000446	496635.17	3626178.34	130.83	3.40	0.00855	13.40		6.23	3.16
	L0000447	496648.07	3626181.98	131.00	3.40	0.00855	13.40		6.23	3.16
	L0000448	496660.96	3626185.62	131.16	3.40	0.00855	13.40		6.23	3.16
	L0000449	496673.89	3626189.15	131.32	3.40	0.00855	13.40		6.23	3.16
	L0000450	496686.84	3626192.60	131.46	3.40	0.00855	13.40		6.23	3.16
	L0000451	496699.79	3626196.04	131.55	3.40	0.00855	13.40		6.23	3.16
	L0000452	496712.74	3626199.48	131.60	3.40	0.00855	13.40		6.23	3.16
	L0000453	496725.69	3626202.92	131.63	3.40	0.00855	13.40		6.23	3.16
	L0000454	496738.64	3626206.36	131.60	3.40	0.00855	13.40		6.23	3.16
	L0000455	496751.63	3626209.64	131.63	3.40	0.00855	13.40		6.23	3.16
	L0000456	496764.63	3626212.92	131.74	3.40	0.00855	13.40		6.23	3.16
	L0000457	496777.80	3626215.33	131.81	3.40	0.00855	13.40		6.23	3.16
	L0000458	496791.02	3626217.52	131.89	3.40	0.00855	13.40		6.23	3.16
	L0000459	496804.24	3626219.72	132.00	3.40	0.00855	13.40		6.23	3.16
	L0000460	496817.51	3626221.56	132.11	3.40	0.00855	13.40		6.23	3.16
	L0000461	496830.81	3626223.19	132.23	3.40	0.00855	13.40		6.23	3.16
	L0000462	496844.15	3626224.46	132.35	3.40	0.00855	13.40		6.23	3.16
	L0000463	496857.51	3626225.38	132.45	3.40	0.00855	13.40		6.23	3.16
	L0000464	496870.90	3626225.90	132.55	3.40	0.00855	13.40		6.23	3.16
	L0000465	496884.29	3626226.41	132.65	3.40	0.00855	13.40		6.23	3.16
	L0000466	496897.69	3626226.23	132.75	3.40	0.00855	13.40		6.23	3.16
	L0000467	496911.09	3626226.00	132.86	3.40	0.00855	13.40		6.23	3.16
	L0000468	496924.49	3626225.77	132.99	3.40	0.00855	13.40		6.23	3.16
	L0000469	496937.86	3626225.19	133.12	3.40	0.00855	13.40		6.23	3.16
	L0000470	496951.20	3626223.91	133.22	3.40	0.00855	13.40		6.23	3.16

Source Pathway - Source Inputs

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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]
E2	L0000471	496964.54	3626222.63	133.33	3.40	0.00855	13.40		6.23	3.16
	L0000472	496977.83	3626220.93	133.44	3.40	0.00855	13.40		6.23	3.16
	L0000473	496991.05	3626218.79	133.54	3.40	0.00855	13.40		6.23	3.16
	L0000474	497004.28	3626216.64	133.66	3.40	0.00855	13.40		6.23	3.16
	L0000475	497017.48	3626214.36	133.79	3.40	0.00855	13.40		6.23	3.16
	L0000476	497030.58	3626211.54	133.90	3.40	0.00855	13.40		6.23	3.16
	L0000477	497043.68	3626208.72	134.06	3.40	0.00855	13.40		6.23	3.16
	L0000478	497056.64	3626205.32	134.22	3.40	0.00855	13.40		6.23	3.16
	L0000479	497069.51	3626201.61	134.40	3.40	0.00855	13.40		6.23	3.16
	L0000480	497082.37	3626197.83	134.60	3.40	0.00855	13.40		6.23	3.16
	L0000481	497095.11	3626193.68	134.84	3.40	0.00855	13.40		6.23	3.16
	L0000482	497107.83	3626189.46	135.09	3.40	0.00855	13.40		6.23	3.16
	L0000483	497120.32	3626184.61	135.36	3.40	0.00855	13.40		6.23	3.16
	L0000484	497132.81	3626179.76	135.67	3.40	0.00855	13.40		6.23	3.16
	L0000485	497145.30	3626174.91	136.01	3.40	0.00855	13.40		6.23	3.16
	L0000486	497157.62	3626169.63	136.33	3.40	0.00855	13.40		6.23	3.16
	L0000487	497169.89	3626164.25	136.65	3.40	0.00855	13.40		6.23	3.16
	L0000488	497182.02	3626158.56	136.93	3.40	0.00855	13.40		6.23	3.16

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]
E1	L0000489	495699.30	3626240.74	120.10	1.70	0.00855	13.40		6.23	1.58
	L0000490	495710.72	3626233.73	120.23	1.70	0.00855	13.40		6.23	1.58
	L0000491	495722.14	3626226.71	120.35	1.70	0.00855	13.40		6.23	1.58
	L0000492	495733.55	3626219.70	120.49	1.70	0.00855	13.40		6.23	1.58
	L0000493	495744.97	3626212.69	120.62	1.70	0.00855	13.40		6.23	1.58

Source Pathway - Source Inputs

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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 Dimension [m]	Initial Vertical Dimension [m]
E1	L0000494	495756.39	3626205.68	120.75	1.70	0.00855	13.40		6.23	1.58
	L0000495	495767.81	3626198.66	120.88	1.70	0.00855	13.40		6.23	1.58
	L0000496	495779.23	3626191.65	121.04	1.70	0.00855	13.40		6.23	1.58
	L0000497	495790.65	3626184.64	121.22	1.70	0.00855	13.40		6.23	1.58
	L0000498	495802.07	3626177.63	121.45	1.70	0.00855	13.40		6.23	1.58
	L0000499	495813.48	3626170.61	121.67	1.70	0.00855	13.40		6.23	1.58
	L0000500	495824.90	3626163.60	121.88	1.70	0.00855	13.40		6.23	1.58
	L0000501	495836.38	3626156.69	122.08	1.70	0.00855	13.40		6.23	1.58
	L0000502	495848.18	3626150.34	122.21	1.70	0.00855	13.40		6.23	1.58
	L0000503	495859.98	3626143.99	122.34	1.70	0.00855	13.40		6.23	1.58
	L0000504	495872.15	3626138.40	122.42	1.70	0.00855	13.40		6.23	1.58
	L0000505	495884.37	3626132.88	122.52	1.70	0.00855	13.40		6.23	1.58
	L0000506	495896.58	3626127.37	122.65	1.70	0.00855	13.40		6.23	1.58
	L0000507	495908.91	3626122.12	122.77	1.70	0.00855	13.40		6.23	1.58
	L0000508	495921.26	3626116.93	122.94	1.70	0.00855	13.40		6.23	1.58
	L0000509	495933.90	3626112.49	123.04	1.70	0.00855	13.40		6.23	1.58
	L0000510	495946.54	3626108.04	123.19	1.70	0.00855	13.40		6.23	1.58
	L0000511	495959.37	3626104.17	123.34	1.70	0.00855	13.40		6.23	1.58
	L0000512	495972.25	3626100.48	123.47	1.70	0.00855	13.40		6.23	1.58
	L0000513	495985.19	3626096.98	123.63	1.70	0.00855	13.40		6.23	1.58
	L0000514	495998.15	3626093.58	123.80	1.70	0.00855	13.40		6.23	1.58
	L0000515	496011.23	3626090.70	123.95	1.70	0.00855	13.40		6.23	1.58
	L0000516	496024.32	3626087.82	124.13	1.70	0.00855	13.40		6.23	1.58
	L0000517	496037.49	3626085.42	124.34	1.70	0.00855	13.40		6.23	1.58
	L0000518	496050.73	3626083.34	124.46	1.70	0.00855	13.40		6.23	1.58

