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Air Quality, Greenhouse Gas Emissions, and Energy Analysis Report
Dedeaux Industrial Center Project
City of Rialto, San Bernardino County, California

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ACRONYMS AND ABBREVIATIONS

°F	degrees Fahrenheit
µg/m^3	micrograms per cubic meter
AB	Assembly Bill
AERMOD	American Meteorological Society Regulatory Model
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BAU	Business as Usual
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
Convention	United Nations Framework Convention on Climate Change
CPUC	California Public Utility Commission
DPM	diesel particulate matter
EMFAC	Emission Factor
EPA	United States Environmental Protection Agency
GHG	greenhouse gas
HAP	Hazardous Air Pollutant
HFC	hydrofluorocarbon
HI	hazard index
HRA	Health Risk Assessment
IPCC	United Nations Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers
LCFS	Low Carbon Fuel Standard
LEV	Low Emission Vehicle
LST	localized significance threshold
MIR	Maximum Impacted Sensitive Receptor
MMT	million metric tons
mph	miles per hour
MWh	megawatt-hour
NAAQS	National Ambient Air Quality Standards

NO_X	oxides of nitrogen
NO_2	nitrogen dioxide
OAL	Office of Administrative Law
OEHHA	California Office of Environmental Health Hazards Assessment
PFC	perfluorocarbons
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
REL	Reference Exposure Level
RPS	Renewables Portfolio Standard
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SoCAB	South Coast Air Basin
SO_X	sulfur oxides
SO_2	sulfur dioxide
SRA	Source Receptor Area
TAC	toxic air contaminant
TIA	Traffic Impact Analysis
TRU	Transportation Refrigeration Units
VMT	vehicle miles traveled
VOC	volatile organic compound
ZEV	zero emission vehicles

SECTION 1: EXECUTIVE SUMMARY

1.1 - Purpose and Methods of Analysis

This Air Quality, Greenhouse Gas (GHG) Emissions, and Energy Analysis Report was prepared to evaluate whether the estimated criteria air pollutant, ozone precursor, toxic air contaminant (TAC), and/or GHG emissions generated from construction and/or operation of the Dedeaux Industrial Center Project (proposed project) would cause significant impacts to air resources in the project area. The respective analyses were conducted within the context of the California Environmental Quality Act (CEQA) (California Public Resources Code [PRC] § 21000, *et seq*.). The analysis methodology follows South Coast Air Quality Management District (SCAQMD) recommendations and City of Rialto recommendations for the quantification of emissions and evaluation of potential impacts on air resources.

1.2 - Project Summary

1.2.1 - Site Location

The project site is within the City of Rialto (City), in San Bernardino County, California. The City is surrounded by San Bernardino to the north, Muscoy and San Bernardino to the east, parts of Bloomington, Colton, Riverside, and Grand Terrace to the south, and Fontana to the west (Exhibit 1). Regional access to the site is provided via Interstate 215 (I-215) at the West 5th Street exit and via Interstate 10 (I-10) at the South Riverside Avenue and Cedar Avenue exits. Local access to the site is provided via Merrill Avenue, South Yucca Avenue, and South Cactus Avenue.

The 3.51-acre project site is located at 473 South Yucca Avenue, east of South Cactus Avenue and north of Merrill Avenue, and consists of Assessor's Parcel Numbers (APNs) 0131-011-029, -030, -031, -033, and -034 (Exhibit 2). The project site is located within Township 1 South, Range 5 West, Section 11 of the *Fontana* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map.

1.2.2 - Project Description

The proposed project includes the construction of a 36,500-square-foot warehouse with a 2,000-square-foot ground floor office, 2,000-square-foot mezzanine, and 23 dock doors (Exhibit 3). A total of 20 trailer parking spaces and 12 vehicle spaces would be provided at the northern portion of the site, and a parking lot with 23 vehicle spaces would be available at the southern portion of the site frontage West Merrill Avenue. Total vehicle parking would consist of 40 spaces, which includes two Americans with Disabilities Act (ADA) accessible spaces. The site would include a 25-foot building setback from South Yucca Avenue and a 10-foot landscaping setback at the northern portion of the site along the trailer parking lot. At the southern parking lot, a 10-foot landscaping setback would be established at the eastern boundary along the San Bernardino Flood Control District canal, in addition to a 15-foot landscaping setback along the project's frontage on West Merrill Avenue. The project would include 22,150 square feet of landscaping, and a tilt up concrete trash enclosure would be located near the southeast corner of the project site. The proposed project would

repurpose the existing project site, which would include paving the existing gravel yard with 6-inch-thick concrete, constructing new sidewalks, repairing the two existing driveways along the eastern side of Yucca Avenue, and installing a concrete tilt up screen wall surrounding the proposed project.

Hours of operation for the proposed project would be from 7:00 a.m. to 7:00 p.m., 7-days a week. The proposed project would include approximately 15-25 employees. Anticipated potential users would include warehouse operators, long-term storage, e-commerce fulfillment, and last mile users. Two access points to the site are proposed via one driveway along West Merrill Avenue and the other at the cul-de-sac on South Yucca Avenue. Additionally, two gates (one to the north and one to the south) would be utilized for internal project circulation.

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1.3 - Summary of Analysis Results

The project is required to comply with City Standard Conditions relating to Air Quality and GHG Emissions. Given the project must comply with the standard conditions outlined below, all impacts would be less than significant.

Impact AIR-1: The project would not conflict with or obstruct implementation of the applicable air quality plan.
Less than significant impact.

Impact AIR-2: The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality.
Less than significant impact.

Impact AIR-3: The project would not expose sensitive receptors to substantial pollutant concentrations.
Less than significant impact.

Impact AIR-4: The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.
Less than significant impact.

Impact GHG-1: The project would generate direct and indirect greenhouse gas emissions; however, these emissions would not result in a significant impact on the environment.
Less than significant impact.

Impact GHG-2: The project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of GHG.
Less than significant impact.

Impact ENER-1: The project would not result in a potentially significant environmental impact due to the wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation.
Less than significant impact.

Impact ENER-2: The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.
Less than significant impact.

1.4 - Standard Conditions Applied to the Proposed Project

Air Quality

SC AIR-1 During construction, dust control measures to meet the requirements of SCAQMD Rules 402 and 403 shall be implemented. Such measures may include but are not limited to the following:

a) All haul trucks shall be covered prior to leaving the site to prevent dust from impacting the surrounding areas.

b) Moisten soil each day prior to commencing grading to depth of soil cut.

c) Water exposed surfaces at least three times a day under calm conditions, and as often as needed on windy days or during very dry weather in order to maintain a surface crust and minimize the release of visible emissions from the construction-site.

d) Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation.

e) Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1.

f) All contractors shall turn off all construction equipment and delivery vehicles when not in use, or limit on-site idling to no more than 5 minutes in any one hour.

g) On-site electrical hook ups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators.

h) Traffic speeds on all unpaved roads to be reduced to 15 miles per hour or less.

i) Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads.

SC AIR-2 During construction activities, all off-road equipment with engines greater than 100 horsepower shall meet either EPA or ARB Tier IV Interim off-road emission standards. The construction contractor shall maintain records documenting compliance with this requirement, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type,

equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

Greenhouse Gas Emissions

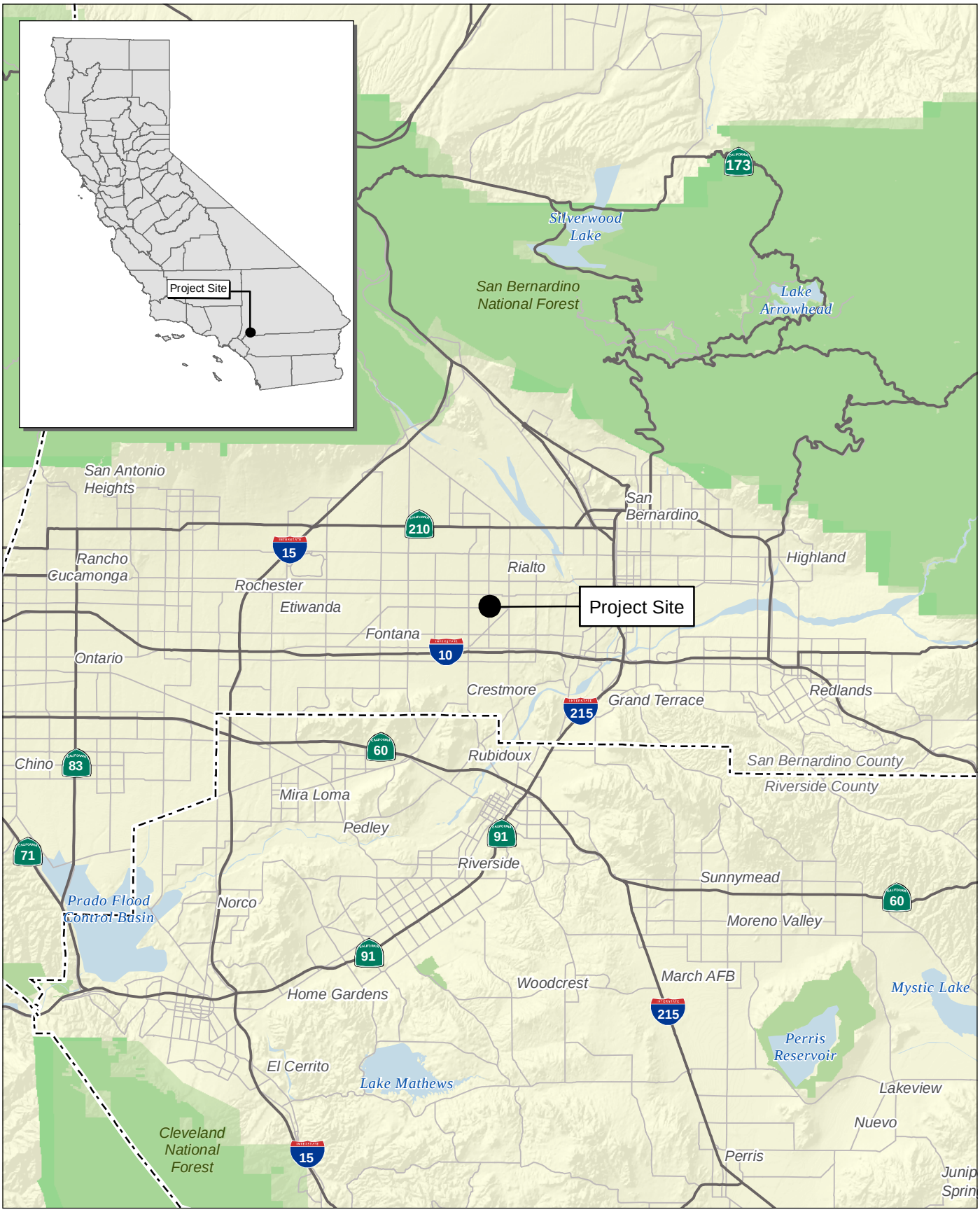
SC GHG-1 The project shall be designed to incorporate a minimum of six percent of all vehicle parking spaces (including for trucks) with electric vehicle charging spaces and minimum eight percent of all spaces designated for clean air vehicles, consistent with the applicable California Green Building Standards Code Nonresidential Mandatory Measures (Section 5.106). Electric vehicle charging spaces must provide electrical vehicle charging infrastructure to support future installation of electric vehicle supply equipment and shall meet the design space requirements of California Green Building Standards Code Section 5.106.5.3.2.

SC GHG-2 All buildings shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other interior vehicles.

SC GHG-3 All buildings shall be designed to provide electric infrastructure to support use of exterior yard trucks and on-site vehicles. The operation of yard trucks that are used to move trailers and on-site vehicles within the project site shall be powered by electricity unless the project applicant can reasonably demonstrate that specific equipment is not available for a particular task.

Energy

None required.



Source: Census 2000 Data, The CaSIL

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5 2.5 0 5 Miles

Exhibit 1
Regional Location Map

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CITY OF RIALTO
DEDEAUX INDUSTRIAL CENTER PROJECT
AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY ANALYSIS REPORT

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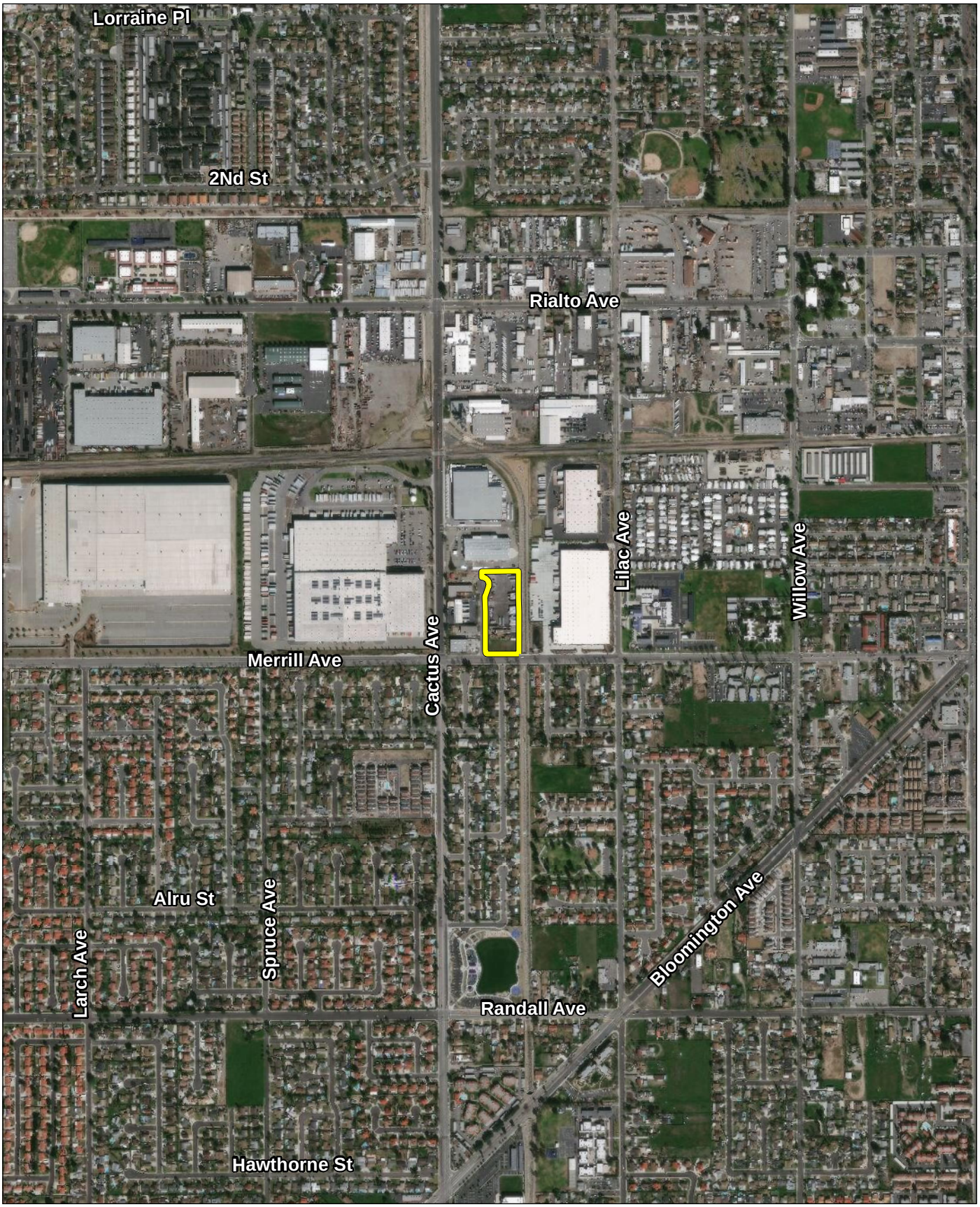

Source: ESRI Aerial Imagery.

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1,000 500 0 1,000
Feet

Exhibit2
Local Vicinity Map

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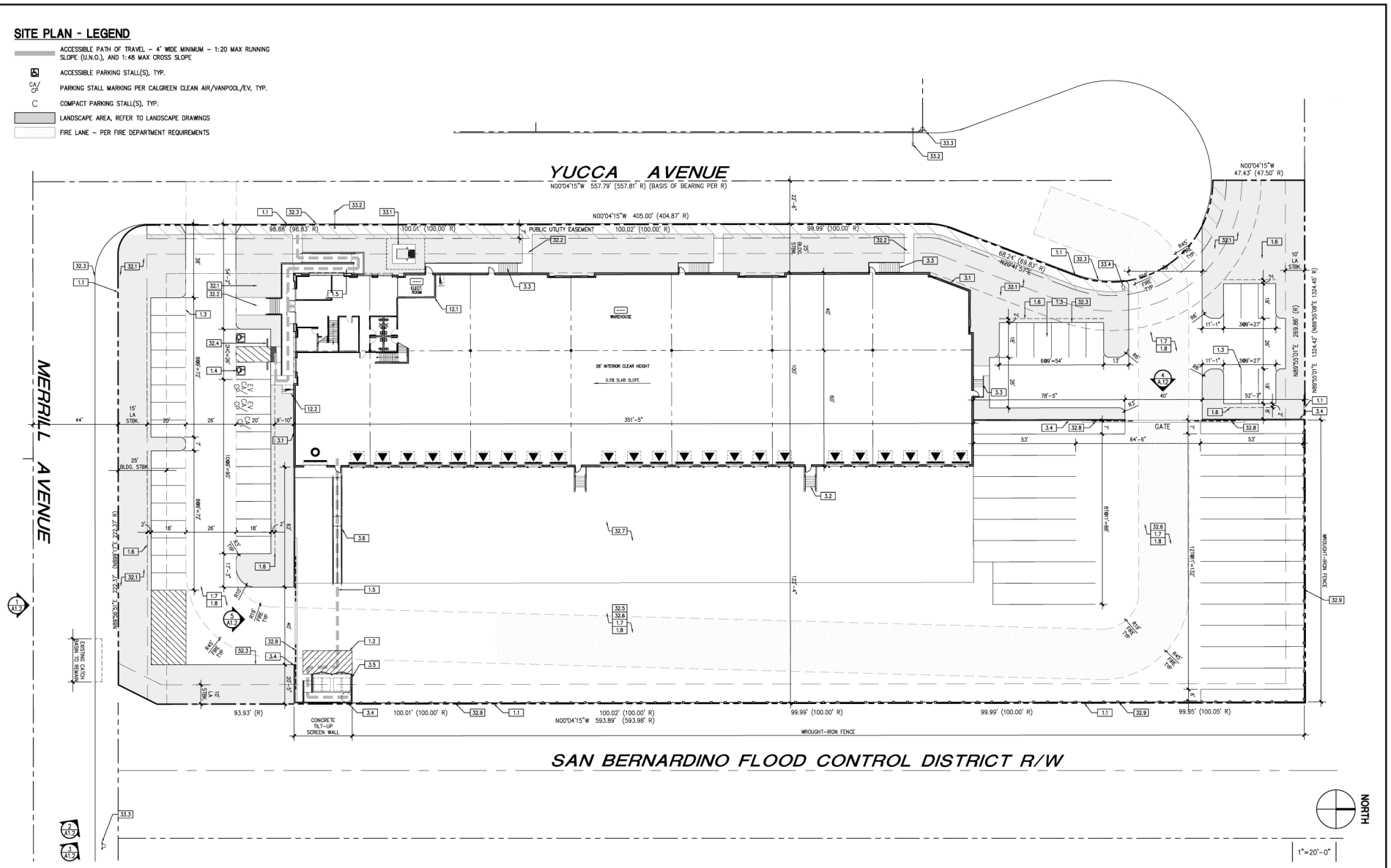

Source: GAA Architects, March 19, 2020.