Source Pathway - Source Inputs

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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 Dimension [m]	Initial Vertical Dimension [m]
E1	L0000519	496064.00	3626081.49	124.60	1.70	0.00855	13.40		6.23	1.58
	L0000520	496077.29	3626079.72	124.75	1.70	0.00855	13.40		6.23	1.58
	L0000521	496090.62	3626078.42	124.89	1.70	0.00855	13.40		6.23	1.58
	L0000522	496103.98	3626077.41	125.01	1.70	0.00855	13.40		6.23	1.58
	L0000523	496117.36	3626076.71	125.20	1.70	0.00855	13.40		6.23	1.58
	L0000524	496130.75	3626076.22	125.34	1.70	0.00855	13.40		6.23	1.58
	L0000525	496144.14	3626075.81	125.45	1.70	0.00855	13.40		6.23	1.58
	L0000526	496157.54	3626075.83	125.55	1.70	0.00855	13.40		6.23	1.58
	L0000527	496170.94	3626075.93	125.67	1.70	0.00855	13.40		6.23	1.58
	L0000528	496184.32	3626076.62	125.77	1.70	0.00855	13.40		6.23	1.58
	L0000529	496197.71	3626077.30	125.87	1.70	0.00855	13.40		6.23	1.58
	L0000530	496211.04	3626078.60	125.92	1.70	0.00855	13.40		6.23	1.58
	L0000531	496224.35	3626080.13	125.96	1.70	0.00855	13.40		6.23	1.58
	L0000532	496237.66	3626081.67	126.06	1.70	0.00855	13.40		6.23	1.58
	L0000533	496250.87	3626083.88	126.16	1.70	0.00855	13.40		6.23	1.58
	L0000534	496264.04	3626086.35	126.34	1.70	0.00855	13.40		6.23	1.58
	L0000535	496277.18	3626088.98	126.44	1.70	0.00855	13.40		6.23	1.58
	L0000536	496290.25	3626091.91	126.43	1.70	0.00855	13.40		6.23	1.58
	L0000537	496303.33	3626094.84	126.57	1.70	0.00855	13.40		6.23	1.58
	L0000538	496316.35	3626098.00	126.75	1.70	0.00855	13.40		6.23	1.58
	L0000539	496329.32	3626101.38	126.73	1.70	0.00855	13.40		6.23	1.58
	L0000540	496342.28	3626104.76	126.88	1.70	0.00855	13.40		6.23	1.58
	L0000541	496355.21	3626108.28	127.03	1.70	0.00855	13.40		6.23	1.58
	L0000542	496368.12	3626111.90	127.12	1.70	0.00855	13.40		6.23	1.58
	L0000543	496381.02	3626115.49	127.27	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
E1	L0000544	496393.96	3626118.99	127.35	1.70	0.00855	13.40		6.23	1.58
	L0000545	496406.89	3626122.49	127.62	1.70	0.00855	13.40		6.23	1.58
	L0000546	496419.83	3626125.99	127.78	1.70	0.00855	13.40		6.23	1.58
	L0000547	496432.76	3626129.49	127.94	1.70	0.00855	13.40		6.23	1.58
	L0000548	496445.69	3626133.00	128.17	1.70	0.00855	13.40		6.23	1.58
	L0000549	496458.62	3626136.55	128.34	1.70	0.00855	13.40		6.23	1.58
	L0000550	496471.54	3626140.11	128.52	1.70	0.00855	13.40		6.23	1.58
	L0000551	496484.46	3626143.66	128.75	1.70	0.00855	13.40		6.23	1.58
	L0000552	496497.38	3626147.21	128.90	1.70	0.00855	13.40		6.23	1.58
	L0000553	496510.29	3626150.79	129.08	1.70	0.00855	13.40		6.23	1.58
	L0000554	496523.20	3626154.39	129.32	1.70	0.00855	13.40		6.23	1.58
	L0000555	496536.10	3626157.99	129.46	1.70	0.00855	13.40		6.23	1.58
	L0000556	496549.01	3626161.60	129.65	1.70	0.00855	13.40		6.23	1.58
	L0000557	496561.92	3626165.20	129.88	1.70	0.00855	13.40		6.23	1.58
	L0000558	496574.82	3626168.80	130.03	1.70	0.00855	13.40		6.23	1.58
	L0000559	496587.73	3626172.40	130.24	1.70	0.00855	13.40		6.23	1.58
	L0000560	496600.64	3626176.00	130.45	1.70	0.00855	13.40		6.23	1.58
	L0000561	496613.55	3626179.58	130.59	1.70	0.00855	13.40		6.23	1.58
	L0000562	496626.48	3626183.10	130.81	1.70	0.00855	13.40		6.23	1.58
	L0000563	496639.41	3626186.63	131.00	1.70	0.00855	13.40		6.23	1.58
	L0000564	496652.34	3626190.15	131.10	1.70	0.00855	13.40		6.23	1.58
	L0000565	496665.27	3626193.67	131.33	1.70	0.00855	13.40		6.23	1.58
	L0000566	496678.20	3626197.19	131.47	1.70	0.00855	13.40		6.23	1.58
	L0000567	496691.13	3626200.71	131.59	1.70	0.00855	13.40		6.23	1.58
	L0000568	496704.05	3626204.23	131.71	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
E1	L0000569	496716.98	3626207.75	131.77	1.70	0.00855	13.40		6.23	1.58
	L0000570	496729.93	3626211.23	131.87	1.70	0.00855	13.40		6.23	1.58
	L0000571	496742.87	3626214.71	131.97	1.70	0.00855	13.40		6.23	1.58
	L0000572	496755.87	3626217.92	132.00	1.70	0.00855	13.40		6.23	1.58
	L0000573	496769.03	3626220.45	132.08	1.70	0.00855	13.40		6.23	1.58
	L0000574	496782.18	3626222.99	132.25	1.70	0.00855	13.40		6.23	1.58
	L0000575	496795.41	3626225.13	132.35	1.70	0.00855	13.40		6.23	1.58
	L0000576	496808.68	3626226.98	132.42	1.70	0.00855	13.40		6.23	1.58
	L0000577	496821.95	3626228.82	132.46	1.70	0.00855	13.40		6.23	1.58
	L0000578	496835.25	3626230.45	132.58	1.70	0.00855	13.40		6.23	1.58
	L0000579	496848.59	3626231.68	132.77	1.70	0.00855	13.40		6.23	1.58
	L0000580	496861.95	3626232.68	132.90	1.70	0.00855	13.40		6.23	1.58
	L0000581	496875.34	3626233.04	133.00	1.70	0.00855	13.40		6.23	1.58
	L0000582	496888.74	3626233.40	133.10	1.70	0.00855	13.40		6.23	1.58
	L0000583	496902.14	3626233.36	133.20	1.70	0.00855	13.40		6.23	1.58
	L0000584	496915.53	3626233.11	133.31	1.70	0.00855	13.40		6.23	1.58
	L0000585	496928.93	3626232.77	133.42	1.70	0.00855	13.40		6.23	1.58
	L0000586	496942.29	3626231.75	133.48	1.70	0.00855	13.40		6.23	1.58
	L0000587	496955.65	3626230.74	133.52	1.70	0.00855	13.40		6.23	1.58
	L0000588	496968.95	3626229.13	133.67	1.70	0.00855	13.40		6.23	1.58
	L0000589	496982.25	3626227.46	133.85	1.70	0.00855	13.40		6.23	1.58
	L0000590	496995.54	3626225.80	134.02	1.70	0.00855	13.40		6.23	1.58
	L0000591	497008.69	3626223.18	134.08	1.70	0.00855	13.40		6.23	1.58
	L0000592	497021.82	3626220.53	134.07	1.70	0.00855	13.40		6.23	1.58
	L0000593	497034.91	3626217.67	134.28	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
E1	L0000594	497047.99	3626214.76	134.50	1.70	0.00855	13.40		6.23	1.58
	L0000595	497060.97	3626211.44	134.53	1.70	0.00855	13.40		6.23	1.58
	L0000596	497073.88	3626207.86	134.78	1.70	0.00855	13.40		6.23	1.58
	L0000597	497086.72	3626204.02	134.93	1.70	0.00855	13.40		6.23	1.58
	L0000598	497099.38	3626199.66	135.14	1.70	0.00855	13.40		6.23	1.58
	L0000599	497112.05	3626195.29	135.45	1.70	0.00855	13.40		6.23	1.58
	L0000600	497124.60	3626190.60	135.63	1.70	0.00855	13.40		6.23	1.58
	L0000601	497137.10	3626185.77	135.99	1.70	0.00855	13.40		6.23	1.58
	L0000602	497149.56	3626180.83	136.22	1.70	0.00855	13.40		6.23	1.58
	L0000603	497161.79	3626175.36	136.55	1.70	0.00855	13.40		6.23	1.58
	L0000604	497174.03	3626169.90	136.75	1.70	0.00855	13.40		6.23	1.58
	L0000605	497186.20	3626164.30	136.99	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
W1	L0000737	495707.41	3626252.19	120.17	1.70	0.00855	13.40		6.23	1.58
	L0000738	495718.84	3626245.19	120.31	1.70	0.00855	13.40		6.23	1.58
	L0000739	495730.27	3626238.20	120.43	1.70	0.00855	13.40		6.23	1.58
	L0000740	495741.69	3626231.20	120.55	1.70	0.00855	13.40		6.23	1.58
	L0000741	495753.12	3626224.20	120.69	1.70	0.00855	13.40		6.23	1.58
	L0000742	495764.55	3626217.20	120.84	1.70	0.00855	13.40		6.23	1.58
	L0000743	495775.97	3626210.20	120.95	1.70	0.00855	13.40		6.23	1.58
	L0000744	495787.40	3626203.20	121.09	1.70	0.00855	13.40		6.23	1.58
	L0000745	495798.83	3626196.20	121.25	1.70	0.00855	13.40		6.23	1.58
	L0000746	495810.30	3626189.28	121.30	1.70	0.00855	13.40		6.23	1.58
	L0000747	495821.81	3626182.41	121.37	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
W1	L0000748	495833.31	3626175.54	121.56	1.70	0.00855	13.40		6.23	1.58
	L0000749	495844.82	3626168.68	121.55	1.70	0.00855	13.40		6.23	1.58
	L0000750	495856.57	3626162.24	121.66	1.70	0.00855	13.40		6.23	1.58
	L0000751	495868.49	3626156.12	121.85	1.70	0.00855	13.40		6.23	1.58
	L0000752	495880.50	3626150.20	121.88	1.70	0.00855	13.40		6.23	1.58
	L0000753	495892.69	3626144.63	122.08	1.70	0.00855	13.40		6.23	1.58
	L0000754	495904.91	3626139.12	122.07	1.70	0.00855	13.40		6.23	1.58
	L0000755	495917.36	3626134.18	122.31	1.70	0.00855	13.40		6.23	1.58
	L0000756	495929.82	3626129.24	122.36	1.70	0.00855	13.40		6.23	1.58
	L0000757	495942.46	3626124.81	122.61	1.70	0.00855	13.40		6.23	1.58
	L0000758	495955.12	3626120.41	122.63	1.70	0.00855	13.40		6.23	1.58
	L0000759	495967.92	3626116.49	122.90	1.70	0.00855	13.40		6.23	1.58
	L0000760	495980.88	3626113.07	123.02	1.70	0.00855	13.40		6.23	1.58
	L0000761	495993.84	3626109.65	123.14	1.70	0.00855	13.40		6.23	1.58
	L0000762	496006.79	3626106.24	123.38	1.70	0.00855	13.40		6.23	1.58
	L0000763	496019.83	3626103.15	123.56	1.70	0.00855	13.40		6.23	1.58
	L0000764	496032.98	3626100.56	123.65	1.70	0.00855	13.40		6.23	1.58
	L0000765	496046.13	3626097.99	123.93	1.70	0.00855	13.40		6.23	1.58
	L0000766	496059.38	3626096.02	124.08	1.70	0.00855	13.40		6.23	1.58
	L0000767	496072.66	3626094.24	124.25	1.70	0.00855	13.40		6.23	1.58
	L0000768	496085.98	3626092.75	124.39	1.70	0.00855	13.40		6.23	1.58
	L0000769	496099.34	3626091.71	124.46	1.70	0.00855	13.40		6.23	1.58
	L0000770	496112.70	3626090.80	124.59	1.70	0.00855	13.40		6.23	1.58
	L0000771	496126.09	3626090.13	124.74	1.70	0.00855	13.40		6.23	1.58
	L0000772	496139.48	3626089.95	124.85	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
W1	L0000773	496152.88	3626089.99	124.94	1.70	0.00855	13.40		6.23	1.58
	L0000774	496166.28	3626090.13	125.05	1.70	0.00855	13.40		6.23	1.58
	L0000775	496179.67	3626090.51	125.14	1.70	0.00855	13.40		6.23	1.58
	L0000776	496193.04	3626091.39	125.23	1.70	0.00855	13.40		6.23	1.58
	L0000777	496206.40	3626092.48	125.34	1.70	0.00855	13.40		6.23	1.58
	L0000778	496219.72	3626093.90	125.45	1.70	0.00855	13.40		6.23	1.58
	L0000779	496233.03	3626095.50	125.56	1.70	0.00855	13.40		6.23	1.58
	L0000780	496246.30	3626097.33	125.66	1.70	0.00855	13.40		6.23	1.58
	L0000781	496259.48	3626099.74	125.76	1.70	0.00855	13.40		6.23	1.58
	L0000782	496272.64	3626102.27	125.85	1.70	0.00855	13.40		6.23	1.58
	L0000783	496285.80	3626104.79	125.98	1.70	0.00855	13.40		6.23	1.58
	L0000784	496298.88	3626107.67	126.10	1.70	0.00855	13.40		6.23	1.58
	L0000785	496311.89	3626110.87	126.25	1.70	0.00855	13.40		6.23	1.58
	L0000786	496324.87	3626114.20	126.45	1.70	0.00855	13.40		6.23	1.58
	L0000787	496337.79	3626117.78	126.64	1.70	0.00855	13.40		6.23	1.58
	L0000788	496350.70	3626121.37	126.83	1.70	0.00855	13.40		6.23	1.58
	L0000789	496363.61	3626124.97	127.01	1.70	0.00855	13.40		6.23	1.58
	L0000790	496376.54	3626128.49	127.18	1.70	0.00855	13.40		6.23	1.58
	L0000791	496389.47	3626132.00	127.34	1.70	0.00855	13.40		6.23	1.58
	L0000792	496402.40	3626135.52	127.55	1.70	0.00855	13.40		6.23	1.58
	L0000793	496415.32	3626139.04	127.72	1.70	0.00855	13.40		6.23	1.58
	L0000794	496428.25	3626142.57	127.91	1.70	0.00855	13.40		6.23	1.58
	L0000795	496441.18	3626146.10	128.11	1.70	0.00855	13.40		6.23	1.58
	L0000796	496454.11	3626149.63	128.30	1.70	0.00855	13.40		6.23	1.58
	L0000797	496467.03	3626153.16	128.49	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
W1	L0000798	496479.93	3626156.80	128.68	1.70	0.00855	13.40		6.23	1.58
	L0000799	496492.82	3626160.45	128.86	1.70	0.00855	13.40		6.23	1.58
	L0000800	496505.72	3626164.10	129.05	1.70	0.00855	13.40		6.23	1.58
	L0000801	496518.61	3626167.75	129.25	1.70	0.00855	13.40		6.23	1.58
	L0000802	496531.50	3626171.39	129.42	1.70	0.00855	13.40		6.23	1.58
	L0000803	496544.40	3626175.04	129.64	1.70	0.00855	13.40		6.23	1.58
	L0000804	496557.29	3626178.69	129.82	1.70	0.00855	13.40		6.23	1.58
	L0000805	496570.18	3626182.34	129.99	1.70	0.00855	13.40		6.23	1.58
	L0000806	496583.10	3626185.92	130.19	1.70	0.00855	13.40		6.23	1.58
	L0000807	496596.02	3626189.45	130.40	1.70	0.00855	13.40		6.23	1.58
	L0000808	496608.95	3626192.98	130.57	1.70	0.00855	13.40		6.23	1.58
	L0000809	496621.88	3626196.51	130.78	1.70	0.00855	13.40		6.23	1.58
	L0000810	496634.80	3626200.05	130.94	1.70	0.00855	13.40		6.23	1.58
	L0000811	496647.73	3626203.58	131.08	1.70	0.00855	13.40		6.23	1.58
	L0000812	496660.66	3626207.11	131.29	1.70	0.00855	13.40		6.23	1.58
	L0000813	496673.58	3626210.64	131.48	1.70	0.00855	13.40		6.23	1.58
	L0000814	496686.51	3626214.17	131.67	1.70	0.00855	13.40		6.23	1.58
	L0000815	496699.41	3626217.77	131.87	1.70	0.00855	13.40		6.23	1.58
	L0000816	496712.32	3626221.39	132.04	1.70	0.00855	13.40		6.23	1.58
	L0000817	496725.22	3626225.00	132.24	1.70	0.00855	13.40		6.23	1.58
	L0000818	496738.15	3626228.51	132.37	1.70	0.00855	13.40		6.23	1.58
	L0000819	496751.18	3626231.65	132.50	1.70	0.00855	13.40		6.23	1.58
	L0000820	496764.29	3626234.38	132.63	1.70	0.00855	13.40		6.23	1.58
	L0000821	496777.46	3626236.85	132.70	1.70	0.00855	13.40		6.23	1.58
	L0000822	496790.64	3626239.30	132.82	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
W1	L0000823	496803.92	3626241.06	132.89	1.70	0.00855	13.40		6.23	1.58
	L0000824	496817.21	3626242.73	133.00	1.70	0.00855	13.40		6.23	1.58
	L0000825	496830.54	3626244.17	133.11	1.70	0.00855	13.40		6.23	1.58
	L0000826	496843.87	3626245.42	133.24	1.70	0.00855	13.40		6.23	1.58
	L0000827	496857.25	3626246.21	133.32	1.70	0.00855	13.40		6.23	1.58
	L0000828	496870.63	3626246.94	133.41	1.70	0.00855	13.40		6.23	1.58
	L0000829	496884.02	3626247.43	133.52	1.70	0.00855	13.40		6.23	1.58
	L0000830	496897.41	3626247.82	133.64	1.70	0.00855	13.40		6.23	1.58
	L0000831	496910.81	3626247.44	133.74	1.70	0.00855	13.40		6.23	1.58
	L0000832	496924.19	3626246.84	133.83	1.70	0.00855	13.40		6.23	1.58
	L0000833	496937.58	3626246.22	133.97	1.70	0.00855	13.40		6.23	1.58
	L0000834	496950.93	3626245.08	134.07	1.70	0.00855	13.40		6.23	1.58
	L0000835	496964.27	3626243.85	134.18	1.70	0.00855	13.40		6.23	1.58
	L0000836	496977.53	3626241.93	134.27	1.70	0.00855	13.40		6.23	1.58
	L0000837	496990.80	3626240.02	134.37	1.70	0.00855	13.40		6.23	1.58
	L0000838	497004.06	3626238.10	134.50	1.70	0.00855	13.40		6.23	1.58
	L0000839	497017.21	3626235.51	134.62	1.70	0.00855	13.40		6.23	1.58
	L0000840	497030.35	3626232.89	134.72	1.70	0.00855	13.40		6.23	1.58
	L0000841	497043.39	3626229.80	134.83	1.70	0.00855	13.40		6.23	1.58
	L0000842	497056.42	3626226.69	134.99	1.70	0.00855	13.40		6.23	1.58
	L0000843	497069.45	3626223.57	135.19	1.70	0.00855	13.40		6.23	1.58
	L0000844	497082.26	3626219.64	135.36	1.70	0.00855	13.40		6.23	1.58
	L0000845	497095.02	3626215.57	135.56	1.70	0.00855	13.40		6.23	1.58
	L0000846	497107.79	3626211.50	135.80	1.70	0.00855	13.40		6.23	1.58
	L0000847	497120.33	3626206.80	136.07	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
W1	L0000848	497132.82	3626201.92	136.29	1.70	0.00855	13.40		6.23	1.58
	L0000849	497145.30	3626197.05	136.55	1.70	0.00855	13.40		6.23	1.58
	L0000850	497157.55	3626191.64	136.70	1.70	0.00855	13.40		6.23	1.58
	L0000851	497169.75	3626186.08	136.83	1.70	0.00855	13.40		6.23	1.58
	L0000852	497181.92	3626180.48	136.90	1.70	0.00855	13.40		6.23	1.58
	L0000853	497194.06	3626174.82	136.98	1.70	0.00855	13.40		6.23	1.58