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Exhibit 3
Site Plan

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SECTION 2: AIR QUALITY SETTING

2.1 - Environmental Setting

The proposed project is within the South Coast Air Basin (SoCAB or basin). Regional and local air quality are impacted by topography, dominant airflows, atmospheric inversions, location, season, and time of day. The following section describes these conditions as they pertain to the SoCAB.

2.1.1 - South Coast Air Basin

The proposed project is within the City of Rialto, which is within the southwestern portion of San Bernardino County. This portion of San Bernardino County is within the SoCAB. To the west of the basin is the Pacific Ocean, to the north and east are the San Gabriel, San Bernardino, and San Jacinto mountains, while the southern limit of the basin is the San Diego County line. The basin consists of Orange County, all of Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

Dominant airflows provide the driving mechanism for transport and dispersion of air pollution. The mountains surrounding the region form natural horizontal barriers to the dispersion of air contaminants. Typically, air flows from the ocean eastward to the inland areas of the basin during the afternoon (a sea breeze) and westward from the inland areas to the coastal regional at night (a land breeze). Air pollution created in coastal areas and around San Bernardino County is transported inland until it reaches the mountains where the combination of mountains and temperature inversion layers[1] generally prevent further dispersion. This poor ventilation results in a gradual degradation of air quality from the coastal areas to inland areas. Air stagnation may occur during the early evening and early morning periods during the transition between day and nighttime flows. The region also periodically experiences periods of hot, dry winds from the desert, known as Santa Ana winds. If the Santa Ana winds are strong, they can surpass the sea breeze, which blows from the ocean to the land, and carry the suspended dust and pollutants out to the ocean. If the winds are weak, they are opposed by the sea breeze and cause stagnation, resulting in high pollution events.

The annual average temperature varies little throughout much of the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). The average temperatures in the project area typically range from 30°F to 90°F.[2] The majority of the annual rainfall in the area occurs between November and April. The average annual precipitation recorded at the Cooperative Observer Program Station in nearby Fontana, California was 15.3 inches.[3]

[1] In meteorology, an inversion, also known as a temperature inversion, is a deviation from the normal change of an atmospheric property with altitude. It almost always refers to an inversion of the thermal lapse rate. Normally, air temperature decreases with an increase in altitude. During an inversion, warmer air is held above cooler air; the normal temperature profile with altitude is inverted. Inversion layers form a vertical cap limiting the vertical dispersion of air pollutants.
[2] Western Regional Climate Center (WRCC). 2016. Website: http://www.wrcc.dri.edu/. Accessed December 7, 2018.
[3] Ibid.

2.2 - Regulatory Setting

Air pollutants are regulated to protect human health and for secondary effects such as visibility and building soiling. The Clean Air Act of 1970 tasks the United States Environmental Protection Agency (EPA) with setting air quality standards. The State of California also sets air quality standards that are, in some cases, more stringent than federal standards and address additional pollutants. The following section describes these federal and State standards and the health effects of the regulated pollutants.

2.2.1 - Clean Air Act

Congress established much of the basic structure of the Clean Air Act in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants and listed below) are addressed in the Clean Air Act. The EPA calls these pollutants criteria air pollutants because it regulates them by developing human health-based and environmentally based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health are called primary standards. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health. Another set of limits intended to prevent environmental and property damage are called secondary standards.[4] The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO_2)
- Lead
- Particulate matter (PM_{10} and $PM_{2.5}$)
- Carbon monoxide (CO)
- Sulfur dioxide (SO_2)

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants.

2.2.2 - California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal Clean Air Act at the time. California's air quality problems were and continue to be some of the most severe in the nation and required additional actions beyond the federal mandates. The California Air Resources Board (ARB) administers California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six federal standards listed above as well visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. It should be noted that the EPA recently rescinded California's waiver for its GHG and Zero Emission Vehicle (ZEV) mandates that were more stringent

[4] United States Environmental Protection Agency (EPA). 2016. NAAQS Table. December 20. Website: https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed August 27, 2019.

than other federal regulations implementing the Clean Air Act;[5] however, all ARB standards are still in effect at the time of this writing.

2.2.3 - Toxic Air Contaminants

A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. There are no ambient air quality standards for TAC emissions. TACs are regulated in terms of health risks to individuals and populations exposed to the pollutants. The 1990 Clean Air Act Amendments significantly expanded the EPA's authority to regulate Hazardous Air Pollutants (HAPs). Section 112 of the Clean Air Act lists 187 HAPs to be regulated by source category. Authority to regulate these pollutants was delegated to individual states. The ARB and local air districts regulate TACs and HAPs in California.

The California Almanac of Emissions and Air Quality—2009 Edition presents the relevant concentration and cancer risk data for the 10 TACs that pose the most substantial health risk in California based on available data.[6] The 10 TACs are acetaldehyde, benzene, 1.3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and diesel particulate matter (DPM).

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program[7] demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance, but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The ARB has made preliminary concentration estimates based on a DPM

[5] Beveridge & Diamond Professional Corporation. 2019. EPA Rescinds California's Authority to Regulate Vehicle Tailpipe Greenhouse Gas Emissions and to Implement a Zero-Emission Vehicle Program. September 23. Website: https://www.bdlaw.com/publications/epa-rescinds-californias-authority-to-regulate-vehicle-tailpipe-greenhouse-gas-emissions-and-to-implement-a-zero-emission-vehicle-program/. Accessed June 22, 2020.

[6] California Air Resources Board (ARB). 2009. The California Almanac of Emissions and Air Quality—2009 Edition. Website: https://www.arb.ca.gov/aqd/almanac/almanac09/almanac2009 all.pdf.

[7] California Air Resources Board (ARB). 1998. The Toxic Air Contaminant Identification Process: Toxic Air Contaminant Emissions from Diesel-fueled Engines. Website: www.arb.ca.gov/toxics /dieseltac/factsht1.pdf.

exposure method. This method uses the ARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of DPM.

2.2.4 - Air Pollutant Description and Health Effects

The federal and State ambient air quality standards, relevant effects, properties, and sources of the air pollutants are summarized in Table 1.

Table 1: Description of Air Pollutants

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere but is formed by a complex series of chemical reactions between volatile VOC, nitrogen oxides (NO_X), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind. Hot, sunny, and calm weather conditions are favorable to ozone formation.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO_X) are mobile sources (on-road and off-road vehicle exhaust).
	8 Hour	0.070 ppm	0.070 ppm[f]			
CO	1 Hour	20 ppm	35 ppm	Ranges depend on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8 Hour	9.0 ppm	9 ppm			
NO_2[b]	1 Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contribution to atmospheric discoloration; increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO_X (NO, NO_2, NO_3, N_2O, N_2O_3, N_2O_4, and N_2O_5). NO_X is a precursor to ozone, PM_{10}, and $PM_{2.5}$ formation. NO_X can react with compounds to form nitric acid and related small particles and result in PM-related health effects.	NO_X is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. NO_2 forms quickly from NO_X emissions. NO_2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
SO_2[c]	1 Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	SO_2 is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor like rotten eggs. Sulfur oxides (SO_X) include SO_2 and sulfur trioxide. Sulfuric acid is formed from SO_2, which can lead to acid deposition and can harm natural resources and materials. Although SO_2 concentrations have been reduced to levels well below state and federal standards, further reductions are desirable because SO_2 is a precursor to sulfate and PM_{10}.	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of SO_2. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. SO_2 is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The SO_2 levels in the State are well below the maximum standards.
	3 Hour	—	0.5 ppm			
	24 Hour	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			
Particulate matter (PM_{10})	24 hour	50 µg/m^3	150 µg/m^3	• Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM_{10} refers to particulate matter that is between 2.5 and 10 microns in diameter, (1 micron is one-millionth of a meter). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.
	Mean	20 µg/m^3	—			
Particulate matter ($PM_{2.5}$)	24 Hour	—	35 µg/m^3			
	Annual	12 µg/m^3	12 µg/m^3			
Visibility-reducing particles	8 Hour	See note below[d]				

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Sulfates	24 Hour	25 µg/m^3	—	Decrease in ventilatory function; aggravation of asthmatic symptoms; aggravation of cardio-pulmonary disease; vegetation damage; degradation of visibility; and property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO_4^{2-}. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of SO_2. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead[e]	30-day	1.5 µg/m^3	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded state or federal standards at any monitoring station since 1982.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m^3			
	Rolling 3-month average	—	0.15 µg/m^3			
Vinyl chloride[e]	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, the ARB identified vinyl chloride as a TAC and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H_2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application-sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
VOC		There are no state or federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified TACs.	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROG and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility.
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	DPM is a source of $PM_{2.5}$—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, several which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources

Notes:
ppm = parts per million (concentration) µg/m^3 = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter

[a] Federal standard refers to the primary NAAQS, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 Hour SO_2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[b] To attain the 1-hour NO_2 national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb) (0.100 ppm).

[c] On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

[d] Visibility-reducing particles: In 1989, the ARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the Statewide and Lake Tahoe Air Basin standards, respectively.

[e] The ARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[f] The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard went into effect 60 days after publication of the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015 and became effective on December 28, 2015.

[g] The official level of the 1-hour NO_2 standard is 100 ppb, equal to 0.100 ppm, which is shown here for the purpose of clearer comparison to the other standards.

Source of effects, properties, and sources: United States Environmental Protection Agency (EPA). 2003. Particle Pollution and your Health. EPA-452/F-03-001. September. Website: https://www3.epa.gov/airnow/particles-bw.pdf. Accessed December 30, 2019.
United States Environmental Protection Agency (EPA). 2009. Ozone and your Health EPA-456/F-09-001. Website: https://www3.epa.gov/airnow/ozone-c.pdf. Accessed December 30, 2019.
United States Environmental Protection Agency (EPA). 2009. Fact Sheet, Proposed Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide. July. Website: https://www.gpo.gov/fdsys/pkg/FR-2009-07-15/pdf/E9-15944.pdf. Accessed December 31, 2019.
United States Environmental Protection Agency (EPA). 2010. Technology Transfer Network, Air Toxics Website. Page updated December 21, 2018. Health Effects Notebook for Hazardous Air Pollutants. December. Website: https://www.epa.gov/haps/health-effects-notebook-hazardous-air-pollutants. Accessed December 31, 2019.
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National Toxicology Program. 2016. Report on Carcinogens, Fourteenth Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. Website: https://ntp.niehs.nih.gov/ntp/roc/content/profiles/dieselexhaustparticulates.pdf. Accessed July 30, 2018.
California Environmental Protection Agency (Cal/EPA). 2002. Office of Environmental Health Hazard Assessment. Health Effects of Diesel Exhaust. Website: https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf. Accessed December 30, 2019.
California Air Resources Board (ARB). 2009. Vinyl Chloride. Website: https://ww2.arb.ca.gov/resources/vinyl-chloride-and-health. Accessed December 30, 2019.
United States Environmental Protection Agency (EPA). 2017. Indoor Air Quality. Sources of Indoor Air Pollution—Organic Gases (Volatile Organic Compounds—VOCs). November. Website: www.epa.gov/iaq/voc.html. Accessed December 31, 2019.
National Toxicology Program. 2011. Report on Carcinogens, Twelfth Edition; U.S. Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. Website: https://oehha.ca.gov/media/downloads/proposition-65/crnr/comments/12throc-complete.pdf. Accessed July 18, 2013.
Source of standards: South Coast Air Quality Management District (SCAQMD). 2018. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) Attainment Status for South Coast Air Basin. February. Website http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=2. Accessed January 9, 2020.

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Several pollutants listed in Table 1 are not addressed in this analysis. Analysis of lead is not included in this report because no new sources of lead emissions are anticipated with the project. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed as PM_{10} and $PM_{2.5}$. No components of the proposed project would result in vinyl chloride or hydrogen sulfide emissions in any substantial quantity.

Asbestos

Asbestos is the name given to several naturally occurring fibrous silicate minerals that have been mined for their useful properties such as thermal insulation, chemical and thermal stability, and high tensile strength. The three most common types of asbestos are chrysotile, amosite, and crocidolite. Chrysotile, also known as white asbestos, is the most common type of asbestos found in buildings. Chrysotile makes up approximately 90 to 95 percent of all asbestos contained in buildings in the United States. Exposure to asbestos is a health threat; exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest, and abdominal cavity), and asbestosis (a non-cancerous lung disease that causes scarring of the lungs). Exposure to asbestos can occur during demolition or remodeling of buildings that were constructed prior to the 1977 ban on asbestos for use in buildings. Exposure to naturally occurring asbestos can occur during soil-disturbing activities in areas with deposits present. No naturally occurring asbestos is located near the project site.[8]

Valley Fever

Valley Fever, or coccidioidomycosis, is an infection caused by inhalation of spores of the fungus, *Coccidioides immitis (C. immitis*). Spores live in soil and can live for an extended time in harsh environmental conditions. Activities or conditions that increase the amount of fugitive dust, including dust storms, grading, and recreational off-road activities, contribute to greater exposure.

Much of California is considered an endemic area for Valley Fever. In 2015, there were 36 cases of Valley Fever in San Bernardino County, or 1.7 cases per 100,000 people. Nearly 75 percent of people who get Valley Fever miss work or school for an average of two weeks. More than 40 percent of people who get Valley Fever need to be hospitalized. The number of Valley Fever cases reported nationally has more than quadrupled in the past decade. There were over 11,000 reported cases in 2015, and the CDC estimates that an additional 150,000 cases go undiagnosed each year. About 28 percent of all cases occur in California. There have been several outbreaks of Valley Fever in California in recent years. Between 1990 and 2008, there were 3,089 Valley Fever fatalities nationwide, and 47 percent of those deaths occurred in California.[9]

The distribution of *C. immitis* is not uniform, and growth sites are commonly small (a few tens of meters) and widely scattered. Known sites appear to have some ecological factors in common suggesting that certain physical, chemical, and biological conditions are more favorable for *C. immitis* growth. Avoidance, when possible, of sites favorable for the occurrence of *C. immitis* is a prudent

[8] California Department of Conservation, Division of Mine Reclamation. 2000. A General Location Guide for Ultramafic Rocks in California—Areas More likely to Contain Naturally Occurring Asbestos. August. Website: https://ww2.arb.ca.gov/sites/default/files/classic//toxics/asbestos/ofr_2000-019.pdf. Accessed December 2, 2019.

[9] San Bernardino County Division of Environmental Health Services. 2017. Coccidioidomycosis. February.

risk management strategy. Listed below are ecologic factors and sites favorable for the occurrence of *C. immitis*:

1. Rodent burrows (often a favorable site for C. immitis, perhaps because temperatures are more moderate and humidity higher than on the ground surface).
2. Old (prehistoric) Native American campsites near fire pits.
3. Areas with sparse vegetation and alkaline soils.
4. Areas with high salinity soils.
5. Areas adjacent to arroyos (where residual moisture may be available).
6. Packrat middens.
7. Upper 30 centimeters of the soil horizon, especially in virgin undisturbed soils.
8. Sandy well aerated soil with relatively high water holding capacities.

Sites within endemic areas less favorable for the occurrence of *C. immitis* include:

1. Cultivated fields.
2. Heavily vegetated areas (e.g. grassy lawns).
3. Higher elevations (above 7,000 feet.)
4. Areas where commercial fertilizers (e.g. ammonium sulfate) have been applied.
5. Areas that are continually wet.
6. Paved (asphalt or concrete) or oiled areas.
7. Soils containing abundant microorganisms.
8. Heavily urbanized areas where there is little undisturbed virgin soil.[10]

The project area is mostly developed. The project site is adjacent to existing industrial and residential development. Exposure to *C. immitis* could occur during soil-disturbing activities in areas with deposits present, however because most of the project area and immediately surrounding vicinity consists of urbanized development, the project site would have low probability of *C. immitis* growth sites or exposure from disturbed soil. No further analysis is necessary.

2.3 - Existing Air Quality Conditions

The local air quality can be evaluated by reviewing relevant air pollution levels or concentrations near the project area. Table 2 summarizes 2016 through 2018 published monitoring data, which is the most recent 3-year period available. The table displays data from the San Bernardino-4th Street monitoring station (located approximately 6.26 miles east of the project site), which is the closest monitoring station to the project site with available data. The data shows that during the past few years, the project area has exceeded the standards for ozone (State and national), PM_{10} (State and national), and $PM_{2.5}$ (national). The data in the table reflects pollutant concentration in the air, measured using air monitoring equipment. This differs from emissions, which are calculations of a pollutant being emitted over a certain period. No recent monitoring data for San Bernardino County

[10] United States Geological Survey (USGS). 2000. Operational Guidelines (version 1.0) for Geological Fieldwork in Areas Endemic for Coccidioidomycosis (Valley Fever), 2000, Open-File Report 2000-348. Website: https://pubs.usgs.gov/of/2000/0348/pdf/of00-348.pdf. Accessed July 8, 2020.

or the SoCAB was available for CO or SO_2. Generally, no monitoring is conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 2: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2016	2017	2018
Ozone	1 Hour	Max 1 Hour (ppm)	0.158	0.158	0.138
		Days > State Standard (0.09 ppm)	70	81	63
	8 Hour	Max 8 Hour (ppm)	0.118	0.136	0.116
		Days > State Standard (0.07 ppm)	108	114	107
		Days > National Standard (0.07 ppm)	ND	ND	ND
CO	8 Hour	Max 8 Hour (ppm)	ND	ND	ND
		Days > State Standard (9.0 ppm)	ND	ND	ND
		Days > National Standard (9 ppm)	ND	ND	ND
NO_2	Annual	Annual Average (ppm)	0.016	0.015	0.015
	1 Hour	Max 1 Hour (ppm)	0.0601	0.0658	0.0057
		Days > State Standard (0.18 ppm)	0	0	0
SO_2	Annual	Annual Average (ppm)	ND	ND	ND
	24 Hour	Max 24 Hour (ppm)	ND	ND	ND
		Days > State Standard (0.04 ppm)	ND	ND	ND
Inhalable coarse particles (PM_{10})	Annual	Annual Average (µg/m^3)	ID	ID	33.9
	24 hour	24 Hour (µg/m^3)	277.8	76.7	63.9
		Days > State Standard (50 µg/m^3)	ID	ID	30.9
		Days > National Standard (150 µg/m^3)	ID	1.1	0.0
Fine particulate matter ($PM_{2.5}$)	Annual	Annual Average (µg/m^3)	ID	ID	11.1
	24 Hour	24 Hour (µg/m^3)	53.5	38.2	30.1
		Days > National Standard (35 µg/m^3)	3.0	3.3	0.0

Notes:
> = exceed; ppm = parts per million; µg/m3 = micrograms per cubic meter;
ID = insufficient data; ND = no data; max = maximum
State Standard = California Ambient Air Quality Standard
National Standard = National Ambient Air Quality Standard
Source: California Air Resources Board. 2019. iADAM: Air Quality Data Statistics. Website: https://www.arb.ca.gov/adam/. Accessed October 2, 2019.

Health impacts of various air pollutants of concern can be presented in several ways. The clearest comparison is to the State and federal ozone standards. Air concentration below standards indicate that health risks are sufficiently low enough to have a minimal impact on public health, as there is no such thing as a zero-risk level. When concentrations exceed the standards, impacts will vary based on the amount by which the standard is exceeded and the sensitivity of individuals to air pollutant exposures. The EPA developed the Air Quality Index (AQI) as an easy-to-understand measure of

health impacts compared with concentrations in the air. Table 3 provides a description of the health impacts of ozone at different concentrations.

Table 3: Air Quality Index and Health Effects from Ozone

Air Quality Index/ 8-hour Ozone Concentration	Health Effects Description
AQI 100—Moderate	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 75 ppb	**Health Effects Statements**: Unusually sensitive individuals may experience respiratory symptoms.
	Cautionary Statements: Unusually sensitive people should consider limiting prolonged outdoor exertion.
AQI 150—Unhealthy for Sensitive Groups	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 95 ppb	**Health Effects Statements**: Increasing likelihood of respiratory symptoms and breathing discomfort in active children and adults and people with respiratory disease, such as asthma.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should limit prolonged outdoor exertion.
AQI 200—Unhealthy	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 115 ppb	**Health Effects Statements**: Greater likelihood of respiratory symptoms and breathing difficulty in active children and adults and people with respiratory disease, such as asthma; possible respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid prolonged outdoor exertion; everyone else, especially children, should limit prolonged outdoor exertion.
AQI 210—Very Unhealthy	**Sensitive Groups**: Children and people with asthma are the groups most at risk.
Concentration 139 ppb	**Health Effects Statements**: Increasingly severe symptoms and impaired breathing likely in active children and adults and people with respiratory disease, such as asthma; increasing likelihood of respiratory effects in general population.
	Cautionary Statements: Active children and adults, and people with respiratory disease, such as asthma, should avoid all outdoor exertion; everyone else, especially children, should limit outdoor exertion.
Source: Air Now. 2015. AQI Calculator: AQI to Concentration. Website: https://www.airnow.gov/aqi/aqi-calculator/. Accessed June 16, 2020.	

The highest reading for the 8-hour ozone standard for the last 3 years at the San Bernardino-4th Street monitoring station was 118 parts per billion (ppb) in 2016, 136 ppb in 2017, and 116 ppb in 2018, which is between the 115 ppb cutoff point for Unhealthy (AQI 200) and the 139 ppb cutoff for Very Unhealthy (AQI 210).

2.3.1 - Attainment Status

The EPA and the ARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

The SoCAB is currently nonattainment for State ozone, particulate matter with aerodynamic diameter less than 10 microns (PM_{10}), and particulate matter with aerodynamic diameter less than 2.5 microns ($PM_{2.5}$), and federal ozone and $PM_{2.5}$.[11]

2.4 - Air Quality Plans and Regulations

Air pollutants are regulated at the national, State, and air basin or county level; each agency has a different level of regulatory responsibility. The EPA regulates at the national level. The ARB regulates at the State level. The SCAQMD regulates at the air basin level.

The EPA is responsible for national and interstate air pollution issues and policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans (SIP), provides research and guidance for air pollution programs, and sets the NAAQS.

A SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal air standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical

[11] South Coast Air Quality Management District (SCAQMD). 2018. NAAQS and CAAQS Attainment Status for South Coast Air Basin. September.

foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Areas designated non-attainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards. Regulations adopted by California are described below.

2.4.1 - California Regulations

Low-Emission Vehicle Program

The ARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represented continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 SIP. In 2012, ARB adopted the LEV III amendments to California's LEV regulations. These amendments, also known as the Advanced Clean Cars Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and GHGs for new passenger vehicles.[12]

California Air Resources Board Airborne Toxic Control Measure for Asbestos

In July 2001, the ARB approved an Airborne Toxic Control Measure (ATCM) for construction, grading, quarrying, and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of Best Management Practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than 1 acre in size. These projects require the submittal of a "Dust Mitigation Plan" and approval by the air district prior to the start of a project.

Construction sometimes requires the demolition of existing buildings where construction occurs; however, no demolition of buildings is proposed as part of the project. In addition, asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentinite) and often contains chrysotile

[12] California Air Resources Board (ARB). 2012. Low-Emission Vehicle Program. Website: http://www.arb.ca.gov/msprog/levprog/levprog.htm. Accessed April 19, 2013.

asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found near the project site.

Diesel Risk Reduction Plan

The ARB's Diesel Risk Reduction Plan has led to the adoption of new state regulatory standards for all new on-road, off-road, and stationary diesel-fueled engines and vehicles to reduce DPM emissions by about 90 percent overall from year 2000 levels. The projected emission benefits associated with the full implementation of this plan, including federal measures, are reductions in DPM emissions and associated cancer risks of 75 percent by 2010, and 85 percent by 2020.[13]

California Air Resources Board Regulation for In-Use Off-Road Diesel Vehicles

On July 26, 2007, the ARB adopted a regulation to reduce DPM and oxides of nitrogen (NO_X) emissions from in-use (existing) off-road heavy-duty diesel vehicles in California. Such vehicles are used in construction, mining, and industrial operations. The regulation limits idling to no more than 5 consecutive minutes, requires reporting and labeling, and requires disclosure of the regulation upon vehicle sale. The ARB is enforcing that part of the rule with fines up to $10,000 per day for each vehicle in violation. Performance requirements of the rule are based on a fleet's average NO_X emissions, which can be met by replacing older vehicles with newer, cleaner vehicles or by applying exhaust retrofits. The regulation was amended in 2010 to delay the original timeline of the performance requirements, making the first compliance deadline January 1, 2014 for large fleets (over 5,000 horsepower), 2017 for medium fleets (2,501-5,000 horsepower), and 2019 for small fleets (2,500 horsepower or less).

The latest amendments to the Truck and Bus regulation became effective on December 31, 2014. The amended regulation requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses met particulate matter (PM) filter requirements beginning January 1, 2012. Mandatory replacement of lighter and older heavier trucks began January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

The regulation applies to nearly all privately and federally owned diesel fueled trucks and buses and to privately and publicly owned school buses with a gross vehicle weight rating greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low use

[13] California Air Resources Board (ARB). 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles. Website: http://www.arb.ca.gov/diesel /documents/rrpfinal.pdf.

vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.

On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California's emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.[14]

Regulations for Heavy-Duty Vehicles/Trucks

California Air Resources Board Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. This ATCM adopted Section 2485 within Chapter 10, Article 1, Division 3, title 13 in the California Code of Regulations. The measure limits the idling of diesel vehicles (i.e., commercial trucks over 10,000 pounds) to reduce emissions of toxics and criteria pollutants. The driver of any vehicle subject to this section: (1) shall not idle the vehicle's primary diesel engine for greater than 5 minutes at any location; and (2) shall not idle a diesel-fueled auxiliary power system for more than 5 minutes to power a heater, air conditioner, or any ancillary equipment on the vehicle if it has a sleeper berth and the truck is located within 100 feet of a restricted area (homes and schools).

California Air Resources Board Requirements to Reduce Idling Emissions from New and In-Use Trucks. Amendments were made to Title 13 in California Code of Regulations in Sections 1956.8, 2404, 2424, 2425, and 2485. The amendment states: "all new 2008 and subsequent model-year heavy-duty diesel engines shall be equipped with an engine shutdown system that automatically shuts down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to 'neutral' or 'park,' and the parking brake is engaged. If the parking brake is not engaged, then the engine shutdown system shall shut down the engine after 900 seconds of continuous idling operation once the vehicle is stopped and the transmission is set to 'neutral' or 'park.'" There are a few conditions where the engine shutdown system can be overridden to prevent engine damage. Any project trucks manufactured after 2008 would be consistent with this rule, which would ultimately reduce air emissions.

Statewide Truck and Bus Regulation (Regulation to Reduce Emissions of DPM, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles, Title 13, California Code of Regulations, Section 2025). On December 12, 2008, the ARB approved this regulation (Regulation to Reduce Emissions of DPM, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles, Title 13, California Code of Regulations, Section 2025) to reduce emissions from existing on-road diesel trucks and buses operating in California. This regulation applies to all on-road heavy-duty diesel-fueled vehicles with a gross vehicle weight rating

[14] California Air Resources Board (ARB). 2013. The California Almanac of Air Quality and Emissions—2013 Edition. Website: http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm. Accessed April 25, 2016.

greater than 14,000 pounds, agricultural yard trucks with off-road certified engines, and certain diesel fueled shuttle vehicles of any gross vehicle weight rating. Out-of-state trucks and buses that operate in California are also subject to the regulation. Under the regulation, older, heavier trucks (i.e. those with pre-2000 year engines and a gross vehicle weight rating greater than 26,000 pounds), are required to have installed a PM filter and must be replaced with a 2010 engine between 2015 and 2020, depending on the model year.

Air Toxics Contaminant Measure for Transportation Refrigeration Units and Transportation Refrigeration Generator Sets was adopted by the ARB to reduce emissions of TAC emissions from in-use Transportation Refrigeration Units (TRUs) and TRU generator sets used to power electrically driven refrigerated shipping.

2.4.2 - South Coast Air Quality Management District

Standard Conditions

During construction and operation, the project must comply with applicable rules and regulations. The following are rules and regulations the project may be required to comply with, either directly or indirectly.

SCAQMD Rule 402 prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause injury or damage to business or property.

SCAQMD Rule 403 governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through the application of standard Best Management Practices, such as the application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour (mph), sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

Rule 403 requires that fugitive dust be controlled with the best available control measures, so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Applicable dust suppression techniques from Rule 403 are summarized below. Implementation of these dust suppression techniques can reduce the fugitive dust generation (and thus the PM_{10} component). Compliance with these rules would reduce impacts on nearby sensitive receptors.

Rule 403 measures may include, but are not limited to, the following:

- Apply nontoxic chemical soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 10 days or more).

- Water active sites at least three times daily. (Locations where grading is to occur will be thoroughly watered prior to earthmoving.)
- Cover all trucks hauling dirt, sand, soil, or other loose materials, or maintain at least 0.6 meters (2 feet) of freeboard (vertical space between the top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114.
- Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Suspension of all grading activities when wind speeds (including instantaneous wind gusts) exceed 25 mph.
- Bumper strips or similar BMPs shall be provided where vehicles enter and exit the construction-site onto paved roads, or wash off trucks and any equipment leaving the site each trip.
- Replanting disturbed areas as soon as practical.
- During all construction activities, construction contractors shall sweep on-site and off-site streets if silt is carried to adjacent public thoroughfares, to reduce the amount of particulate matter on public streets. All sweepers shall be compliant with SCAQMD Rule 1186.1, Less Polluting Sweepers.

SCAQMD Rule 481 applies to all spray painting and spray coating operations and equipment. This rule would apply to the application of architectural coatings to the exterior and interior or of the building walls.

SCAQMD Rule 1108 governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the SoCAB. This rule would regulate the VOC content of asphalt used during construction. Therefore, all asphalt used during construction of the project must comply with SCAQMD Rule 1108.

SCAQMD Rule 1113 governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of the project must comply with SCAQMD Rule 1113.

SCAQMD Rule 1143 governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

SCAQMD Rule 1186 limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

SCAQMD Rule 1303 governs the permitting of re-located or new major emission sources, requiring Best Available Control Measures and setting significance limits for PM_{10} among other pollutants.

SCAQMD Rule 1401.1 provides additional health protection to children at schools or schools under construction from new or relocated facilities emitting TACs.

SCAQMD Rule 1403 establishes Survey Requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities.

SCAQMD Rule 2202, On-Road Motor Vehicle Mitigation Options, is to provide employers with a menu of options to reduce mobile source emissions generated from employee commutes, to comply with federal and state Clean Air Act requirements, Health and Safety Code Section 40458, and Section 182(d)(1)(B) of the federal Clean Air Act. It applies to any employer who employs 250 or more employees on a full or part-time basis at a worksite for a consecutive six-month period calculated as a monthly average.

Air Quality Management Plans

The agency for air pollution control for the Los Angeles County portion of the SoCAB is the SCAQMD. The SCAQMD is responsible for controlling emissions primarily from stationary sources. The SCAQMD maintains air quality monitoring stations throughout the SoCAB and a portion of the Salton Sea Air Basin. The SCAQMD is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the region, in coordination with the Southern California Association of Governments (SCAG).

An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the NAAQS and/or CAAQS. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

2016 AQMP

On March 3, 2017, the SCAQMD adopted the 2016 AQMP. The 2016 AQMP address strategies and measures to attain the 2008 federal 8-hour ozone standard by 2032, the 2012 federal annual $PM_{2.5}$ standard by 2021 to 2025, and the 2006 federal 24-hour $PM_{2.5}$ standard by 2019. The 2016 AQMP also examined the regulatory requirements for attaining the 2015 federal 8-hour ozone standard. The 2016 AQMP also updates previous attainment plans for ozone and $PM_{2.5}$ that have not yet been met.[15] In general, the AQMP is updated every 3 to 4 years. However, the air quality planning process for the AQMP is continuous and each iteration is an update of the previous plan.

To ensure air quality goals will be met while minimizing impacts to the regional economy, the following policy objectives guided the development of the plan:

[15] South Coast Air Quality Management District (SCAQMD). 2017. Final 2016 Air Quality Management Plan. March. Website: http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15. Accessed July 1, 2017.

- Eliminate reliance on "black box" (future technologies) to the maximum extent possible by providing specific pathways to attainment with specific control measures.
- Calculate and take credit for co-benefits from other planning efforts (e.g., GHG reduction targets, energy efficiency, and transportation).
- Develop a strategy with fair-share emission reductions at the federal, State, and local levels such as a new federal engine emission standards and/or additional authority provided to the state or SCAQMD for mobile sources.
- Seek significant funding for incentives to implement early deployment and commercialization of known zero and near-zero technologies.
- Invest in strategies and technologies meeting multiple objectives regarding air quality, climate change, air toxic exposure, energy, and transportation.
- Enhance the socioeconomic analysis and select the most efficient and cost-effective path to achieve multi-pollutant and multi-deadline targets.
- Prioritize non-regulatory, innovative and "win-win" approaches for emission reductions.

The 2016 AQMP also demonstrates attainment of the 2008 Ozone Standard in Coachella Valley by 2026. The AQMP also demonstrates compliance with all applicable Federal Clean Air Act requirements pertaining to nonattainment areas pursuant to the EPA approved Implementation Rules, such as the annual average and summer planning emission inventory for criteria and precursor pollutants, attainment demonstrations, reasonably available control measure and reasonably available control technology analyses, reasonable further progress, PM precursor requirements, vehicle miles traveled (VMT) demonstrations, and transportation conformity budgets for SoCAB.

The control measures in the 2016 AQMP are based on implementing all feasible control measures through the accelerated deployment of available cleaner technologies, BMPs, co-benefits from existing programs, and incentive measures. The 2016 AQMP control measures consist of three main components: (1) the SCAQMD's Stationary and Mobile Source Control Measures; (2) suggested State and federal Source Control Measures; and (3) Regional Transportation Plan Transportation Control Measures provided by SCAG. These measures rely on not only the traditional command-and-control approach, but also public incentive programs, as well as advanced technologies expected to be developed and deployed in the next several years.

SCAQMD CEQA Guidance

The SCAQMD has two roles under CEQA:

1. Lead Agency: responsible for preparing environmental analyses for its own projects (adoption of rules, regulations, or plans) or permit projects filed with the SCAQMD where the SCAQMD has primary approval authority over the project.
2. Commenting Agency: the SCAQMD reviews and comments on air quality analyses prepared by other public agencies (such as the project).

The SCAQMD also provides guidance and thresholds for CEQA air quality and GHG analyses. The result of this guidance as well as state regulations to control air pollution is an overall improvement in the project area.

2.4.3 - Local

Rialto General Plan

The City addresses goals and policies of its General Plan relevant to air quality in the Air Quality and Climate Section.[16] The City updated its General Plan in 2010. The Rialto General Plan goals and policies relevant to the project and relating air quality or GHGs are listed below.

Goal 2-35: Reduce air pollution emissions from both mobile and stationary sources in the City.

- **Policy 2-35.2:** Require that new development projects incorporate design features that encourage ridesharing, transit use, park and ride facilities, and bicycle and pedestrian circulation.
- **Policy 2-35.4:** Require new development and significant redevelopment proposals to incorporate sufficient design and operational controls to prevent release of noxious odors beyond the limits of the development site.

Goal 2-36: Reduce the amount of fugitive dust released into the atmosphere.

- **Policy 2-36.1:** Put conditions on discretionary permits to require fugitive dust controls.
- **Policy 2-36.2:** Support programs and policies of the South Coast Air Quality Management District regarding restrictions on grading operations at construction projects.
- **Policy 2-36.3:** Enforce regulations that do not allow vehicles to transport aggregate or similar material upon a roadway unless the material is stabilized or covered.

Goal 2-38: Mitigate against climate change.

- **Policy 2-38.1:** Consult with State agencies, SCAG, and the San Bernardino Associated Governments (SANBAG) to implement AB 32 and SB 375 by utilizing incentives to facilitate infill and transit-oriented development.
- **Policy 2-38.2:** Encourage development of transit-oriented and infill development, and encourage a mix of uses that foster walking and alternative transportation in Downtown and along Foothill Boulevard.
- **Policy 2-38.3:** Provide enhanced bicycling and walking infrastructure, and support public transit, including public bus service, the Metrolink, and the potential for Bus Rapid Transit (BRT).

[16] City of Rialto. 2010. Rialto General Plan. December.

Rialto Code of Ordinances

The Rialto Code of Ordinances establishes the following air quality provisions that are relevant to the project.[17]

Chapter 18.38 - M-1 Light Manufacturing Zone

- **18.38.060 - Use conditions.**
  Uses in the M-1 zone are planned, developed, conducted and operated so that smoke, fumes, dust, odors, liquids and other waste of any kind is confined and/or purified to control pollution of air, soil or water to meet the standards and requirements of the planning commission in such manner as to provide no threat to public health and welfare. They also shall not be obnoxious or offensive by reason of noise, vibrations or similar causes.

[17] City of Rialto. 1965. Rialto Code of Ordinances Section 18.38.060 – Use conditions.

SECTION 3: CLIMATE CHANGE SETTING

3.1 - Climate Change

Climate change is a change in the average weather of the Earth that is measured by alterations in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes occurring in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of GHGs needed to stabilize global temperatures and climate change impacts. In its Fourth Assessment Report, the IPCC predicted that the global mean temperature changes from 1990 to 2100, given six scenarios, could range from 1.1°C (degrees Celsius) to 6.4°C. Regardless of analytical methodology, global average temperatures and sea levels are expected to rise under all scenarios.[18] The report also concluded that "[w]arming of the climate system is unequivocal," and that "[m]ost of the observed increase in global average temperatures since the mid-20th century is very likely due to the observed increase in anthropogenic greenhouse gas concentrations."

An individual project cannot generate enough GHG emissions to effect a discernible change in global climate. However, the project participates in the potential for global climate change by its incremental contribution of GHGs combined with the cumulative increase of all other sources of GHGs, which when taken together constitute potential influences on global climate change.

3.1.1 - Consequences of Climate Change in California

In California, climate change may result in consequences such as the following from California Climate Change Center.[19]

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st Century because more winter rain will

[18] Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Website: www.ipcc.ch /publications_and_data/ar4/wg1/en/contents.html.

[19] California Climate Change Center (CCCC). 2006. Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center. July 2006. CEC-500-2006-077. Website: www.scc.ca.gov/webmaster/ftp/pdf/climate_change/assessing _risks.pdf. Accessed December 2013.