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 Dimension [m]	Initial Vertical Dimension [m]
W2	L0000854	495712.25	3626258.44	120.10	3.40	0.00847	13.40		6.23	3.16
	L0000855	495723.64	3626251.38	120.24	3.40	0.00847	13.40		6.23	3.16
	L0000856	495735.04	3626244.33	120.38	3.40	0.00847	13.40		6.23	3.16
	L0000857	495746.43	3626237.27	120.51	3.40	0.00847	13.40		6.23	3.16
	L0000858	495757.82	3626230.21	120.65	3.40	0.00847	13.40		6.23	3.16
	L0000859	495769.21	3626223.16	120.76	3.40	0.00847	13.40		6.23	3.16
	L0000860	495780.60	3626216.10	120.90	3.40	0.00847	13.40		6.23	3.16
	L0000861	495792.00	3626209.05	121.01	3.40	0.00847	13.40		6.23	3.16
	L0000862	495803.44	3626202.08	121.13	3.40	0.00847	13.40		6.23	3.16
	L0000863	495814.96	3626195.23	121.23	3.40	0.00847	13.40		6.23	3.16
	L0000864	495826.48	3626188.38	121.23	3.40	0.00847	13.40		6.23	3.16
	L0000865	495838.00	3626181.54	121.24	3.40	0.00847	13.40		6.23	3.16
	L0000866	495849.69	3626175.01	121.27	3.40	0.00847	13.40		6.23	3.16
	L0000867	495861.61	3626168.88	121.32	3.40	0.00847	13.40		6.23	3.16
	L0000868	495873.52	3626162.74	121.40	3.40	0.00847	13.40		6.23	3.16
	L0000869	495885.43	3626156.61	121.53	3.40	0.00847	13.40		6.23	3.16
	L0000870	495897.55	3626150.91	121.65	3.40	0.00847	13.40		6.23	3.16