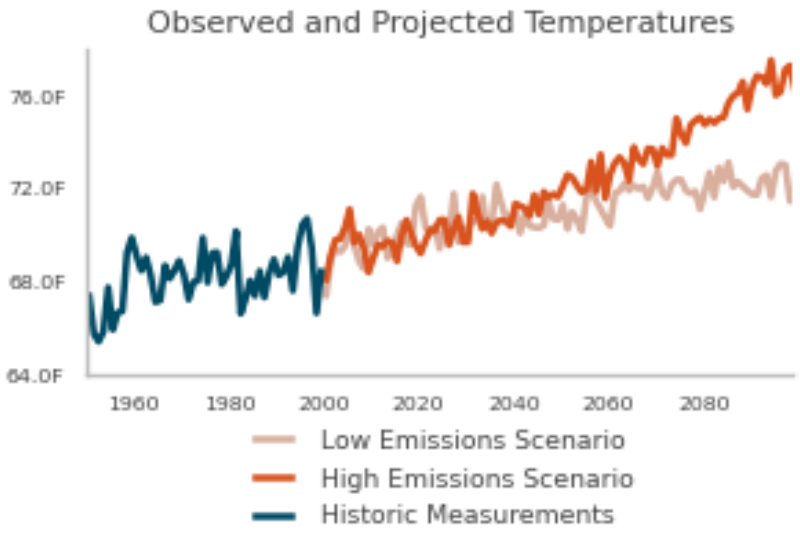
stimulate the growth of more plant "fuel" available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.

- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California's forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

San Bernardino County

Figure 1 displays a chart of measured historical and projected annual average temperatures for San Bernardino County. As shown in the figure, temperatures are expected to rise in the low and high GHG emissions scenarios. The results indicate that temperatures are predicted to increase by 3.9°F under the low emission scenario and 7.1°F under the high emissions scenario.

Figure 1: Observed and Projected Temperatures for Climate Change in San Bernardino County



Source: Cal-Adapt 2020.[20]

3.2 - Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Common GHGs include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), chlorofluorocarbons, hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulfur hexafluoride (SF_6), ozone, and aerosols. Natural processes and human activities emit GHGs. The presence of GHGs in the atmosphere affects the earth's temperature. It is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

Individual GHG compounds have varying global warming potential and atmospheric lifetimes. The global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. To describe how much global warming a given type and amount of GHG may cause, the CO_2 equivalent (CO_2e) is used. The calculation of the CO_2 equivalent is a consistent methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent reference gas, CO_2. For example, CH_4's warming potential of 25 indicates that CH_4 has 25 times greater warming effect than CO_2 on a molecule-per-molecule basis. A CO_2 equivalent is the mass emissions of an individual GHG multiplied by its global warming potential. As described in Table 4, the GHGs defined by Assembly Bill (AB) 32 (see the Climate Change Regulatory Environment section for a description) include CO_2, CH_4, N_2O, HFC, PFC, and SF_6. A seventh GHG, nitrogen trifluoride (NF_3), was added to Health and Safety Code Section 38505(g)(7) as a GHG of concern.

[20] Cal-Adapt. 2020. Local Climate Snapshots. Website: http://v1.cal-adapt.org/tools/factsheet/#. Accessed July 6, 2020.

Table 4: Description of Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Nitrous oxide	Nitrous oxide (laughing gas) is a colorless GHG. It has a lifetime of 114 years. Its global warming potential is 298.	Microbial processes in soil and water, fuel combustion, and industrial processes.
CH_4	Methane is a flammable gas and is the main component of natural gas. It has a lifetime of 12 years. Its global warming potential is 25.	Methane is extracted from geological deposits (natural gas fields). Other sources are landfills, fermentation of manure, and decay of organic matter.
CO_2	CO_2 is an odorless, colorless, natural GHG. CO_2's global warming potential is 1. The concentration in 2005 was 379 parts per million (ppm), which is an increase of about 1.4 ppm per year since 1960.	Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
HFCs	HFCs are a group of GHGs containing carbon, chlorine, and at least one hydrogen atom. Global warming potentials range from 140 to 11,700.	HFCs are synthetic man-made chemicals used as a substitute for chlorofluorocarbons in applications such as automobile air conditioners and refrigerants.
PFCs	PFCs have stable molecular structures and only break down by ultraviolet rays about 60 kilometers above Earth's surface. Because of this, they have long lifetimes, between 10,000 and 50,000 years. Global warming potentials range from 6,500 to 9,200.	Two main sources of PFCs are primary aluminum production and semiconductor manufacturing.
SF_6	SF_6 is an inorganic, odorless, colorless, and nontoxic, nonflammable gas. It has a lifetime of 3,200 years. It has a high global warming potential, 23,900.	This gas is man-made and used for insulation in electric power transmission equipment in the magnesium industry, in semiconductor manufacturing, and as a tracer gas.
Nitrogen trifluoride	Nitrogen trifluoride (NF_3) was added to Health and Safety Code Section 38505(g)(7) as a GHG of concern. It has a high global warming potential of 17,200.	This gas is used in electronics manufacture for semiconductors and liquid crystal displays.

Sources: Compiled from a variety of sources, primarily
Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Website: www.ipcc.ch/publications_and_data/ar4/wg1/en/contents.html. Accessed December 13, 2020.

Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: Synthesis Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, Pachauri, R.K. and Reisinger, A. (eds.)]. IPCC, Geneva, Switzerland. Website: https://www.ipcc.ch/report/ar4/syr/. Accessed December 13, 2020.

The State of California has begun the process of addressing pollutants referred to as short-lived climate pollutants. The short-lived climate pollutants include three main components: black carbon, fluorinated gases, and methane. The ARB approved the Short-Lived Climate Pollutant Reduction Strategy in March 2017. The ARB has completed an emission inventory of these pollutants, identified research needs, identified existing and potential new control measures that offer co-benefits, and coordinate with other State agencies and districts to develop measures.[21] Sources of black carbon are already regulated by the ARB, and air district criteria pollutant and toxic regulations that control $PM_{2.5}$ from diesel engines and other combustion sources.[22] Additional controls on the sources of black carbon specifically for their GHG impacts beyond those required for toxic and fine particulates are not likely to be needed.

Human Health Effects of GHG Emissions

GHG emissions from development projects would not result in concentrations that would directly impact public health. However, the cumulative effects of GHG emissions on climate change have the potential to cause adverse effects to human health.

The United States Global Change Research Program, in its report, Global Climate Change Impacts in the United States (2009),[23] has analyzed the degree to which impacts on human health are expected to impact the United States.

Potential effects of climate change on public health include:

- **Direct Temperature Effects:** Climate change may directly affect human health through increases in average temperatures, which are predicted to increase the incidence of heat waves and hot extremes.
- **Extreme Events:** Climate change may affect the frequency and severity of extreme weather events, such as hurricanes and extreme heat and floods, which can be destructive to human health and well-being.
- **Climate-Sensitive Diseases:** Climate change may increase the risk of some infectious diseases, particularly those diseases that appear in warm areas and are spread by mosquitoes and other insects, such as malaria, dengue fever, yellow fever, and encephalitis.
- **Air Quality:** Respiratory disorders may be exacerbated by warming-induced increases in the frequency of smog (ground-level ozone) events and particulate air pollution.[24]

Although there could be health effects resulting from changes in the climate and the consequences that can occur, inhalation of GHGs at levels currently in the atmosphere would not result in adverse health effects, with the exception of ozone and aerosols (PM). At very high indoor concentrations

[21] California Air Resources Board (ARB). 2016. Proposed Short-Lived Climate Pollutant Reduction Strategy. Website: http://www.arb.ca.gov/cc/shortlived/shortlived.htm.
[22] California Air Resources Board (ARB). 2015. Low Carbon Fuel Standard Regulation. Website: http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm. Accessed July 28, 2015.
[23] The United States Global Change Research Program. Global Climate Change Impacts in the United States. 2009. Website: https://downloads.globalchange.gov/usimpacts/pdfs/climate-impacts-report.pdf. Accessed August 2019.
[24] The United States Global Change Research Program. Global Climate Change Impacts in the United States. 2009. Website: https://downloads.globalchange.gov/usimpacts/pdfs/climate-impacts-report.pdf. Accessed August 2019.

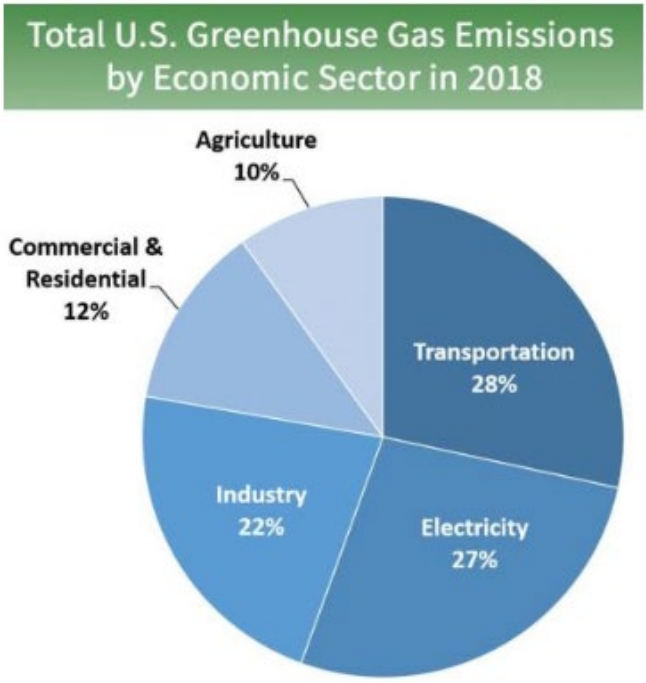
(not at levels existing outside), CO, CH_4, SF_6, and some chlorofluorocarbons can cause suffocation as the gases can displace oxygen.[25,26]

3.2.1 - Emissions Inventories

United States GHG Inventory

In 2018, total United States GHG emissions totaled 6,677 million metric tons (MMT) CO_2e. Figure 2 presents 2018 United States GHG emissions by economic sector. Emissions increased from 2017 to 2018 by approximately 3 percent. This increase was largely driven by an increase in emissions from fossil fuel combustion, which was a result of multiple factors, including more electricity use greater due to greater heating and cooling needs due to a colder winter and hotter summer in 2018 in comparison to 2017. Total GHG emissions in the United States increased by 3.7 percent from 1990 to 2018 (from 6,437 MMT CO_2e in 1990 to 6,677 MMT CO_2e in 2018). Since 1990, United States emissions have increased at an average annual rate of 0.1 percent. GHG emissions in 2018 were 10.2 percent below 2005 levels.[27]

Figure 2: 2018 U.S. Greenhouse Gas Emissions by Economic Sector



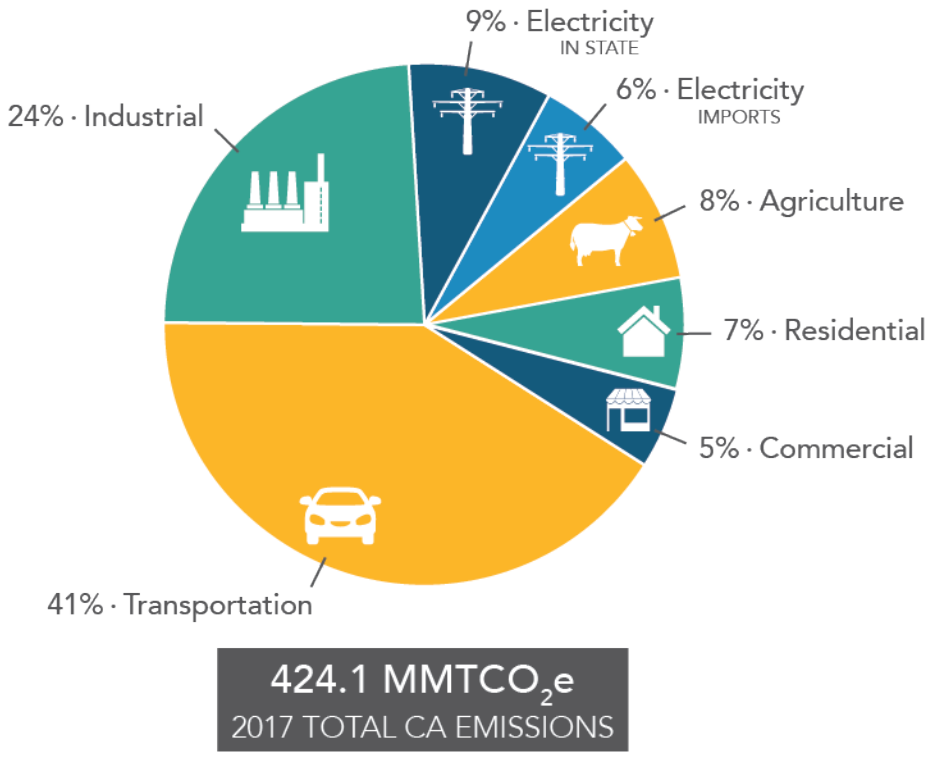
Source: United States Environmental Protection Agency (EPA). 2020. Inventory of U.S. Greenhouse Gas Emissions and Sinks. April. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed June 24, 2020.
Note: Emissions shown do not include carbon sinks such as change in land uses and forestry.

[25] Centers for Disease Control and Prevention (CDC). 2010. Department of Health and Human Services, the National Institute for Occupational Safety and Health. Carbon Dioxide. Website: www.cdc.gov/niosh/npg/npgd0103.html. Accessed February 14, 2017.
[26] Occupational Safety and Health Administration (OSHA). 2003. United States Department of Labor. Safety and Health Topics: Methane. Website: www.osha.gov/dts/chemicalsampling/data/CH_250700.html. Accessed August 21, 2016.
[27] United States Environmental Protection Agency (EPA). 2020. Inventory of U.S. Greenhouse Gas Emissions and Sinks. April. Website: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks. Accessed June 24, 2020.

California GHG Inventory

As the second largest emitter of GHG emissions in the U.S., California contributes a large quantity (424.1 MMT CO_2e in 2017) of GHG emissions to the atmosphere. Emissions of CO_2 are byproducts of fossil-fuel combustion and are attributable in large part to human activities associated with transportation, industry/manufacturing, electricity and natural gas consumption, and agriculture. In California, the transportation sector is the largest emitter at 41 percent of GHG emissions, followed by industry/manufacturing at 24 percent of GHG emissions (Figure 3).[28]

Figure 3: California GHG Emissions by Sector



Source: California Air Resources Board (ARB). 2019. California Greenhouse Gas Emission Inventory - 2019 Edition. Website: https://ww3.arb.ca.gov/cc/inventory/data/data.htm. Accessed May 18, 2020.

3.3 - Regulatory Environment

3.3.1 - International

Intergovernmental Panel on Climate Change. In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical and socio-economic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

[28] California Air Resources Board (ARB). 2019. California Greenhouse Gas Emission Inventory - 2019 Edition. Website: https://ww3.arb.ca.gov/cc/inventory/data/data.htm. Accessed May 18, 2020.

United Nations Framework Convention on Climate Change (Convention). On March 21, 1994, the United States joined a number of countries around the world in signing the Convention. Under the Convention, governments gather and share information on GHG emissions, national policies, and best practices; launch national strategies for addressing GHG emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

Kyoto Protocol. The Kyoto Protocol is an international agreement linked to the Convention. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions at average of five percent against 1990 levels over the 5-year period from 2008–2012. The Convention (as discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."

In 2001, President George W. Bush indicated that he would not submit the treaty to the United States Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. There have been several meetings held to address international climate change commitments post Kyoto, the most notable of which were held by the United Nations Climate Change Committee. The meetings are gradually gaining consensus among participants on individual climate change issues. At the Climate Summit hosted by the United Nations in September 2014, heads of government, business and civil society announced actions in areas that would have the greatest impact on reducing emissions, including climate finance, energy, transport, industry, agriculture, cities, forests, and building resilience.

Paris Climate Change Agreement. Parties to the Convention reached a landmark agreement on December 12 in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a 4-year negotiating round, the new treaty ends the strict differentiation between developed and developing countries that characterized earlier efforts, replacing it with a common framework that commits all countries to put forward their best efforts and to strengthen them in the years ahead. This includes, for the first time, requirements that all parties report regularly on their emissions and implementation efforts, and undergo international review. The agreement and a companion decision by parties were the key outcomes of the conference, known as the 21st Session of the Convention Conference of the Parties, or COP 21.[29]

On June 1, 2017, President Trump announced the decision for the United States to withdraw from the Paris Climate Accord.[30] California remains committed to combating climate change through programs aimed to reduce GHGs.[31]

[29] Center for Climate and Energy Solutions (C2ES). 2015. Outcomes of the U.N. Climate Change Conference. Website: http://www.c2es.org/international/negotiations/cop21-paris/summary. Accessed April 19, 2016.

[30] The White House. Statement by President Trump on the Paris Climate Accord. Website: https://www.whitehouse.gov/the-press-office/2017/06/01/statement-president-trump-paris-climate-accord. Accessed June 23, 2017.

[31] California Air Resources Board (ARB). 2017. New Release: California and China Team Up to Push for Millions More Zero-emission Vehicles. Website: https://www.arb.ca.gov/newsreel/newsrelease.php?id=934. Accessed June 27, 2017.

3.3.2 - Federal Regulations

The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG Endangerment. *Massachusetts v. EPA* (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the EPA regulate four GHGs, including CO_2, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Supreme Court found that GHGs are air pollutants covered by the Clean Air Act. The Court held that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the Clean Air Act. These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section "Clean Vehicles" below. After a lengthy legal challenge, the United States Supreme Court declined to review an Appeals Court ruling upholding that upheld the EPA Administrator findings.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this CO_2 level solely through fuel economy improvements. Together, these standards would cut CO_2 emissions by an estimated 960 MMT and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second-phase joint rulemaking, establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012.[32] The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium duty passenger vehicles. The final standards are projected to result in an average industry fleetwide level of 163 grams/mile of CO_2 in model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

[32] United States Environmental Protection Agency (EPA). 2012. EPA and NHTSA Set Standards to Reduce Greenhouse Gases and Improve Fuel Economy for Model Years 2017-2025 Cars and Light Trucks. August. Website: https://nepis.epa.gov/Exe/tiff2png.cgi/P100EZ7C.PNG?-r+75+-g+7+D%3A%5CZYFILES%5CINDEX%20DATA%5C11THRU15%5CTIFF%5C00000346%5CP100EZ7C.TIF. Accessed July 8, 2020.

The EPA and the United States Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, which became effective November 14, 2011. For combination tractors, the agencies proposed engine and vehicle standards that began in the 2014 model year and achieve up to a 20-percent reduction in CO_2 emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10-percent reduction for gasoline vehicles, and a 15-percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10-percent reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

The State of California has received a waiver from the EPA to have separate, stricter corporate average fuel economy standards. Although global climate change did not become an international concern until the 1980s, efforts to reduce energy consumption began in California in response to the oil crisis in the 1970s, resulting in the incidental reduction of GHG emissions. To manage the State's energy needs and promote energy efficiency, AB 1575 created the California Energy Commission (CEC) in 1975. It should be noted that the EPA recently rescinded California's waiver for its GHG and ZEV mandates; however, all ARB standards are still in effect at the time of this writing.[33]

Consolidated Appropriations Act (Mandatory GHG Reporting). The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.

New Source Review. The EPA issued a final rule on May 13, 2010 that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units. As required by a settlement agreement, the EPA proposed new performance standards for CO_2 emissions for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an

[33] Beveridge & Diamond Professional Corporation. 2019. EPA Rescinds California's Authority to Regulate Vehicle Tailpipe Greenhouse Gas Emissions and to Implement a Zero-Emission Vehicle Program. September 23. Website: https://www.bdlaw.com/publications/epa-rescinds-californias-authority-to-regulate-vehicle-tailpipe-greenhouse-gas-emissions-and-to-implement-a-zero-emission-vehicle-program/. Accessed June 22, 2020.

output based standard of 1,000 pounds of CO_2 per megawatt-hour (MWh, based on the performance of widely used natural gas combined cycle technology.

Cap and Trade. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. There is no federal GHG cap-and-trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

The Western Climate Initiative partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15 percent below 2005 levels by 2020. The partners are California, British Columbia, Manitoba, Ontario, and Quebec. Currently only California and Quebec are participating in the Cap And Trade Program.[34]

3.3.3 - California

Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any State in the nation. Some legislation such as the landmark AB 32 California Global Warming Solutions Act of 2006 was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 1493 Pavley Regulations and Fuel Efficiency Standards. California AB 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the by the United States District Court for the District of Columbia in 2011.[35] The standards were to be phased in during the 2009 through 2016 model years.[36]

The second phase of the implementation for the Pavley Bill was incorporated into Amendments to the Low-emission Vehicle Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation is anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles and hydrogen fuel cell cars. The regulations will also ensure adequate fueling

[34] Center for Climate and Energy Solutions (C2ES). 2015. Multi-State Climate Initiatives. Website: http://www.c2es.org/us-states-regions/regional-climate-initiatives. Accessed January 9, 2020.
[35] California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: http://www.arb.ca.gov/cc/ccms/ccms.htm. Accessed February 14, 2017.
[36] California Air Resources Board (ARB). 2013. Facts About the Clean Cars Program. Website: http://www.arb.ca.gov/msprog/zevprog/factsheets/advanced_clean_cars_eng.pdf. Accessed February 14, 2017.

infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.[37]

Assembly Bill 32. The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. "Greenhouse gases" as defined under AB 32 include CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs.

The ARB is the State agency charged with monitoring and regulating sources of GHGs. The ARB approved the 1990 GHG emissions level of 427 MMT CO_2e on December 6, 2007.[38] Therefore, to meet the State's target, emissions generated in California in 2020 are required to be equal to or less than 427 MMT CO_2e. Emissions in 2020 in a Business as Usual (BAU) scenario were estimated to be 596 MMT CO_2e, which do not account for reductions from AB 32 regulations.[39] At that rate, a 28 percent reduction was required to achieve the 427 MMT CO_2e 1990 inventory. In October 2010, ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. Under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels.[40]

California Air Resources Board Scoping Plan. The ARB Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32.[41] The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a Statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;

[37] California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures. Website: www.arb.ca.gov/cc/scoping plan/sp_measures_implementation_timeline.pdf. Accessed February 14, 2017.

[38] California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed February 14, 2017.

[39] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 14, 2017.

[40] California Air Resources Board (ARB). 2010. 2020 Greenhouse Gas Emissions Projection and BAU Scenario Emissions Estimate. Website: http://www.arb.ca.gov/cc/inventory/archive/captrade_2010_projection.pdf. Accessed February 14, 2017.

[41] California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 14, 2017.

- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS); and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. Capped strategies are subject to the proposed cap-and-trade program. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.[42]

The ARB approved the First Update to the Scoping Plan on May 22, 2014. The First Update builds upon the Initial Scoping Plan with new strategies and recommendations.[43]

Senate Bill 375—the Sustainable Communities and Climate Protection Act of 2008. Senate Bill (SB) 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 does the following: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Senate Bill 32 and the 2017 Climate Change Scoping Plan Update. The Governor signed SB 32 in September 2016, giving the ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states that "In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the State [air resources] board shall ensure that statewide greenhouse gas emissions are reduced to at least 40 percent below the statewide greenhouse gas emissions limit no later than December 31, 2030." The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. The major elements of the framework proposed to achieve the 2030 target are as follows:

1. SB 350
   - Achieve 50 percent renewables portfolio standard (RPS) by 2030.
   - Doubling of energy efficiency savings by 2030.

[42] California Air Resources Board (ARB). 2008 (includes edits made in 2009). Climate Change Scoping Plan, a framework for change. Website: http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed February 14, 2017.

[43] California Air Resources Board (ARB). 2014. First Update to the Climate Change Scoping Plan. Website: http://www.arb.ca.gov/cc/scopingplan/document/updatedscopingplan2013.htm. Accessed February 14, 2017.

2. Low Carbon Fuel Standard
   - Increased stringency (reducing carbon intensity 18 percent by 2030, up from 10 percent in 2020).
3. Mobile Source Strategy (Cleaner Technology and Fuels Scenario)
   - Maintaining existing GHG standards for light- and heavy-duty vehicles.
   - Put 4.2 million ZEVs on the roads.
   - Increase ZEV buses, delivery and other trucks.
4. Sustainable Freight Action Plan
   - Improve freight system efficiency.
   - Maximize use of near-zero emission vehicles and equipment powered by renewable energy.
   - Deploy over 100,000 zero-emission trucks and equipment by 2030.
5. Short-Lived Climate Pollutant Reduction Strategy
   - Reduce emissions of methane and HFCs 40 percent below 2013 levels by 2030.
   - Reduce emissions of black carbon 50 percent below 2013 levels by 2030.
6. SB 375 Sustainable Communities Strategies
   - Increased stringency of 2035 targets.
7. Post-2020 Cap-and-Trade Program
   - Declining caps, continued linkage with Québec, and linkage to Ontario, Canada.
   - The ARB will look for opportunities to strengthen the program to support more air quality co-benefits, including specific program design elements. In Fall 2016, ARB staff described potential future amendments including reducing the offset usage limit, redesigning the allocation strategy to reduce free allocation to support increased technology and energy investment at covered entities and reducing allocation if the covered entity increases criteria or toxics emissions over some baseline.
8. 20 percent reduction in GHG emissions from the refinery sector.
9. By 2018, develop Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.[44]

Senate Bill 1368—Emission Performance Standards. In 2006, the State Legislature adopted SB 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. The California Public Utilities Commission adopted the regulations required by SB 1368 on August 29, 2007. The regulations implementing SB 1368 establish a standard for baseload

[44] California Air Resources Board (ARB). 2017. The 2017 Climate Change Scoping Plan Update, the Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. January 17. Website: https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf. Accessed June 1, 2018.

generation owned by, or under long-term contract to publicly owned utilities, of 1,100 pounds CO_2 per MWh.

Senate Bill 1078—Renewable Electricity Standards. On September 12, 2002, Governor Gray Davis signed SB 1078, requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established an RPS target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the ARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the State's load serving entities to meet a 33 percent renewable energy target by 2020. The ARB approved the Renewable Electricity Standard on September 23, 2010 by Resolution 10-23.

Senate Bill 350—Clean Energy and Pollution Reduction Act of 2015. The legislature recently approved and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Provisions for a 50 percent reduction in the use of petroleum Statewide were removed from the Bill due to opposition and concern that it would prevent the Bill's passage. Specifically, SB 350 requires the following to reduce Statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33 percent to 50 percent by 2030, with interim targets of 40 percent by 2024, and 25 percent by 2027.
- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator to develop more regional electrify transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.[45]

SBX 7-7—The Water Conservation Act of 2009. The legislation directs urban retail water suppliers to set individual 2020 per capita water use targets and begin implementing conservation measures to achieve those goals. Meeting this Statewide goal of 20 percent decrease in demand will result in a reduction of almost 2 million acre-feet in urban water use in 2020.

Senate Bill 100—The 100 Percent Clean Energy Act of 2018. The legislation directs the CPUC, CEC, and the ARB to plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. This Act amends Sections 399.11, 399.15, and 399.30 of, and adds Section 454.53 to, the Public Utilities Code, relating to energy.

[45] California Legislative Information (California Leginfo). 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed September 28, 2017.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the State and guide the actions of State agencies.

Executive Order S-3-05. Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07—Low Carbon Fuel Standard. The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a Statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a LCFS and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, ARB, University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. The ARB adopted the LCFS on April 23, 2009.

The LCFS was subject to legal challenge in 2011. Ultimately, on August 8, 2013, the Fifth District Court of Appeal (California) ruled that the ARB failed to comply with CEQA and the Administrative Procedure Act when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal directed that Resolution 09-31 and two executive orders of the ARB approving LCFS regulations promulgated to reduce GHG emissions be set aside. However, the court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, the ARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low-carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The second public hearing for the new LCFS regulation was held on September 24, 2015 and September 25, 2015, where the LCFS Regulation was adopted. The Final Rulemaking Package adopting the regulation was filed with the Office of Administrative Law (OAL) on October 2, 2015. The OAL approved the regulation on November 16, 2015.[46]

[46] California Air Resources Board (ARB). 2015. Low Carbon Fuel Standard Regulation. Website: http://www.arb.ca.gov/regact/2015/lcfs2015/lcfs2015.htm. Accessed September 22, 2017.

Executive Order S-13-08. Executive Order S-13-08 states that "climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California's economy, to the health and welfare of its population and to its natural resources." Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy[47] was adopted, which is the ". . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15. On April 29, 2015, Governor Edmund G. Brown Jr. issued an executive order to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments ahead of the United Nations Climate Change Conference in Paris late 2015. The executive order sets a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050, and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of metric ton (MT) CO_2e. The executive order also requires the State's climate adaptation plan to be updated every 3 years and for the State to continue its climate change research program, among other provisions.

California Regulations and Building Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California's energy consumption relatively flat even with rapid population growth.

California Code of Regulations Title 13: Motor Vehicles. California Code of Regulations, Title 13: Division 3, Chapter 10, Article 1, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.[48] This measure seeks to reduce public exposure to DPM and other air contaminants by establishing idling restrictions, emission standards, and other requirements for heavy-duty diesel engines and alternative idle reduction technologies to limit the idling of diesel-fueled commercial motor vehicles. Any person that owns, operates, or causes to operate any diesel-fueled commercial motor vehicle must not allow a vehicle to idle for more than 5 consecutive minutes at any location, or operate a diesel-fueled auxiliary power system for greater than 5 minutes at any location when within 100 feet of a restricted area.

California Code of Regulations, Title 13: Division 3, Chapter 9, Article 4.8, Section 2449: General Requirements for In-Use Off-Road Diesel-Fueled Fleets. This measure regulates NO_X, DPM, and other criteria pollutant emissions from in-use off-road diesel-fueled vehicles. This measure also requires each fleet to meet fleet average requirements or demonstrate that it has met "best available control

[47] California Natural Resources Agency. 2009. 2009 California Climate Adaptation Strategy. Website: https://cawaterlibrary.net/wp-content/uploads/2017/05/Statewide_Adaptation_Strategy.pdf. Accessed July 8, 2020.

[48] Thomas Reuters Westlaw. 2020. California Code of Regulations, Title 13: Division 3, Chapter 10, Article 1, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Website: https://govt.westlaw.com/calregs/Document/I6DACC2EF0D6441DDA5B788DFEDCD1A22?viewType=FullText&originationContext=documenttoc&transitionType=StatuteNavigator&contextData=(sc.Default). Accessed July 8, 2020.

technology" requirements. Additionally, this measure requires medium and large fleets to have a written idling policy that is made available to operators of the vehicles informing them that idling is limited to 5 consecutive minutes or less.

Title 20 Appliance Efficiency Regulations. California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

Title 24 Energy Efficiency Standards. California Code of Regulations Title 24 Part 6: California's Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The newest version of Title 24 adopted by the CEC went into effect on January 1, 2020. One of the notable changes in the 2019 Title 24 Standards includes the solar photovoltaic systems requirement for new low-rise residential homes.

Title 24 California Green Building Standards Code. California Code of Regulations Title 24 Part 11 code is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The code is updated on a regular basis, with the most recent update consisting of the 2019 California Green Building Code Standards that became effective January 1, 2020.[49] Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

Model Water Efficient Landscape Ordinance. The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881 Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected for Ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed the California Department of Water Resources to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems;

[49] State of California. 2020. CALGreen. Website: https://www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen. Accessed July 8, 2020.

- Incentives for graywater usage;
- Improvements in on-site stormwater capture;
- Limiting the portion of landscapes that can be planted with high water use plants; and
- Reporting requirements for local agencies.

Senate Bill 97 and the CEQA Guidelines Update. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)."

Section 21097 was also added to the Public Resources Code, which provided an exemption until January 1, 2010 for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to analyze adequately the effects of GHGs would not violate CEQA. The Natural Resources Agency completed the approval process and the Amendments became effective on March 18, 2010.

The 2010 CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change.

California Supreme Court GHG Ruling

In a November 30, 2015 ruling, the California Supreme Court in Center for Biological Diversity v. California Department of Fish and Wildlife on the Newhall Ranch project concluded that whether the project was consistent with meeting Statewide emission reduction goals is a legally permissible criterion of significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence. The Court offered potential solutions on pages 25-27 of the ruling to address this issue summarized below:

Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU**. A lead agency may use a BAU comparison based on the Scoping Plan's methodology if it also substantiates the reduction a particular project must achieve to comply with statewide goals (page 25).
- **Compliance with Regulatory Programs or Performance Based Standards**. A lead agency "might assess consistency with AB 32's goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities" (page 26).
- **Compliance with GHG Reduction Plans or Climate Action Plans**. A lead agency may utilize "geographically specific GHG emission reduction plans" such as climate action plans or GHG

emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (page 26).

- **Compliance with Local Air District Thresholds**. A lead agency may rely on "existing numerical thresholds of significance for greenhouse gas emissions" adopted by, for example, local air districts (page 27).

3.3.4 - Regional

The proposed project is within the SoCAB. The SCAQMD works directly with SCAG, local governments, and State and federal agencies to attain and maintain air quality standards. The applicable air quality plan for the project is the SCAQMD's 2016 AQMP.

SCAQMD Regulation XXVII, Climate Change

SCAQMD Regulation XXVII currently includes three rules:

- The purpose of Rule 2700 is to define terms and post global warming potentials.
- The purpose of Rule 2701, SoCal Climate Solutions Exchange, is to establish a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program, was adopted on February 6, 2009. The purpose of this rule is to create a GHG Reduction Program for GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

3.3.5 - Local

The City addresses goals and policies of its General Plan relevant to air quality in the Air Quality and Climate Section.[50] The City updated its General Plan in 2010. The Rialto General Plan goals and policies relevant to the project and to relating air quality or GHGs are listed in Section 2.4.3 of this report.

The City is in the process of developing a Climate Adaptation Plan. The City started developing the Plan in early 2019 and was expected to complete the study in approximately 18 months. At the time of this writing, the City is still drafting the Plan.

[50] City of Rialto. 2010. General Plan. December. Website: https://www.yourrialto.com/wp-content/uploads/2016/08/General-Plan-Update-2010.pdf. Accessed January 6, 2020.

SECTION 4: MODELING PARAMETERS AND ASSUMPTIONS

4.1 - Model Selection and Guidance

Regional air pollutant emissions are composed of those on-site and off-site construction and operational emissions generated from all facets of the project. Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors represent the emission rate of a pollutant over a given time or activity for example, grams of NO_X per vehicle mile traveled or grams of NO_X per horsepower hour of equipment operation. The activity factor is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, the amount of fuel consumed in a given amount of time, or VMT per day. The ARB has published emission factors for on-road mobile vehicles/trucks in the Emission Factor (EMFAC) mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the levels of activity and outputs the emissions for the various pieces of equipment.

The California Emissions Estimator Model (CalEEMod) was developed in cooperation with the SCAQMD and other air districts throughout the state. CalEEMod is designed as a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with construction and operation from a variety of land uses. The current version of CalEEMod, version 2016.3.2, uses OFFROAD2011 and EMFAC2014 emission factors. Regional construction and operational emissions reported in this analysis were modeled using CalEEMod, version 2016.3.2.

4.1.1 - Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM_{10}) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM_{10} and $PM_{2.5}$).

Construction activities would consist of site preparation, mass grading, building construction, asphalt paving of roadways, and architectural coating of the inside and outside of the buildings. For each construction activity, the construction equipment operating hours and numbers represent the average equipment activity over the duration of the activity. A conceptual construction schedule is provided in Table 5 that presents the duration for each construction activity. Table 6 presents the number of assumed construction equipment along with hours of operation per day, horsepower, and load factor. Where project-specific information was not available or unknown, default assumptions were used to complete emissions modeling. The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an

engine—the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment.

As shown in Table 5, the proposed project is anticipated to begin as early as October 2020 and would be completed in October 2021. The anticipated construction schedule reflects the construction start date and construction phase durations estimated by the project applicant. The construction schedule used in the analysis represents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and compliance with more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moves to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required by the CEQA Guidelines.

Table 5: Construction Schedule

Construction Activity	Conceptual Construction Schedule		Working Days per Week	Working Days
	Start Date	End Date		
Demolition (Removal of Existing Hardscape)	10/5/2020	10/30/2020	5	20
Site Preparation	10/31/2020	11/6/2020	5	5
Grading	11/7/2020	11/18/2020	5	8
Paving	11/19/2020	12/14/2020	5	18
Building Construction	11/19/2020	10/6/2021	5	230
Architectural Coating	10/6/2021	10/29/2021	5	18
Source: CalEEMod Output (Appendix A).				

A summary of the on-site, off-road construction equipment usage assumptions used to estimate emissions is presented in Table 6.

Table 6: Project Construction Equipment Assumptions

Construction Activity	Equipment	Equipment Amount	Average Hours per day	Horsepower	Load Factor
Demolition (Removal of Existing Hardscape)	Concrete/Industrial Saws	1	8	81	0.73
	Excavators	3	8	158	0.38
	Rubber Tired Dozers	2	8	247	0.40
Site Preparation	Rubber Tired Dozers	3	8	247	0.40
	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	1	8	158	0.38

Construction Activity	Equipment	Equipment Amount	Average Hours per day	Horsepower	Load Factor
	Graders	1	8	187	0.41
	Rubber Tired Dozers	1	8	247	0.40
	Tractors/Loaders/Backhoes	3	8	97	0.37
Paving	Cement and Mortar Mixers	2	6	9	0.56
	Pavers	1	8	130	0.42
	Paving Equipment	2	6	132	0.36
	Rollers	2	6	80	0.38
	Tractors/Loaders/Backhoes	1	8	97	0.37
Building Construction	Cranes	1	7	231	0.29
	Forklifts	3	8	89	0.20
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	7	97	0.37
	Welders	1	8	46	0.45
Architectural Coating	Air Compressors	1	6	78	0.48
Source: CalEEMod Output (Appendix A).					

A summary of the construction-related vehicle trips is shown in Table 7. During grading, it is expected that the project would not require imported material from an off-site location based on information provided by the project applicant. However, project construction would export 3,100 cubic yards of material according to the project applicant. In addition, haul trips associated with the removal of the existing on-site hardscape are accounted for in the demolition phase; see Appendix C for the assumptions used to estimate the tons of debris assumed for the removal of hardscape. Additional vendor trips were added to account for transport of equipment and miscellaneous trips during the construction period. CalEEMod default values for trip lengths, and vehicle fleets were used. Note that the total number of off-site construction vehicle trips would not necessarily occur on the same day, since construction activities would vary each day during the construction period.

Table 7: Construction Off-site Trips

Construction Activity	Worker (Trips per day)	Vendor (Trips per day)	Haul (Total Trips)
Demolition (Removal of Existing Hardscape)	15	4	378
Site Preparation	18	4	0
Grading	15	4	388
Paving	60	24	0

Construction Activity	Worker (Trips per day)	Vendor (Trips per day)	Haul (Total Trips)
Building Construction	20	4	0
Architectural Coating	12	4	0
Source: CalEEMod Output (Appendix A).			