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 Dimension [m]	Initial Vertical Dimension [m]
W2	L0000871	495909.84	3626145.57	121.77	3.40	0.00847	13.40		6.23	3.16
	L0000872	495922.16	3626140.29	121.90	3.40	0.00847	13.40		6.23	3.16
	L0000873	495934.73	3626135.66	122.04	3.40	0.00847	13.40		6.23	3.16
	L0000874	495947.31	3626131.03	122.18	3.40	0.00847	13.40		6.23	3.16
	L0000875	495960.07	3626126.97	122.36	3.40	0.00847	13.40		6.23	3.16
	L0000876	495972.90	3626123.11	122.46	3.40	0.00847	13.40		6.23	3.16
	L0000877	495985.74	3626119.25	122.64	3.40	0.00847	13.40		6.23	3.16
	L0000878	495998.57	3626115.39	122.86	3.40	0.00847	13.40		6.23	3.16
	L0000879	496011.61	3626112.38	123.00	3.40	0.00847	13.40		6.23	3.16
	L0000880	496024.74	3626109.70	123.17	3.40	0.00847	13.40		6.23	3.16
	L0000881	496037.94	3626107.41	123.37	3.40	0.00847	13.40		6.23	3.16
	L0000882	496051.17	3626105.27	123.66	3.40	0.00847	13.40		6.23	3.16
	L0000883	496064.40	3626103.12	123.67	3.40	0.00847	13.40		6.23	3.16
	L0000884	496077.68	3626101.39	123.84	3.40	0.00847	13.40		6.23	3.16
	L0000885	496091.00	3626099.95	123.99	3.40	0.00847	13.40		6.23	3.16
	L0000886	496104.37	3626098.96	124.11	3.40	0.00847	13.40		6.23	3.16
	L0000887	496117.73	3626097.97	124.26	3.40	0.00847	13.40		6.23	3.16
	L0000888	496131.10	3626097.24	124.47	3.40	0.00847	13.40		6.23	3.16
	L0000889	496144.50	3626097.23	124.65	3.40	0.00847	13.40		6.23	3.16
	L0000890	496157.90	3626097.26	124.75	3.40	0.00847	13.40		6.23	3.16
	L0000891	496171.30	3626097.53	124.83	3.40	0.00847	13.40		6.23	3.16
	L0000892	496184.67	3626098.29	124.88	3.40	0.00847	13.40		6.23	3.16
	L0000893	496198.05	3626099.11	124.90	3.40	0.00847	13.40		6.23	3.16
	L0000894	496211.40	3626100.21	124.98	3.40	0.00847	13.40		6.23	3.16
	L0000895	496224.72	3626101.71	125.08	3.40	0.00847	13.40		6.23	3.16