Fugitive Dust

During grading activities, fugitive dust can be generated from the movement of dirt on the project site. CalEEMod estimates dust from dozers moving dirt around, dust from graders or scrapers leveling the land, and loading or unloading dirt into haul trucks. Every project within the SCAQMD's jurisdiction is required to comply with the requirements of SCAQMD Rule 403 (Fugitive Dust). SCAQMD Rule 403 requires fugitive dust generating activities follow best available control measures to reduce emissions of fugitive dust. As shown in Table 8, per SCAQMD guidance, the Rule 403 measures are accounted for in CalEEMod through selection of the appropriate mitigation measures in CalEEMod. Development of the proposed project would include design features which would reduce fugitive dust compared to default values. Note that CalEEMod nominally treats these design elements and conditions as "mitigation measures," despite their inclusion in the project description.

Table 8: Best Available Control Measures

Best Available Control Measure		Associated Measure in CalEEMod
Clearing and Grubbing		
02-1 02-2 02-3	Maintain stability of soil through pre-watering of site prior to clearing and grubbing. Stabilize soil during clearing and grubbing activities. Stabilize soil immediately after clearing and grubbing activities.	Water exposed surfaces three times per day Twelve percent moisture content on unpaved roads
Earth Moving Activities		
08-1 08-2	Pre-apply water to depth of proposed cuts Re-apply water as necessary to maintain soils in a damp condition and to ensure that visible emissions do not exceed 100 feet in any direction	Water exposed surfaces three times per day
08-3	Stabilize soils once earth-moving activities are complete	
Import/Export of Bulk Materials		
09-1	Stabilize material while loading to reduce fugitive dust emissions.	Water exposed surfaces three times per day
09-3 09-4	Stabilize material while transporting to reduce fugitive dust emissions. Stabilize material while unloading to reduce fugitive dust emissions.	Water exposed surfaces three times per day Twelve percent moisture content on unpaved roads

Best Available Control Measure	Associated Measure in CalEEMod
Landscaping	
10-1 Stabilize soils, materials, slopes	Water exposed surfaces three times per day
Staging Areas	
13-1 Stabilize staging areas during use by limiting vehicle speeds to 15 mph.	Reduce speed on unpaved roads to 15 mph.
Traffic Areas for Construction Activities	
15-1 Stabilize all off-road traffic and parking areas.	Water exposed surfaces three times per day Twelve percent moisture content on unpaved roads
Source of Best Available Control Measures: South Coast Air Quality Management District (SCAQMD). 2005. Rule 403—Fugitive Dust. Amended June 3, 2005. Website: https://www.aqmd.gov/home/rules-compliance/compliance/rule-403-dust-control-information. Accessed December February 1, 2019. Source of associated CalEEMod measures: CalEEMod Output (Appendix A).	

4.1.2 - Operation

The major sources operational emissions, which would occur over the long-term operations of the project, are summarized below.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the motor vehicles that would travel to and from and within the project site. The regional emissions from the project's mobile sources were estimated using CalEEMod. The project would primarily generate passenger vehicle trips from employees and visitors traveling to and from the project site; however, the project would also be served with daily truck deliveries. An estimate of the number of vehicle trips that the project would generate was presented in the project-specific Traffic Impact Analysis (TIA) Scoping Agreement, as shown in Table 9.

Table 9: Vehicle Trip Generation During Operations

Institute of Transportation Engineers (ITE) Code	Land Use	Project Size	Units	Total Daily Trips (Weekday)
150	Warehousing	36.5	tsf	134
Note: tsf: thousand square feet Source: Dedeaux Industrial Center Traffic Impact Analysis – Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.				

The trip summary shown in Table 9 includes trips from both passenger vehicles and trucks. The TIA Scoping Agreement reports that truck trips would account for 56 of the 134 total daily trips generated by the project.

Industrial land use projects, including warehouse projects, can be expected to have longer than average truck trip lengths compared to the default trip length in CalEEMod (6.9 miles to 16.6 miles for the San Bernardino County portion of the SoCAB). To estimate mobile-source emissions from trucks during project operations, a one-way truck trip length of 40 miles was assumed based on recommendations from the SCAQMD for warehouse-type projects. To use a longer trip length for trucks, modeling of the project's mobile operations was split into two separate CalEEMod runs: (1) area-source emissions, energy-source emissions, and passenger vehicle mobile-source emissions; and (2) truck mobile-source emissions. The CalEEMod default fleet mix for the San Bernardino County portion of the SoCAB was used as the basis for the determining the passenger car fleet mix used in the first operational run. The number of daily operational vehicle trips were presented in the TIA Scoping Agreement for the project. Emission factors are assigned to the expected vehicle mix as a function of vehicle age, vehicle class, speed, and fuel type. The operational fleet mix used to assess emissions from the project is shown below in Table 10.

Table 10: Vehicle Type Classification

Vehicle Type	Classification	Fleet Mix
Passenger Vehicle	LDA	36.1%
	LDT1	2.4%
	LDT2	11.8%
	MDT	7.8%
2-Axle	LHDT1	1.1%
	LHDT2	0.3%
3-Axle	MHDT	11.9%
4-Axle	HHDT	28.4%
Source: Appendix A.		

Other Emission Sources

Area Sources

In addition to typical mobile- and energy-source emissions, long-term operational emissions also include area-source emissions. Area-source emissions include occasional architectural coating activities for repainting and maintenance of building associated with the proposed industrial center. CalEEMod assumes that repainting occurs at a rate of 10 percent of the buildings per year. Therefore, on average, it is assumed that the building would be fully repainted every 10 years.

Other area-source emissions include consumer products that involve solvents that emit VOCs during use. CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products associated with parking uses. The general consumer product category was updated based on 2017 ARB VOC inventory data and 2017 population estimates based on the State of California's Department of Finance demographic projections were used to estimate a statewide VOC emission factor for 2017. The default general consumer product emission factor is based on 2008 ARB VOC inventory data using the same methodology applied to calculate the updated VOC emission factor for general consumer products. Lastly, CalEEMod default emission factors for landscape maintenance equipment were used in this analysis.

Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant.

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project. For solid waste disposal, CalEEMod calculates GHG emissions generated as solid waste generated by the project decomposes in a landfill.

For electricity-related emissions, CalEEMod contains default electricity intensity factors for various utilities throughout California. Southern California Edison emission factors were selected to quantify electricity emissions for the project. The Southern California Edison emissions factors are based on compliance with the RPS. The factors listed below were applied in estimating project emissions for the year 2021:

- CO_2: 532.57 pound per megawatt hour (lb/MWh)
- Methane: 0.029 lb/MWh
- Nitrous oxide: 0.006 lb/MWh

4.2 - Emissions Model Selection—Localized Assessment

Whereas the regional estimation of emissions quantifies the project's emissions throughout the region, the estimation of the project's local construction and operational emissions focuses on emissions that the project would generate on the project site.

4.2.1 - Localized Assessment—Construction

The project's localized construction emissions would consist of those emissions generated from on-site construction activities including site preparation, grading, building construction, paving, and architectural coating. The localized construction emissions result exhaust emissions from operation of off-road construction equipment and generation of fugitive dust from earth-moving activities.

CalEEMod provides emissions outputs that separate on- and off-site construction emissions. For the localized emissions screening analysis, only on-site emissions were used to compare with SCAQMD's Localized Significant Thresholds (LSTs).

4.2.2 - Localized Assessment—Operation

The project's operational emissions occur from a variety of sources described above; however, most long-term operational emissions occur off-site as mobile-source emissions. The localized assessment methodology limits analyzed emissions to those generated from on-site activities. Therefore, only on-site operational emissions were used to compare with SCAQMD's operational LSTs. A trip length of 0.16 mile was used in the modeling input assumptions to account for on-site emissions from mobile sources based on the measured on-site trip length, which provides for a reasonably worst-case scenario.

4.3 - Air Dispersion Modeling

An air dispersion model is a mathematical formulation used to estimate air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the EPA American Meteorological Society Regulatory Model (AERMOD), version 19191, air dispersion model, which is approved by the SCAQMD for air dispersion assessments. Specifically, the AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from project construction PM_{10} exhaust emissions. The AERMOD model provides a refined methodology for estimating localized construction impacts by utilizing long-term, measured representative meteorological data for the project site and a representative construction schedule.

Terrain elevations were obtained for the project site using the AERMAP model, the AERMOD terrain data pre-processor. The urban dispersion option was used to describe air dispersion in the local vicinity of the project. The air dispersion model assessment was performed using meteorological data from the Fontana Station, which is within Source Receptor Area (SRA) 34 and located approximately 6.3 miles west of the project site.

4.3.1 - Air Dispersion Modeling—Construction

Receptor locations within the AERMOD model were placed at locations of existing residences surrounding the project and an elementary school approximately 780 feet to the east. To evaluate the project's localized construction impacts, sensitive receptor height should be considered at the point of maximum impact. The SCAQMD recommends that all receptors are placed within the breathing zone at zero meters above ground level.

The on-site construction area sources were assumed to cover the entire construction area. Emissions from the on-site construction exhaust source were assumed to be emitted at five meters above ground to account for the top of equipment exhaust stacks where emissions are released to the atmosphere and the increase in emission height due to its heated exhaust. The off-site construction vehicle emissions were represented in the AERMOD model as line volume sources with a release height of 10.2 feet (3.1 meters) for diesel vehicles.

SECTION 5: AIR QUALITY IMPACT ANALYSIS

This section calculates expected emissions from construction and operation of the project as a necessary requisite for assessing regulatory significance of project emissions on a regional and localized level.

5.1 - CEQA Guidelines

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on air quality, the type, level, and impact of emissions generated by the project must be evaluated.

While the final determination of whether a project is significant is within the purview of the Lead Agency pursuant to Section 15064(b) of the CEQA Guidelines, SCAQMD recommends that its quantitative air pollution thresholds be used to determine the significance of project emissions. If the Lead Agency finds that the project has the potential to exceed these air pollution thresholds, the project should be considered to have significant air quality impacts.

5.1.1 - Thresholds of Significance

According to CEQA Guidelines Appendix G, to determine whether impacts related to air quality are significant environmental effects, the following questions are analyzed and evaluated.

Would the project:

- Conflict with or obstruct implementation of the applicable air quality plan?
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?
- Expose sensitive receptors to substantial pollutant concentrations?
- Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

The SCAQMD has developed daily regional and localized thresholds of significance to evaluate construction and operational emissions within its jurisdiction to address CEQA Guidelines. Established emissions thresholds were based on attainment status of the air basin relative to air quality standards for specific criteria pollutants. Because concentration standards were set at a level that protects public health with an adequate margin of safety, these emissions thresholds are considered conservative and would overstate an individual project's contribution related to air quality and health risks.

Regional Thresholds

Construction Emissions

Projects in the SoCAB would generate significant construction-related regional emissions if daily emissions would exceed:

- 75 pounds per day of VOC, also known as reactive organic gases;
- 100 pounds per day of NO_X;
- 550 pounds per day of CO;
- 150 pounds per day of sulfur oxides (SO_X);
- 150 pounds per day of PM_{10}; or
- 55 pounds per day of $PM_{2.5}$.

Regional Thresholds for Operational Emissions

Projects in the SoCAB would generate significant operational regional emissions if daily emissions would exceed:

- 55 pounds per day of VOC;
- 55 pounds per day of NO_X;
- 550 pounds per day of CO;
- 150 pounds per day of SO_X;
- 150 pounds per day of PM_{10}; or
- 55 pounds per day of $PM_{2.5}$.

Localized Air Quality Significance Thresholds

The SCAQMD recommends that all air quality analyses include a localized assessment of both construction and operational emissions on nearby sensitive receptors. The SCAQMD has developed LSTs to be implemented at the discretion of local public agencies acting as a lead agency pursuant to CEQA. LSTs represent maximum mass emissions from a project site that would not result in pollutant concentrations that exceed NAAQS or CAAQS. LSTs are based on ambient concentrations of that pollutant within the SRA where a project is located, distance to nearest sensitive receptor, and size of the project site, all of which are the primary factors that influence pollutant concentrations.

The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003, revised 2009) for guidance. The LST Methodology assists lead agencies in analyzing localized air quality impacts, particularly CO, NO_X, PM_{10}, and $PM_{2.5}$. The SCAQMD provides LST mass rate look-up tables for projects with active construction areas that are less than or equal to 5 acres. These LST look-up values are provided to be used a as screening tool for identifying whether a more detailed analysis is needed for localized impacts. The appropriate LSTs can be determined based on the project's SRA, size, and distance to nearest sensitive receptor. The appropriate SRA for the LSTs is Central San Bernardino Valley (SRA 34) since this area includes the project site. LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. LSTs were obtained for sensitive receptors located 25 meters from the source area based on the project's proximity to existing sensitive receptors.

Construction

The SCAQMD has published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds." CalEEMod calculates construction emissions based on quantity and types of construction equipment, equipment hours, rates of emission, and maximum daily disturbance activity possible for each piece of equipment for several land use projects and their developmental intensity. The daily maximum disturbed area during construction serves as a factor in determining the project size value of the applicable LSTs for construction. Table 11 shows maximum daily disturbed acreage during construction based on types and numbers of construction equipment used for each activity, as identified by CalEEMod. The maximum daily area disturbed during construction is 1.5 acres.

Table 11: Equipment Specific Site Preparation and Grading Disturbed Area Rates

Construction Activity [1]	Offroad Equipment Type	Equipment Quantity	Operating Hours per Day	Acres Graded per 8-hour Day	Acres Graded per Day
Demolition (Removal of Existing Hardscape)	Concrete/Industrial Saws	1	8	0.0	0.0
	Excavators	3	8	0.0	0.0
	Rubber Tired Dozers	2	8	0.5	1.0
	Maximum Daily Disturbed Area (Demolition)				*1.0*
Site Preparation	Rubber Tired Dozers	3	8	0.5	1.5
	Tractors/Loaders/Backhoes	4	8	0.0	0.0
	Maximum Daily Disturbed Area (Site Preparation)				*1.5*
Grading	Excavators	1	8	0.0	0.0
	Graders	1	8	0.5	0.5
	Rubber Tired Dozers	1	8	0.5	0.5
	Tractors/Loaders/Backhoes	3	8	0.0	0.0
	Maximum Daily Disturbed Area (Grading)				*1.0*
Maximum Daily Disturbed Area from Any Construction Activity					***1.5***

Notes:
[1] Assumes overlap of construction activities based on schedule presented in Table 5; there is no overlap of demolition, site preparation, and grading activities.

Construction and Operation

The proposed project is approximately 3.51 acres in size and the nearest sensitive receptors are residences approximately 95 feet (29 meters) south of the project site across Merrill Avenue. As noted earlier, the SCAQMD has defined LSTs for project areas up to 5 acres in size. Specifically, LSTs are provided for 1-, 2-, and 5-acre sites. Table 12 shows the LSTs for NO_2, CO, PM_{10}, and $PM_{2.5}$ for both construction and operational activities for with sensitive receptors being 25 meters away. If a

project exceeds an applicable LST, then the SCAQMD recommends that project-specific air quality modeling be performed.

Table 12: SCAQMD Local Air Quality Screening Thresholds

Activity	Allowable Emissions (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Construction (1-acre site)	118	667	4	3
Construction (2-acre site)	170	972	7	4
Operation (2-acre site)	170	972	2	1
Operation (5-acre site)	270	1,746	4	2

Source: SCAQMD Mass Rate Look-Up Tables for sites in SRA 34 for sensitive receptors located 25 meters (82 feet) from the project site.

Carbon Monoxide Hotspot Thresholds

A CO hotspot represents a condition wherein high concentrations of CO may be produced by motor vehicles accessing a congested traffic intersection under heavy traffic volume conditions. It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Accordingly, vehicle emissions standards have become increasingly more stringent. Before the first vehicle emission regulations, cars in the 1950s were typically emitting about 87 grams of CO per mile (EPA).

Since the first regulation of CO emissions from vehicles (model year 1966) in California, vehicle emissions standards for CO applicable to light duty vehicles have decreased by 96 percent for automobiles, and new cold weather CO standards have been implemented, effective for the 1996 model year. Currently, the CO standard in California is a maximum of 3.4 grams/mile for passenger cars (with provisions for certain cars to emit even less). With the turnover of older vehicles, introduction of cleaner fuels and implementation of control technology on industrial facilities, CO concentrations in the SCAQMD have steadily declined.

The analysis prepared for CO attainment in the SoCAB by the SCAQMD can be used to assist in evaluating potential for CO exceedances in the SoCAB. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak CO concentrations in the SoCAB are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and AQMPs. In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood); Wilshire Boulevard and Veteran Avenue (Westwood); Sunset Boulevard and Highland Avenue (Hollywood);

and La Cienega Boulevard and Century Boulevard (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Boulevard and Veteran Avenue, which has a daily traffic volume of approximately 100,000 vehicles per day.

Considering this information, the proposed project would result in a less than significant impact to localized CO concentration if the project traffic would not increase traffic volumes at affected intersections to more than those modeled in the 2003 AQMP.

Health Risk Significance Thresholds

For pollutants without defined significance standards or air contaminants not covered by the standard criteria cited above, the definition of substantial pollutant concentrations varies. For toxic TACs, "substantial" is taken to mean that the individual cancer risk exceeds a threshold considered a prudent risk management level.

The SCAQMD has defined several health risk significance thresholds that it recommends Lead Agencies use in assessing a project's health risk impacts. The City has not adopted its own set of thresholds. Therefore, the following SCAQMD thresholds are used for this analysis.

Project-Specific Health Risk Significance Thresholds

The SCAQMD has established the following project-specific health risk significance thresholds:[51]

- Maximum Incremental Cancer Risk: >=10 in 1 million.
- Hazard Index (project increment) >=1.0.

A significant impact would occur if a project's impacts exceeded any of these thresholds.

Cumulative Health Risk Significance Thresholds

The SCAQMD has published guidance on how to address cumulative impacts from air pollution.[52] In the report, the SCAQMD clearly states:

> . . . the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same

[51] South Coast Air Quality Management District (SCAQMD). 2015. Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2. Accessed December 30, 2019.

[52] South Coast Air Quality Management District (SCAQMD). 2003. White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution. Website: http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf?sfvrsn=2. Accessed December 30, 2019.

significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

5.2 - Impact Analysis

5.2.1 - Consistency with Air Quality Management Plan

Impact AIR-1:	**The project would not conflict with or obstruct implementation of the applicable air quality plan.**

Impact Analysis

To evaluate whether or not a project conflicts with or obstructs implementation of the applicable air quality plan (2016 AQMP for the SoCAB), the SCAQMD CEQA Air Quality Handbook states that there are two key indicators. These indicators are identified by the criteria discussed below.

1. **Indicator:** Whether the project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
2. **Indicator:** According to Chapter 12 of the SCAQMD CEQA Air Quality Handbook, the purpose of the General Plan consistency findings is to determine whether a project is inconsistent with the growth assumptions incorporated into the air quality plan, and thus, whether it would interfere with the region's ability to comply with federal and California air quality standards.

Considering the recommended criteria in the SCAQMD's 1993 Handbook, this analysis uses the following criteria to address this potential impact:

- **Criterion 1:** Project's contribution to air quality violations (SCAQMD's first indictor);
- **Criterion 2:** Assumptions in AQMP (SCAQMD's second indictor); and
- **Criterion 3:** Compliance with applicable emission control measures in the AQMPs.

Criterion 1: Project's Contribution to Air Quality Violations

According to the SCAQMD, the project is consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.[53]

[53] South Coast Air Quality Management District (SCAQMD). 1993. CEQA Handbook. Available at SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765.