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 Dimension [m]	Initial Vertical Dimension [m]
W2	L0000896	496238.03	3626103.27	125.20	3.40	0.00847	13.40		6.23	3.16
	L0000897	496251.25	3626105.46	125.53	3.40	0.00847	13.40		6.23	3.16
	L0000898	496264.46	3626107.67	125.72	3.40	0.00847	13.40		6.23	3.16
	L0000899	496277.51	3626110.72	125.53	3.40	0.00847	13.40		6.23	3.16
	L0000900	496290.56	3626113.76	125.59	3.40	0.00847	13.40		6.23	3.16
	L0000901	496303.61	3626116.81	126.17	3.40	0.00847	13.40		6.23	3.16
	L0000902	496316.66	3626119.85	126.24	3.40	0.00847	13.40		6.23	3.16
	L0000903	496329.70	3626122.94	126.30	3.40	0.00847	13.40		6.23	3.16
	L0000904	496342.62	3626126.49	126.94	3.40	0.00847	13.40		6.23	3.16
	L0000905	496355.54	3626130.04	126.90	3.40	0.00847	13.40		6.23	3.16
	L0000906	496368.46	3626133.59	127.00	3.40	0.00847	13.40		6.23	3.16
	L0000907	496381.38	3626137.15	127.51	3.40	0.00847	13.40		6.23	3.16
	L0000908	496394.29	3626140.74	127.38	3.40	0.00847	13.40		6.23	3.16
	L0000909	496407.20	3626144.32	127.54	3.40	0.00847	13.40		6.23	3.16
	L0000910	496420.11	3626147.91	128.11	3.40	0.00847	13.40		6.23	3.16
	L0000911	496433.02	3626151.50	127.90	3.40	0.00847	13.40		6.23	3.16
	L0000912	496445.93	3626155.09	128.23	3.40	0.00847	13.40		6.23	3.16
	L0000913	496458.85	3626158.68	128.67	3.40	0.00847	13.40		6.23	3.16
	L0000914	496471.76	3626162.27	128.48	3.40	0.00847	13.40		6.23	3.16
	L0000915	496484.67	3626165.86	128.97	3.40	0.00847	13.40		6.23	3.16
	L0000916	496497.58	3626169.45	129.18	3.40	0.00847	13.40		6.23	3.16
	L0000917	496510.49	3626173.03	129.05	3.40	0.00847	13.40		6.23	3.16
	L0000918	496523.40	3626176.62	129.81	3.40	0.00847	13.40		6.23	3.16
	L0000919	496536.31	3626180.21	129.60	3.40	0.00847	13.40		6.23	3.16
	L0000920	496549.22	3626183.80	129.62	3.40	0.00847	13.40		6.23	3.16

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 Dimension [m]	Initial Vertical Dimension [m]
W2	L0000921	496562.13	3626187.38	130.28	3.40	0.00847	13.40		6.23	3.16
	L0000922	496575.06	3626190.91	130.25	3.40	0.00847	13.40		6.23	3.16
	L0000923	496587.98	3626194.45	130.19	3.40	0.00847	13.40		6.23	3.16
	L0000924	496600.91	3626197.98	130.66	3.40	0.00847	13.40		6.23	3.16
	L0000925	496613.83	3626201.51	130.57	3.40	0.00847	13.40		6.23	3.16
	L0000926	496626.76	3626205.05	130.75	3.40	0.00847	13.40		6.23	3.16
	L0000927	496639.69	3626208.58	131.03	3.40	0.00847	13.40		6.23	3.16
	L0000928	496652.61	3626212.12	131.19	3.40	0.00847	13.40		6.23	3.16
	L0000929	496665.52	3626215.70	131.34	3.40	0.00847	13.40		6.23	3.16
	L0000930	496678.44	3626219.28	131.77	3.40	0.00847	13.40		6.23	3.16
	L0000931	496691.35	3626222.86	131.90	3.40	0.00847	13.40		6.23	3.16
	L0000932	496704.26	3626226.44	132.15	3.40	0.00847	13.40		6.23	3.16
	L0000933	496717.18	3626230.01	132.45	3.40	0.00847	13.40		6.23	3.16
	L0000934	496730.10	3626233.54	132.63	3.40	0.00847	13.40		6.23	3.16
	L0000935	496743.09	3626236.85	132.87	3.40	0.00847	13.40		6.23	3.16
	L0000936	496756.11	3626239.97	133.09	3.40	0.00847	13.40		6.23	3.16
	L0000937	496769.33	3626242.15	133.05	3.40	0.00847	13.40		6.23	3.16
	L0000938	496782.56	3626244.32	133.14	3.40	0.00847	13.40		6.23	3.16
	L0000939	496795.78	3626246.49	133.23	3.40	0.00847	13.40		6.23	3.16
	L0000940	496809.00	3626248.67	133.40	3.40	0.00847	13.40		6.23	3.16
	L0000941	496822.23	3626250.84	133.49	3.40	0.00847	13.40		6.23	3.16
	L0000942	496835.55	3626252.22	133.59	3.40	0.00847	13.40		6.23	3.16
	L0000943	496848.89	3626253.55	133.71	3.40	0.00847	13.40		6.23	3.16
	L0000944	496862.27	3626254.05	133.79	3.40	0.00847	13.40		6.23	3.16
	L0000945	496875.67	3626254.36	133.88	3.40	0.00847	13.40		6.23	3.16

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 Dimension [m]	Initial Vertical Dimension [m]
W2	L0000946	496889.06	3626254.65	133.99	3.40	0.00847	13.40		6.23	3.16
	L0000947	496902.46	3626254.56	134.09	3.40	0.00847	13.40		6.23	3.16
	L0000948	496915.86	3626254.48	134.21	3.40	0.00847	13.40		6.23	3.16
	L0000949	496929.24	3626253.86	134.32	3.40	0.00847	13.40		6.23	3.16
	L0000950	496942.62	3626252.98	134.43	3.40	0.00847	13.40		6.23	3.16
	L0000951	496955.96	3626251.79	134.53	3.40	0.00847	13.40		6.23	3.16
	L0000952	496969.29	3626250.38	134.63	3.40	0.00847	13.40		6.23	3.16
	L0000953	496982.56	3626248.56	134.72	3.40	0.00847	13.40		6.23	3.16
	L0000954	496995.82	3626246.60	134.83	3.40	0.00847	13.40		6.23	3.16
	L0000955	497009.07	3626244.64	134.97	3.40	0.00847	13.40		6.23	3.16
	L0000956	497022.23	3626242.16	135.04	3.40	0.00847	13.40		6.23	3.16
	L0000957	497035.32	3626239.28	135.12	3.40	0.00847	13.40		6.23	3.16
	L0000958	497048.40	3626236.39	135.31	3.40	0.00847	13.40		6.23	3.16
	L0000959	497061.42	3626233.24	135.52	3.40	0.00847	13.40		6.23	3.16
	L0000960	497074.24	3626229.36	135.59	3.40	0.00847	13.40		6.23	3.16
	L0000961	497087.07	3626225.48	135.83	3.40	0.00847	13.40		6.23	3.16
	L0000962	497099.90	3626221.60	136.12	3.40	0.00847	13.40		6.23	3.16
	L0000963	497112.56	3626217.25	136.26	3.40	0.00847	13.40		6.23	3.16
	L0000964	497125.09	3626212.50	136.77	3.40	0.00847	13.40		6.23	3.16
	L0000965	497137.62	3626207.75	136.78	3.40	0.00847	13.40		6.23	3.16
	L0000966	497149.98	3626202.58	137.09	3.40	0.00847	13.40		6.23	3.16
	L0000967	497162.24	3626197.16	137.06	3.40	0.00847	13.40		6.23	3.16
	L0000968	497174.43	3626191.61	137.01	3.40	0.00847	13.40		6.23	3.16
	L0000969	497186.59	3626185.97	137.11	3.40	0.00847	13.40		6.23	3.16
	L0000970	497198.75	3626180.35	137.78	3.40	0.00847	13.40		6.23	3.16