If a project's emissions do not exceed the SCAQMD regional thresholds for VOC, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$, it follows that the project's emissions would not exceed the allowable limit for each project in order for the region to attain and maintain ambient air quality standards, which is the primary goal of air quality plans. As shown in Impact AIR-2, the proposed project's regional construction and operational emissions would not exceed the SCAQMD regional thresholds of significance. Furthermore, as described in Impact AIR-3, the proposed project would not exposure sensitive receptors to substantial pollutant concentrations during operations or construction of the project. Specifically, localized construction emissions were found to be less than significant with the incorporation of Standard Condition (SC) AIR-1 and SC AIR-2. Considering this information, the proposed project's construction and operational emissions would not contribute substantially to potential air quality violations and thus would be consistent with the AQMP. The proposed project meets this criterion.

Criterion 2: Assumptions in AQMP

The development of emission burdens used in AQMPs to demonstrate compliance with ambient air quality standards is based, in part, on land use patterns contained within local general plans. Therefore, it is reasonable to conclude that if a project is consistent with the applicable general plan land use designation, and the general plan was adopted prior to the applicable AQMP, then the growth of VMT and/or population generated by said project would be consistent with growth in VMT and population assumed within the AQMP. The applicable General Plan for the proposed project is the Rialto General Plan, which was adopted in 2010 prior to adoption of the SCAQMD's 2016 AQMP. According to the Rialto General Plan Land Use Map, the project site is designated Light Industrial, which has a building intensity of 1.0 floor area ratio.[54] Further, the project site is located within the Industrial Project Area, which was established in 1979 and is part of an effort by the Rialto Redevelopment Agency (RDA) to eliminate blight in the City of Rialto. The Industrial Project Area consists of two sub-areas; Sub-Area B, which includes the proposed project, is located west of the Central Business District and contains a variety of businesses and industrial uses.[55] Specifically, the project site is located with the Industrial Project Sub-Area B Redevelopment Project Area.

According to the City Zoning Map, the project site is zoned as Light Manufacturing (M-1).[56] This zone provides for light manufacturing, processing, or product treatment uses and other activities including auction houses, bakeries or baking plants, blacksmith and horseshoeing shops, body and fender work inside buildings, and etc. The M-1 zone has a maximum structure height limit of 2.5 stories not to exceed 35 feet.[57]

Based on the current General Plan land use designation, emissions related to development of the project site would have been included in growth forecasts for the current AQMP as light industrial development. The SCAQMD CEQA Air Quality Handbook indicates that consistency with AQMP growth assumptions must be analyzed for new amended General Plan elements, Specific Plans, and

[54] City of Rialto. 2010. Rialto General Plan. December.
[55] Ibid.
[56] City of Rialto. 2013. Official City Zoning Map. March 19.
[57] City of Rialto. 2016. Rialto Code of Ordinances Chapter 18.38 – M-1 Light Manufacturing Zone. August 9.

significant projects.[58] Significant projects include airports, electrical generating facilities, petroleum and gas refineries, designation of oil drilling districts, water ports, solid waste disposal sites, and offshore drilling facilities. The proposed project would include construction and development of a 36,500-square-foot industrial warehouse building and would not engage in any activities that would constitute a significant project as defined by the SCAQMD CEQA Air Quality Handbook.

Furthermore, due to the industrial nature of the proposed project, there would be no significant impacts associated with growth inducement from implementation. Because there would also not be impacts related to long-term project operation, it follows that the proposed project would not result in growth and associated emissions unforeseen in any local or regional plans. Therefore, the proposed project would not be significant regarding the second criterion.

Criterion 3: Control Measures

The AQMP contains several control measures which are enforceable requirements through the adoption of rules and regulations. SCAQMD rules and regulations relevant to the proposed project are described in Section 2.4.2. The proposed project would comply with all applicable SCAQMD rules and regulations. Because of the nature of the proposed project, which includes earthmoving activity, SCAQMD Rule 403 applies. As previously mentioned, Rule 403 governs emissions of fugitive dust during construction and operation activities. The rule requires that fugitive dust be controlled with best available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rule 403 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Compliance with this rule is achieved through application of standard BMPs. These BMPs include application of water or chemical stabilizers to disturbed soils; covering haul vehicles; restricting vehicle speeds on unpaved roads to 15 mph; sweeping loose dirt from paved site access roadways; cessation of construction activity when winds exceed 25 mph; and establishing a permanent ground cover on finished sites. Compliance with SC AIR-1 would ensure incorporation of appliable dust control measures during project construction. The proposed project's compliance with all applicable SCAQMD rules and regulations would result in consistency with the applicable AQMP control measures.

Summary

The proposed project would comply with SC AIR-1 and SC AIR-2, both of which would be applicable throughout the duration of the construction period. As described above, the proposed project would not exceed the growth assumptions in the AQMP or result in a regional or localized exceedance of criteria air pollutants. Furthermore, the proposed project would comply with all applicable SCAQMD rules and regulations. Accordingly, the proposed project would not conflict with or obstruct implementation of the applicable air quality plans, and, therefore, the impact would be less than significant.

[58] South Coast Air Quality Management District (SCAQMD). 1993. CEQA Handbook. Available at SCAQMD, 21865 Copley Drive, Diamond Bar, CA 91765.

Standard Conditions

SC AIR-1 During construction, dust control measures to meet the requirements of SCAQMD Rules 402 and 403 shall be implemented. Such measures may include but are not limited to the following:

a) All haul trucks shall be covered prior to leaving the site to prevent dust from impacting the surrounding areas.

b) Moisten soil each day prior to commencing grading to depth of soil cut.

c) Water exposed surfaces at least three times a day under calm conditions, and as often as needed on windy days or during very dry weather in order to maintain a surface crust and minimize the release of visible emissions from the construction-site.

d) Treat any area that will be exposed for extended periods with a soil conditioner to stabilize soil or temporarily plant with vegetation.

e) Use street sweepers that comply with SCAQMD Rules 1186 and 1186.1.

f) All contractors shall turn off all construction equipment and delivery vehicles when not in use, or limit on-site idling to no more than 5 minutes in any one hour.

g) On-site electrical hook ups to a power grid shall be provided for electric construction tools including saws, drills, and compressors, where feasible, to reduce the need for diesel powered electric generators.

h) Traffic speeds on all unpaved roads to be reduced to 15 miles per hour or less.

i) Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads.

SC AIR-2 During construction activities, all off-road equipment with engines greater than 100 horsepower shall meet either EPA or ARB Tier IV Interim off-road emission standards. The construction contractor shall maintain records documenting compliance with this requirement, including equipment lists. Off-road equipment descriptions and information may include but are not limited to equipment type, equipment manufacturer, equipment identification number, engine model year, engine certification (Tier rating), horsepower, and engine serial number.

Level of Significance

Less than significant impact.

5.2.2 - Cumulative Impacts

Impact AIR-2: **The project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality.**

Impact Analysis

This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. As described above, the region is currently nonattainment for ozone, PM_{10}, and $PM_{2.5}$. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within the air basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the proposed project) within the air basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. All new development that would result in an increase in air pollutant emissions above those assumed in regional air quality plans would contribute to cumulative air quality impacts.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable.

Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the project would result in regional emissions that exceed the SCAQMD regional thresholds of significance for construction and operations on a project level. Projects that generate emissions below the SCAQMD significance thresholds would be considered consistent with regional air quality planning efforts would not generate cumulatively considerable emissions.

The proposed project's regional construction and operational emissions, which include both on- and off-site emissions, are evaluated separately below. Construction and operational emissions from the proposed project were estimated using CalEEMod version 2016.3.2. A detailed description of the assumptions used to estimate emissions and the complete CalEEMod output files are contained in Appendix A.

Cumulative Construction Emissions

Construction emissions are described as "short-term" or temporary in duration; however, they have the potential to represent a significant impact with respect to air quality. Construction of the proposed project would result in the temporary generation of VOC, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions from construction activities such as site preparation, grading, building construction, architectural coating, and asphalt paving. Fugitive dust emissions are primarily associated with earth disturbance and grading activities, and vary as a function of soil silt content, soil moisture, wind

speed, acreage of disturbance area, and miles traveled by construction vehicles on-site and off-site. Construction-related NO_X emissions are primarily generated by exhaust emissions from heavy-duty construction equipment, material and haul trucks, and construction worker vehicles. VOC emissions are mainly generated by exhaust emissions from construction vehicles, off-gas emissions associated with architectural coatings, and asphalt paving.

As shown in Table 5, the proposed project is anticipated to begin in October 2020 and conclude in October 2021. The anticipated construction schedule reflects the construction start date and the construction phase durations estimated by the project applicant. The construction schedule used in the analysis represents a reasonable worst-case analysis scenario since a delay in construction dates into the future would result in using emission factors for construction equipment that decrease as the analysis year increases, due to improvements in technology and the need to meet more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moves to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required by CEQA Guidelines. For a more detailed description of the construction emissions modeling parameters and assumptions, please refer to Section 4-Modeling Parameters and Assumptions.

Table 13 presents the project's maximum daily construction emissions for each construction activity and during the entire construction duration using the worst-case summer or winter daily construction-related criteria pollutant emissions for each phase of construction. Complete CalEEMod output files are included as part of Appendix A.

Table 13: Regional Construction Emissions by Construction Activity

Construction Activity	Regional Pollutant Emissions (pounds per day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Demolition (Removal of Existing Hardscape)	3.5	38.3	23.2	0.1	3.8	1.9
Site Preparation	4.2	42.9	22.4	0.0	9.5	6.0
Grading	2.8	38.8	18.6	0.1	4.9	2.8
Paving	1.6	12.3	13.3	0.0	0.9	0.7
Building Construction (2020)	2.5	21.9	20.0	0.0	2.0	1.3
Building Construction (2021)	2.3	19.9	19.5	0.0	1.8	1.1
Architectural Coating	20.7	2.0	2.4	0.0	0.3	0.1
Maximum Daily Emissions[1]	**23.0**	**42.9**	**33.3**	**0.1**	**9.5**	**6.0**
SCAQMD Significance Threshold	**75**	**100**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] Assumes overlap of construction activities based on schedule presented in Table 5.
The PM_{10} and $PM_{2.5}$ emissions reflect the combined exhaust and mitigated fugitive dust emissions in accordance with SCAQMD Rule 403.
Source of emissions: Appendix A.

Construction Activity	Regional Pollutant Emissions (pounds per day)					
	VOCs	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Source of thresholds: South Coast Air Quality Management District (SCAQMD). 2015. SCAQMD Air Quality Significance Thresholds. March. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed December 3, 2019.						

Cumulative Operational Emissions

Following project construction, long-term operational emissions would be generated, resulting from daily operations. Operational emissions for land use development projects are typically distinguished as mobile-, area-, and energy-source emissions. Mobile-source emissions are those associated with automobiles that would travel to and from the project site. Assumptions used to estimate mobile-source emissions that would be generated by the proposed project were consistent with those presented in the Dedeaux Industrial Center TIA – Scoping Agreement dated May 8, 2020. The project was estimated to generate 134 average daily trips during the operational period, with 78 of those trips being from passenger vehicles.[59] Area-source emissions are those associated with natural gas combustion for space and water heating, landscape maintenance activities, and periodic architectural coatings. Energy-source emissions are those associated with electricity consumption and are more pertinent for GHG emissions than air quality pollutants. Table 14 presents the project's maximum daily operational emissions.

Table 14: Operational Regional Pollutants

Operational Activity	Regional Pollutant Emissions (pounds per day)[1]					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area	0.20	0.00	0.01	0.00	0.00	0.00
Energy	0.00	0.02	0.02	0.00	0.00	0.00
Mobile—Passenger Vehicles	0.14	0.19	2.32	0.01	0.70	0.19
Mobile—Trucks	1.22	15.71	3.17	0.07	2.08	0.63
Total Operational Emissions	**1.56**	**15.93**	**5.51**	**0.08**	**2.78**	**0.82**
SCAQMD Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:
[1] Emissions shown represent the maximum daily emissions from summer and winter seasons for each operational emission source and pollutant. Therefore, total daily operational emissions represent maximum daily emissions that could occur throughout the year.
Source of emissions: Appendix A.
Source of thresholds: South Coast Air Quality Management District (SCAQMD). 2015. SCAQMD Air Quality Significance Thresholds. March. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook. Accessed December 3, 2018.

[59] Urban Crossroads. 2020. Dedeaux Industrial Center Traffic Impact Analysis – Scoping Agreement. May 8.

As shown in Table 14, the project's regional daily operational emissions would not exceed any of the SCAQMD thresholds of significance. Considering that the project's long-term operational emissions would not exceed any significance thresholds, the project would not result in a cumulatively considerable net increase of operational emissions. The cumulative impact from long-term operation of the project would be less than significant.

Standard Conditions

Implement SC AIR-1.

Level of Significance

Less than significant impact.

5.2.3 - Sensitive Receptors

Impact AIR-3:	**The project would not expose sensitive receptors to substantial pollutant concentrations.**

Impact Analysis

This impact evaluates the potential for the proposed project's construction and operational emissions to expose sensitive receptors to substantial pollutant concentration. Sensitive receptors are defined as those individuals who are sensitive to air pollution including children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities.[60] Commercial and industrial facilities are not included in the definition because employees do not typically remain on-site for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as NO2 and CO), commercial and/or industrial facilities would be considered sensitive receptors.

For the proposed project, the closest off-site sensitive receptors are single-family residences located on Merrill Avenue south of the project site, the closest of which are approximately 95 feet from the project site. Other off-site sensitive receptors include, but are not limited to, an existing school approximately 0.14 mile to the east, an existing park 0.26 mile to the south, and a senior living facility 0.28 mile to the east.

To result in a less than significant impact, the following criteria must be true:

- **Criterion 1:** LST assessment: emissions and air quality impacts during project construction or operation must be below the applicable LSTs to screen out of needing to provide a more detailed air quality analysis. If the proposed project exceeds any applicable LST when the mass rate look-up tables are used as a screening analysis, then project-specific air quality modeling may be performed to determine significance.

[60] South Coast Air Quality Management District (SCAQMD). 2008. Final Localized Significance Threshold Methodology. Revised July 2008. Website: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/localized-significance-thresholds. Accessed February 1, 2019.

- **Criterion 2:** A CO hotspot assessment must demonstrate that the project would not result in the development of a CO hotspot that would result in an exceedance of the CO ambient air quality standards.
- **Criterion 3:** A TAC analysis must demonstrate that the project would not result in significant health risk impacts to sensitive receptors. This would be achieved by demonstrating that construction or operation of the project would not result in an exceedance of the health risk significance thresholds.

Criterion 1: Localized Significance Threshold Analysis—Criteria Pollutants

The localized construction and operational analyses use thresholds (i.e., LSTs) that represent maximum emissions for a project that would not cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standard.[61] If the proposed project's construction or operational emissions are under those thresholds, it follows that the project would not cause or contribute to an exceedance of the standard and would not expose sensitive receptors to substantial pollutant concentrations.

Localized Construction Analysis

The LST Methodology only applies to on-site emissions and states that "off-site mobile emissions from the project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only on-site emissions were compared with the applicable LSTs.

Table 15 presents the proposed project's maximum daily on-site emissions compared with the applicable LSTs. The LSTs have been obtained from the LST Methodology for 1- and 2-acre project sites located in SRA 34 where sensitive receptors are 25 meters away. As noted in Table 15, emission estimates account for implementation of SCAQMD Rule 403.

Table 15: Construction Localized Significance Screening Analysis

Activity	On-site Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Demolition (Removal of Existing Hardscape)	33.2	21.8	3.3	1.8
Site Preparation	42.4	21.5	9.2	5.9
Grading	26.4	16.1	3.8	2.5
Paving	11.8	12.3	0.7	0.6
Building Construction (2020)	19.2	16.8	1.1	1.1
Building Construction (2021)	17.4	16.6	1.0	0.9
Architectural Coating	1.5	1.8	0.1	0.1

[61] South Coast Air Quality Management District (SCAQMD). 2009. Final Localized Significance Threshold Methodology, Appendix C. Revised October 21, 2009. Website: http://www.aqmd.gov/home /regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds.

Activity	On-site Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily On-site Construction Emissions[1]	**42.4**	**29.1**	**9.2**	**5.9**
Localized Significance Thresholds (1-acre site)	**118**	**667**	**4**	**3**
Localized Significance Thresholds (2-acre site)	**170**	**972**	**7**	**4**
Exceeds Any Screening Threshold?	**No**	**No**	**Yes**	**Yes**

Notes:
[1] Assumes overlap of construction activities based on schedule presented in Table 5.
The PM_{10} and $PM_{2.5}$ emissions reflect the combined exhaust and controlled fugitive dust emissions in accordance with SCAQMD Rule 403.
Source of emissions: Appendix A.
Source of thresholds: SCAQMD Mass Rate Look-Up Tables for 1- and 2-acre site in SRA 34 for sensitive receptors located 25 meters (82 feet) from the project site.

As shown in Table 15, the proposed project's maximum daily on-site emissions would not exceed the applicable SCAQMD LSTs for NO_X or CO; therefore, localized construction impacts related to these air pollutants would be less than significant. However, the proposed project's maximum daily on-site emissions would exceed the applicable SCAQMD LSTs for PM_{10} and $PM_{2.5}$. As previously discussed, the LSTs are screening criteria developed by the SCAQMD to provide lead agencies and project applicants with a conservative indication of whether the proposed project could result in a potentially significant air quality impact. If a project exceeds an applicable LST, then the SCAQMD recommends that project-specific air quality modeling be performed to determine localized impacts. To determine localized impacts related to construction-generated PM_{10} and $PM_{2.5}$, a project-specific construction Health Risk Assessment (HRA) was performed. As detailed within the HRA addressed in Criterion 2 above, localized impacts from the project's generation of PM during construction would be less than significant. The proposed project would be required to comply with SC AIR-1 and SC AIR-2. Compliance with SC AIR-1 and SC AIR-2 would ensure that the project-generated emissions of PM_{10} and $PM_{2.5}$ would be controlled during the construction period. Accordingly, with adherence to standard conditions, the proposed project's on-site construction-related criteria air pollutant and ozone precursor concentrations would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant.

Localized Operational Analysis

Like the construction LST analysis above, the applicable operational LSTs were obtained for a project located in SRA 34 with the nearest sensitive receptor being 25 meters away. Long-term operations would occur for the proposed project on the 3.51-acre project site. Because LSTs are provided for 1-, 2-, and 5-acre sites, LSTs were obtained for both a 2-acre and 5-acre site.

As described above, the LST Methodology recommends that only on-site emissions are evaluated using LSTs. Because most of the proposed project's mobile-source emissions would occur on the

local and regional roadway network away from the project site, only the on-site area-, energy-, and mobile-source emissions were included in this analysis. A trip length of 0.16 mile was used in the modeling input assumptions to account for on-site emissions from mobile sources. Table 16 presents the project's maximum daily on-site emissions compared with the appropriate LSTs.

Table 16: Operational Localized Screening Significance Analysis

Emissions Source	Pounds per Day			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Area	0.00	0.01	0.00	0.00
Energy	0.02	0.02	0.00	0.00
Mobile—Passenger Vehicles	0.03	0.33	0.01	0.00
Mobile—Trucks	4.60	0.80	0.01	0.00
Maximum Daily On-site Operational Emissions	**4.65**	**1.16**	**0.02**	**0.01**
Localized Significance Thresholds (2-acre site)	**170**	**972**	**2**	**1**
Localized Significance Thresholds (5-acre site)	**270**	**1,746**	**4**	**2**
Exceeds Any Screening Threshold?	**No**	**No**	**No**	**No**

Source of Emissions: Appendix A.
Source of thresholds: SCAQMD Mass Rate Look-Up Tables for 2-acre and 5-acre sites in SRA 34 for sensitive receptors located 25 meters (82 feet) from the project site.