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 Dimension [m]	Initial Vertical Dimension [m]
W2	L0000971	497210.93	3626174.76	139.56	3.40	0.00847	13.40		6.23	3.16

Source Pathway

AERMOD

Building Downwash Information

Source ID: _____

Emission Rate Units for Output

For Concentration

Unit Factor: 1E6
Emission Unit Label: GRAMS/SEC
Concentration Unit Label: MICROGRAMS/M**3

Variable Emissions

Hourly Emission Rate Variation

Scenario: Scenario 2

Source ID:		E1					
1 to 6		0.11	0.79	0.09	0.09	0.24	0.46
7 to 12		0.63	0.90	0.80	0.67	0.66	0.68
13 to 18		0.76	0.79	0.82	0.90	0.95	1.00
19 to 24		0.76	0.53	0.43	0.36	0.28	0.20
Source ID:		E2					
1 to 6		0.11	0.79	0.09	0.09	0.24	0.46
7 to 12		0.63	0.90	0.80	0.67	0.66	0.68
13 to 18		0.76	0.79	0.82	0.90	0.95	1.00
19 to 24		0.76	0.53	0.43	0.36	0.28	0.20
Source ID:		W1					
1 to 6		0.11	0.79	0.09	0.09	0.24	0.46
7 to 12		0.63	0.90	0.80	0.67	0.66	0.68
13 to 18		0.76	0.79	0.82	0.90	0.95	1.00
19 to 24		0.76	0.53	0.43	0.36	0.28	0.20
Source ID:		W2					
1 to 6		0.11	0.79	0.09	0.09	0.24	0.46
7 to 12		0.63	0.90	0.80	0.67	0.66	0.68
13 to 18		0.76	0.79	0.82	0.90	0.95	1.00
19 to 24		0.76	0.53	0.43	0.36	0.28	0.20

Receptor Pathway

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Receptor Networks

Note: Terrain Elevations 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)

Discrete Receptors

Discrete Cartesian Receptors

Record Number	X-Coordinate [m]	Y-Coordinate [m]	Group Name (Optional)	Terrain Elevations	Flagpole Heights [m] (Optional)
1	496140.59	3626040.92	BLDG1	122.99	8.70
2	496141.25	3626040.82	BLDG1	123.00	12.34
3	496141.84	3626040.66	BLDG1	123.00	16.60
4	496142.53	3626040.55	BLDG1	123.00	20.86
5	496143.09	3626040.45	BLDG1	123.01	25.12
6	496168.57	3626042.58	BLDG1	123.24	8.70
7	496169.12	3626042.60	BLDG1	123.25	12.34
8	496169.72	3626042.37	BLDG1	123.24	16.60
9	496170.27	3626042.32	BLDG1	123.24	20.86
10	496170.87	3626042.18	BLDG1	123.24	25.12
11	496270.01	3626053.36	BLDG2	124.49	17.58
12	496271.36	3626053.88	BLDG2	124.51	21.84
13	496272.79	3626054.41	BLDG2	124.54	26.10
14	496274.59	3626054.56	BLDG2	124.56	30.37
15	496275.86	3626055.08	BLDG2	124.59	34.63
16	496364.97	3626077.63	BLDG2	125.46	17.58
17	496366.70	3626078.49	BLDG2	125.47	21.84
18	496368.42	3626078.71	BLDG2	125.49	26.10
19	496370.07	3626079.01	BLDG2	125.51	30.37
20	496370.96	3626079.24	BLDG2	125.52	34.63
21	496406.07	3626069.01	BLDG2	126.12	17.58
22	496406.59	3626067.87	BLDG2	126.13	21.84
23	496407.32	3626065.69	BLDG2	126.15	26.10
24	496407.73	3626064.65	BLDG2	126.15	30.37
25	496407.83	3626063.41	BLDG2	126.16	34.63
26	496429.30	3626082.13	BLDG3	126.49	17.06
27	496429.57	3626081.25	BLDG3	126.50	21.32
28	496429.92	3626080.19	BLDG3	126.51	25.58
29	496430.01	3626079.04	BLDG3	126.53	29.85
30	496430.45	3626078.25	BLDG3	126.54	34.11

Receptor Pathway

AERMOD

31	496452.00	3626099.07	BLDG3	126.86	17.06
32	496453.53	3626099.58	BLDG3	126.87	21.32
33	496454.43	3626099.96	BLDG3	126.88	25.58
34	496455.26	3626100.28	BLDG3	126.88	29.85
35	496456.28	3626100.47	BLDG3	126.88	34.11
36	496511.81	3626115.54	BLDG3	128.04	17.06
37	496512.64	3626115.91	BLDG3	128.05	21.32
38	496513.54	3626116.14	BLDG3	128.05	25.58
39	496514.89	3626116.51	BLDG3	128.07	29.85
40	496515.64	3626116.74	BLDG3	128.08	34.11
41	496601.60	3626103.36	BLDG4	129.39	16.41
42	496601.07	3626102.53	BLDG4	129.38	20.68
43	496600.62	3626101.63	BLDG4	129.36	24.94
44	496600.10	3626100.88	BLDG4	129.35	29.20
45	496599.50	3626099.98	BLDG4	129.33	33.46
46	496606.63	3626114.99	BLDG4	129.46	16.41
47	496607.45	3626115.06	BLDG4	129.45	20.68
48	496608.20	3626115.06	BLDG4	129.44	24.94
49	496608.80	3626114.99	BLDG4	129.43	29.20
50	496609.55	3626115.06	BLDG4	129.42	33.46

Plant Boundary Receptors

Receptor Groups

Record Number	Group ID	Group Description
1	BLDG1	Building 1
2	BLDG2	Building 2
3	BLDG3	Building 3
4	BLDG4	Building 4

Meteorology Pathway

AERMOD

Met Input Data

Surface Met Data

Filename: ..\722903.SFC
Format Type: Default AERMET format

Profile Met Data

Filename: ..\722903.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): 127.10 [m]

Meteorological Station Data

Stations	Station No.	Year	X Coordinate [m]	Y Coordinate [m]	Station Name
Surface Upper Air		2009 2009			

Data Period

Data Period to Process

Start Date: 1/1/2009 Start Hour: 1 End Date: 1/2/2014 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

Contour Plot Files (PLOTFILE)

Path for PLOTFILES: LAM-08 Alvarado SP.AD

Averaging Period	Source Group ID	High Value	File Name
1	ALL	1st	01H1GALL.PLT
Period	ALL	N/A	PE00GALL.PLT

**HARP - Air Dispersion Modeling and Risk Tool v19121

**Exported Risk Results

Bulding	Floor	REC	GRP	X	Y	RISK_SUM	SCENARIO
1	2	1	ALL	496140.6	3626041	6.15E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	3	2	ALL	496141.3	3626041	3.51E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	4	3	ALL	496141.8	3626041	1.86E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	4	ALL	496142.5	3626041	1.11E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	5	ALL	496143.1	3626040	7.43E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
1	2	6	ALL	496168.6	3626043	6.35E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	3	7	ALL	496169.1	3626043	3.60E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	4	8	ALL	496169.7	3626042	1.89E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	9	ALL	496170.3	3626042	1.13E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	10	ALL	496170.9	3626042	7.55E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
2	4	11	ALL	496270	3626053	1.67E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	12	ALL	496271.4	3626054	1.03E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	13	ALL	496272.8	3626054	7.05E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	7	14	ALL	496274.6	3626055	5.15E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	8	15	ALL	496275.9	3626055	3.94E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
2	4	16	ALL	496365	3626078	1.70E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	17	ALL	496366.7	3626078	1.05E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	18	ALL	496368.4	3626079	7.19E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	7	19	ALL	496370.1	3626079	5.26E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	8	20	ALL	496371	3626079	4.05E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
2	4	21	ALL	496406.1	3626069	1.71E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	22	ALL	496406.6	3626068	1.08E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	23	ALL	496407.3	3626066	7.46E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	7	24	ALL	496407.7	3626065	5.45E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	8	25	ALL	496407.8	3626063	4.19E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
3	4	26	ALL	496429.3	3626082	1.82E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	27	ALL	496429.6	3626081	1.13E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	28	ALL	496429.9	3626080	7.68E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	7	29	ALL	496430	3626079	5.58E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	8	30	ALL	496430.5	3626078	4.27E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
3	4	31	ALL	496452	3626099	1.80E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	32	ALL	496453.5	3626100	1.11E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	33	ALL	496454.4	3626100	7.58E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	7	34	ALL	496455.3	3626100	5.54E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	8	35	ALL	496456.3	3626100	4.27E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
3	4	36	ALL	496511.8	3626116	1.76E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	37	ALL	496512.6	3626116	1.10E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	38	ALL	496513.5	3626116	7.56E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	7	39	ALL	496514.9	3626117	5.56E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	8	40	ALL	496515.6	3626117	4.31E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
4	4	41	ALL	496601.6	3626103	1.86E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	42	ALL	496601.1	3626103	1.19E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	43	ALL	496600.6	3626102	8.30E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	7	44	ALL	496600.1	3626101	6.10E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	8	45	ALL	496599.5	3626100	4.70E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
4	4	46	ALL	496606.6	3626115	1.89E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	5	47	ALL	496607.5	3626115	1.20E-06	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	6	48	ALL	496608.2	3626115	8.27E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70
	7	49	ALL	496608.8	3626115	6.05E-07	30YrCancerDerived_InhSoilDermMMilk_FAH16to70

HARP Project Summary Report 4/17/2020 9:23:54 AM

PROJECT INFORMATION

HARP Version: 19121

Project Name: ALVARADO SP RISK

Project Output Directory: C:\Users\mdrol\Desktop\LAM-08 HRA\ALVARADO SP RISK

HARP Database: NA

FACILITY INFORMATION

Origin

X (m):0

Y (m):0

Zone:1

No. of Sources:0

No. of Buildings:0

EMISSION INVENTORY

No. of Pollutants:4

No. of Background Pollutants:0

Emissions

ScrID	StkID	ProID	PolID	PolAbbrev
Multi	Annual Ems	MaxHr Ems	MWAF	
	(lbs/yr)	(lbs/hr)		
E1	0	0	9901	DieselExhPM
1	7.9577	0.0016569	1	
E2	0	0	9901	DieselExhPM
1	23.331	0.004858	1	
W1	0	0	9901	DieselExhPM
1	7.9904	0.0016638	1	
W2	0	0	9901	DieselExhPM
1	23.523	0.004898	1	

Background

PolID	PolAbbrev	Conc (ug/m^3)	MWAF
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Ground level concentration files (\glc\)

9901MAXHR.txt

9901PER.txt

POLLUTANT HEALTH INFORMATION

Health Database: C:\HARP2\Tables\HEALTH17320.mdb

Health Table Version: HEALTH19252

Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL
InhChronicREL	OralChronicREL	InhChronic8HRREL		

9901	DieselExhPM	1.1
5		

AIR DISPERSION MODELING INFORMATION

Versions used in HARP. All executables were obtained from USEPA's Support Center for Regulatory Atmospheric Modeling website (<http://www.epa.gov/scram001/>)

AERMOD: 18081

AERMAP: 18081

BPIPPRM: 04274

AERPLOT: 13329

METEOROLOGICAL INFORMATION

Version:

Surface File:

Profile File:

Surface Station:

Upper Station:

On-Site Station:

LIST OF AIR DISPERSION FILES

AERMOD Input File:

AERMOD Output File:

AERMOD Error File:

Plotfile list

LIST OF RISK ASSESSMENT FILES

Health risk analysis files (\hra\)

ResCancerCancerRisk.csv

ResCancerCancerRiskSumByRec.csv

ResCancerGLCLList.csv

ResCancerHRAInput.hra

ResCancerOutput.txt

ResCancerPathwayRec.csv

ResCancerPolDB.csv

ResChronicGLCLList.csv

ResChronicHRAInput.hra

ResChronicNCChronicRisk.csv

ResChronicNCChronicRiskSumByRec.csv

ResChronicOutput.txt

ResChronicPathwayRec.csv

ResChronicPolDB.csv

Spatial averaging files (\sa\)

PROJECT INFORMATION

HARP Version: 19121
 Project Name: ALVARADO SP RISK
 Project Output Directory: C:\Users\mdrol\Desktop\LAM-08 HRA\ALVARADO SP RISK
 HARP Database: NA

FACILITY INFORMATION

Origin
 X (m):0
 Y (m):0
 Zone:1
 No. of Sources:0
 No. of Buildings:0

EMISSION INVENTORY

No. of Pollutants:4
 No. of Background Pollutants:0

Emissions								
ScrID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
E1	0	0	9901	DieselExhPM	1	7.9577	0.0016569	1
E2	0	0	9901	DieselExhPM	1	23.331	0.004858	1
W1	0	0	9901	DieselExhPM	1	7.9904	0.0016638	1
W2	0	0	9901	DieselExhPM	1	23.523	0.004898	1

Ground level concentration files (\glc\)

9901MAXHR.txt
 9901PER.txt

POLLUTANT HEALTH INFORMATION

Health Database: C:\HARP2\Tables\HEALTH17320.mdb
 Health Table Version: HEALTH19252
 Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1		5			

LIST OF RISK ASSESSMENT FILES

Health risk analysis files (\hra\)

ResCancerCancerRisk.csv
 ResCancerCancerRiskSumByRec.csv
 ResCancerGLCList.csv
 ResCancerHRAInput.hra
 ResCancerOutput.txt
 ResCancerPathwayRec.csv
 ResCancerPolIDB.csv
 ResChronicGLCList.csv
 ResChronicHRAInput.hra
 ResChronicNCChronicRisk.csv
 ResChronicNCChronicRiskSumByRec.csv
 ResChronicOutput.txt
 ResChronicPathwayRec.csv