As shown in Table 16, the proposed project's maximum daily on-site operational emissions would not exceed any applicable SCAQMD LSTs. Therefore, the project's operational activities would not cause or contribute substantially to an existing or future ambient air quality standard violation. Accordingly, the proposed project's operational criteria air pollutant and ozone precursor concentrations would not expose sensitive receptors to substantial pollutant concentrations. The impact would be less than significant.

Criterion 2: Carbon Monoxide Hotspot Analysis

The Dedeaux Industrial Center TIA – Scoping Agreement identified the peak-hour traffic volumes for the Yucca Avenue and Merrill Avenue intersection in conjunction with project driveways, which would be affected by the proposed project.[62] As identified, maximum project trips would be generated during the AM and PM peak-hour as 12 total trips. It is estimated that the highest average daily trips generated by the proposed project would be approximately 134 trips. With only 134 daily trips distributed along roads within the project vicinity, none of the intersections near the project site would have peak-hour traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the local meteorology to conclude that this

[62] Urban Crossroads. 2020. Dedeaux Industrial Center Traffic Impact Analysis – Scoping Agreement. May 8.

intersection would yield higher CO concentrations if modeled in detail. Therefore, the operational CO impact would be less than significant.

Criterion 3: Toxic Air Contaminant Analysis

Toxic Air Pollutants—On-site Workers

A variety of State and national programs protect workers from safety hazards, including high air pollutant concentrations.[63,64]

On-site workers are not required to be addressed through this HRA process. A document published by the California Air Pollution Control Officers Association, Health Risk Assessments for Proposed Land Use Projects, indicates that on-site receptors are included in risk assessments if they are persons not employed by the project.[65] Persons not employed by the project would not remain on-site for any significant period. Therefore, an HRA for on-site workers is not required or recommended. No further discussion is necessary.

Health Risk Assessment

During construction, the proposed project would result in emissions of several TACs that could potentially impact nearby sensitive receptors. The SCAQMD has defined health risk significance thresholds. These thresholds are represented as a cancer risk to the public and a non-cancer hazard from exposures to TACs. Cancer risk represents the probability (in terms of risk per million individuals) that an individual would contract cancer resulting from exposure to TACs continuously over a period of several years. The principal TAC emission analyzed in this assessment was DPM from operation of off-road equipment and diesel-powered delivery and worker vehicles during construction. DPM has been identified by the ARB as a carcinogenic substance. For purposes of this analysis, DPM is represented as exhaust emissions of PM_{10}. As the proposed project did not screen out needing to complete project-specific air quality modeling to determine significance for PM_{10} and $PM_{2.5}$ by applying the applicable LSTs (see Table 15), this construction HRA is used to determine localized impacts related to PM. DPM represented as exhaust PM_{10} adequately addresses impacts from PM_{10} and $PM_{2.5}$ emissions, as $PM_{2.5}$ comprises a component of PM_{10}. Fugitive dust components of PM_{10} and $PM_{2.5}$ would be controlled through implementation of SC AIR-1, which requires the use of dust control practices during project construction. The SCAQMD and California Office of Environmental Health Hazard Assessment (OEHHA) recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the maximally individual resident.[66] Exposures to TACs can also result in both short-term (acute) or long-term (chronic) non-cancer health impacts. Such impacts could include illnesses related to reproductive effects, respiratory effects, eye sensitivity, immune effects, kidney effects, blood effects, central nervous system, birth defects, or other adverse environmental effects.

[63] Occupational Safety and Health Administration (OSHA). 2003. United States Department of Labor. Safety and Health Topics: Methane. Website: www.osha.gov/dts/chemicalsampling /data/CH_250700.html. Accessed December 30, 2019.

[64] Centers for Disease Control and Prevention (CDC). 2012. Construction—website: www.cdc.gov/niosh/construction/. Indoor Environmental Quality—website: www.cdc.gov/niosh/topics/indoorenv/constructionieq.html. Accessed December 30, 2019.

[65] California Air Pollution Control Officers Association (CAPCOA). 2009. Health Risk Assessments for Proposed Land Use Projects.

[66] Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program-Risk Assessment Guidelines. February.

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 10 in a million implies a likelihood (or risk) that up to 10 persons, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these air toxics.

OEHHA has developed guidance for estimating cancer risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction of the proposed project.

The recommend method for the estimation of cancer risk is shown in the equations.

$$\text{Cancer Risk} = C_{DPM} \times \text{Inhalation Exposure Factor} \quad \text{(EQ-1)}$$

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu g/m^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

$$\text{Inhalation Exposure Factor} = \text{CPF} \times \text{EF} \times \text{ED} \times \text{DBR} \times \text{AAF/AT} \quad \text{(EQ-2)}$$

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 $(mg/kg\text{-}day)^{-1}$ for DPM
EF = Exposure frequency (days/year)
ED = Exposure duration (years of construction)
AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH)
AT = Averaging time period over which exposure is averaged (days)

Estimation of Chronic Non-Cancer Hazards

An evaluation of potential non-cancer effects of chronic chemical exposures was also conducted. Adverse health effects are evaluated by comparing the annual receptor concentration of each

chemical compound with the appropriate Reference Exposure Level (REL). Available RELs promulgated by OEHHA were considered in the assessment.

Risk characterization for non-cancer health hazards from TACs is expressed as an HI. The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the REL.

To quantify non-carcinogenic impacts, the HI approach was used.

$$HI = C_{ann}/REL \qquad \text{(EQ-3)}$$

Where:

HI = chronic hazard index
C_{ann} = annual average concentration of TAC as derived from the air dispersion model ($\mu g/m^3$)
REL = reference exposure level above which a significant impact is assumed to occur ($\mu g/m^3$)

The HI assumes that chronic exposures to TACs adversely affect a specific organ or organ system (toxicological endpoint) of the body. For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds 1, a health hazard is presumed to exist. OEHHA has defined a REL for DPM of 5 $\mu g/m^3$. The principal toxicological endpoint assumed in this assessment was through inhalation.

Toxic Air Contaminant Construction Analysis

Major sources of DPM during construction include off-road construction equipment and heavy-duty delivery truck activities. The results of the HRA prepared for project construction for cancer risk and long-term chronic cancer risk are summarized below. Air dispersion modeling was utilized to assess the project's potential health risks using AERMOD (version 19191), which is the air dispersion model accepted by the EPA and the SCAQMD for preparing HRAs. Exhaust emissions of DPM (as PM_{10} exhaust) were estimated using CalEEMod (version 2016.3.2). The construction emissions were assumed to be distributed over the project area with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per -year averaging period. Detailed parameters, a description of methodology, and complete calculations are contained in Appendix A. Table 17 summarizes emission rates of DPM during project construction.

Table 17: Project DPM Construction Emissions

Scenario	On-site DPM—Area (tons/year)	Off-site DPM—Road Segments (tons/year)[1]	Total Local DPM Emissions (tons/year)
Annual Construction Emissions			
Construction (Prior to SC AIR-2)	0.14659	0.00006	0.14665

Scenario	On-site DPM—Area (tons/year)	Off-site DPM—Road Segments (tons/year)[1]	Total Local DPM Emissions (tons/year)
Construction (With SC AIR-2)	0.10337	0.00006	0.10343

[1] The off-site emissions are estimated over three construction vehicle travel routes from within approximately 1,000 feet of the project site; each road modeled road segment was between 0.41 and 0.54 mile.
Source: CalEEMod Output and Construction Health Risk Assessment Calculations; see Appendix A and Appendix B.

The estimated health and hazard impacts at the Maximum Impacted Sensitive Receptor (MIR) from the proposed project's construction emissions, prior to incorporation of SC AIR-2, are provided in Table 18. As the proposed project would be required to adhere to the applicable standard conditions, Table 18 is shown for informational purposes only.

Table 18: Estimated Health Risks and Hazards During Project Construction—Prior to Compliance with SC AIR-2

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI[1]
Risks and Hazards at the MIR: Infants	11.8	0.02
Risks and Hazards at the MIR: Child	1.9	0.02
Risks and Hazards at the MIR: Adult	0.3	0.02
Significance Threshold	**10**	**1**
Exceeds Individual Source Threshold?	**Yes**	**No**

Notes:
[1] Chronic non-cancer HI was estimated by dividing the maximum annual DPM concentration (as PM_{10} exhaust) by the REL of 5 $\mu g/m^3$.
Source: Appendix B.

As noted in Table 18, the project's construction DPM emissions would not exceed the non-cancer hazard index significance threshold; however, the project's construction DPM emissions would exceed the cancer risk significance threshold prior to the incorporation of cleaner than average on-site construction equipment required by SC AIR-2. Table 19, below, summarizes the health and hazard impacts at the maximum impacted sensitive receptor from construction of the project after the implementation of SC AIR-2, which would ensure the use of off-road construction equipment that meet emissions standards for Tier IV Interim engines for all equipment with engines greater than 100 horsepower.

Table 19: Estimated Health Risks and Hazards During Project Construction—After Compliance with SC AIR-2

Source	Cancer Risk (risk per million)	Chronic Non-Cancer HI[1]
Risks and Hazards at the MIR: Infants	8.4	0.01
Risks and Hazards at the MIR: Child	1.3	0.01
Risks and Hazards at the MIR: Adult	0.2	0.01
Significance Threshold	**10**	**1**
Exceeds Individual Source Threshold?	**No**	**No**

Notes:
[1] Chronic non-cancer HI was estimated by dividing the maximum annual DPM concentration (as PM_{10} exhaust) by the REL of 5 $\mu g/m^3$.
Source: Appendix B.

As noted in Table 19, construction of the project would not exceed the cancer risk and non-cancer hazard index significance thresholds after incorporation of SC AIR-2. Adherence to SC AIR-2 would be required as a condition of approval. Therefore, the proposed project would not result in a significant impact on nearby sensitive receptors from toxic air contaminants during construction.

Toxic Air Contaminant Operational Analysis

Common sources of TACs include high traffic freeways, distribution centers, large gas dispensing facilities, and dry cleaners. The project proposes to develop a 36,500-square-foot industrial building on a 3.51-acre site and would have on-site sources of TACs during operation. The proposed project would primarily generate passenger vehicle trips from employees and visitors traveling to and from the project site; however, the project would also be served with daily truck deliveries. The main source of DPM from long-term warehouse operations and other related light industrial land uses is typically from combustion of diesel fuel in diesel-powered engines in on-road delivery trucks. Motor vehicle emissions refer to DPM exhaust emissions from motor vehicle traffic that would travel to and from the project site each day. An estimate of the number of vehicle trips that the project would generate was prepared, as shown in Table 9 contained in Section 4, Modeling Parameters and Assumptions. The ARB Air Quality Land Use Handbook indicates that there is concern for projects to generate substantial sources of TACs at 100 or more truck trips per day.

The proposed project would generate an estimated 56 truck trips per day. Therefore, project-related emissions from on-road sources during project operations would not expose sensitive receptors to substantial pollutant concentrations. Considering this information, TAC exposure impacts to off-site sensitive receptors are anticipated to be below established thresholds during project operation. Impacts would be less than significant.

Cumulative Toxic Air Contaminant Operational Analysis

As previously discussed, projects that exceed project-specific significance thresholds are considered by the SCAQMD cumulatively considerable. Conversely, projects that do not exceed project-specific

thresholds are generally not considered cumulatively significant. As discussed in Criteria 1 through 3, the proposed project would not expose sensitive receptors to substantial pollutant concentrations. Since the proposed project would not exceed project-specific thresholds it would not be considered to result in cumulatively significant impacts.

Standard Conditions

Implement SC AIR-1 and SC AIR-2.

Level of Significance

Less than significant impact.

5.2.4 - Objectionable Odors

Impact AIR-4:	**The project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**

Impact Analysis

Odors can cause a variety of responses. The impact of an odor is dependent on interacting factors such as frequency (how often), intensity (strength), duration (in time), offensiveness (unpleasantness), location, and sensory perception. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. Odor-related symptoms reported in several studies include nervousness, headache, sleeplessness, fatigue, dizziness, nausea, loss of appetite, stomachache, sinus congestion, eye irritation, nose irritation, runny nose, sore throat, cough, and asthma exacerbation.[67]

The SCAQMD's role is to protect the public's health from air pollution by overseeing and enforcing regulations.[68] The SCAQMD's resolution activity for odor compliance is mandated under California Health and Safety Code Section 41700 and falls under SCAQMD Rule 402. This rule on Public Nuisance Regulation states: "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 SCAQMD does not provide a suggested screening distance for a variety of odor-generating land uses and operations. However, the San Joaquin Valley Air Pollution Control District (Valley Air District) does have a screening distance for odor sources. Those distances are used as a guide to assess whether nearby facilities could be sources of significant odors. Projects that would site a new receptor farther than the applicable screening distances from an existing odor source would not

[67] South Coast Air Quality Management District (SCAQMD). 2007. Odor Detection, Mitigation and Control Technology Forum and Roundtable Discussion. 2007. Website: www.aqmd.gov/tao/conferencesworkshops/OdorForum/OdorForumSummary.pdf.
[68] Ibid.

likely have a significant impact. These screening distances by type of odor generator are listed in Table 20.

Table 20: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Source: San Joaquin Valley Air Pollution Control District. 2015. Guidance for Assessing and Mitigated Air Quality Impacts. February 19.	

Construction-related Odors

Potential sources that may emit odors during construction activities include exhaust from diesel construction equipment. However, because of the temporary nature of these emissions, intermittent nature of construction activities, and highly diffusive properties of diesel PM exhaust, nearby receptors would not be affected by diesel exhaust odors associated with project construction. Odors from these sources would be localized and generally confined to the immediate area surrounding the proposed project site. The proposed project would utilize typical construction techniques, and odors would be typical of most construction-sites and temporary in nature. Impacts would be less than significant.

Operational-related Odors

The proposed project includes construction and development of an industrial warehouse building, parking spaces, and associated landscaping. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, feed lots, coffee roasters, asphalt batch plants, and rendering plants. The proposed project would not engage in any of these activities and would not be considered an odor generator as identified in Table 20. Therefore, the proposed project would not be considered a generator of objectionable odors during operations. Minor sources of odors, such as exhaust from mobile sources, are not typically associated with numerous odor complaints, but are known to have

temporary and less concentrated odors. In Summary, the project's long-term operational activities would not have any substantial odor sources that would expose nearby receptors. Considering the low intensity of potential odor emissions, the proposed project's operational activities would not expose receptors to objectionable odor emissions. Impacts would be less than significant.

Standard Conditions

None required.

Level of Significance

Less than significant impact.

SECTION 6: GREENHOUSE GAS IMPACT ANALYSIS

6.1 - CEQA Guidelines

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on GHGs, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

6.1.1 - Thresholds of Significance for the Proposed Project

SCAQMD GHG Thresholds

The project site is within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD formed a working group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the air basin in 2008. The working group developed several different options that are contained in the SCAQMD Draft Guidance Document—Interim CEQA GHG Significance Threshold (Interim GHG Thresholds) that could be applied by lead agencies. The working group has not provided additional guidance since release of the interim guidance in 2008. The SCAQMD Board has not approved the thresholds; however, the Guidance Document provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.
- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:
  - All land use types: 3,000 metric tons (MT) carbon dioxide equivalents (CO_2e) per year

- Based on land use type: residential: 3,500 MT CO_2e per year; commercial: 1,400 MT CO_2e per year; or mixed use: 3,000 MT CO_2e per year

- Tier 4 has the following options:
  - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
  - Option 3, 2020 target for service population (SP), which includes residents and employees: 4.8 MT CO_2e/SP/year for projects and 6.6 MT CO_2e/SP/year for plans
  - Option 3, 2035 target: 3.0 MT CO_2e/SP/year for projects and 4.1 MT CO_2e/SP/year for plans
- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD provided substantial evidence is support of its threshold approach. The SCAQMD discusses its draft thresholds in the following excerpt:[69]

> The overarching policy objective with regard to establishing a GHG significance threshold for the purposes of analyzing GHG impacts pursuant to CEQA is to establish a performance standard or target GHG reduction objective that will ultimate contribute to reducing GHG emissions to stabilize climate change. Full implementation of the Governor's Executive Order S-3-05 would reduce GHG emissions 80 percent below 1990 levels or 90 percent below current levels by 2050. It is anticipated that achieving the Executive Order's objective would contribute to worldwide efforts to cap GHG concentrations at 450 ppm, thus, stabilizing global climate.
>
> As described below, staff's recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 3, which is expected to be the primary tier by which the AQMD will determine significance for projects where it is the lead agency, uses the Executive Order S-3-05 goal as the basis for deriving the screening level. Specifically, the Tier 3 screening level for stationary sources is based on an emission capture rate of 90 percent for all new or modified projects. A 90 percent emission capture rate means that 90 percent of total emissions from all new or modified stationary source projects would be subject to some type of CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact.

In summary, the SCAQMD's draft threshold uses the Executive Order S-3-05 goal as the basis for the Tier 3 screening level. Achieving the Executive Order's objective would contribute to worldwide efforts to cap CO_2 concentrations at 450 parts per million (ppm), thus stabilizing global climate. In

[69] South Coast Air Quality Management District (SCAQMD). 2008. Draft Guidance Document—Interim CEQA Greenhouse (GHG) Significance Threshold Document. Website: http://www.aqmd.gov /hb/attachments/2008/December/081231.exe.

2010, the SCAQMD Tier 3 threshold was expanded to include non-industrial projects, as explained in the minutes from the most recent working group meeting.[70]

To determine whether the proposed project would have a significant impact with respect to the generation of GHG emissions, this analysis utilizes the SCAQMD's draft local agency threshold for industrial uses of 10,000 MT CO_2e per year. The second CEQA Checklist question would be evaluated by assessing the project's consistency with the ARB's adopted 2017 Scoping Plan Update.

6.2 - Impact Analysis

6.2.1 - Greenhouse Gas Inventory

Impact GHG-1:	**The project would generate direct and indirect greenhouse gas emissions; however, these emissions would not result in a significant impact on the environment.**

Impact Analysis

Construction Emissions

The proposed project would generate GHG emissions during construction activities resulting from emission sources such as construction equipment, haul trucks, and construction worker vehicles. Although these emissions would be temporary and short-term in nature, they could represent a substantial contribution of GHG emissions. Construction emissions were modeled using CalEEMod version 2016.3.2. See Section 4-Modeling Parameters and Assumptions for assumptions the model selection and model inputs used in estimating emissions.

Table 21 presents the proposed project's total construction emissions, which are amortized over the assumed lifetime of the project and added with annual operational emissions.

Table 21: Estimated Construction-Related GHG Emissions

Construction Activity	Total GHG Emissions (MT CO2e per year)
Demolition (Removal of Existing Hardscape)	51
Site Preparation	9
Grading	26
Paving	17
Building Construction (2020)	54
Building Construction (2021)	347
Architectural Coating	**4**
Total Construction Emissions	**509**
Emissions Amortized Over 30 Years[1]	**17**

[70] South Coast Air Quality Management District (SCAQMD). 2010. Greenhouse Gas CEQA Threshold Stakeholder Working Group Meeting #15. September 28. Website: www.aqmd.gov/ceqa /handbook/GHG/2010/sept28mtg/ghgmtg15-web.pdf.

Construction Activity	Total GHG Emissions (MT CO2e per year)

Notes:
Unrounded emissions were used in calculations, including the reported total; therefore, totals may not appear to sum exactly due to rounding.
[1] Construction GHG emissions are amortized over the 30-year lifetime of the project.
Source: Appendix A.

Operational Emissions

Operational or long-term emissions occur over the life of the project. Project operations were modeled for the 2021 operational year, following the completion of construction. Sources for operational emissions are summarized below and are described in more detail in Section 4-Modeling Parameters and Assumptions. Sources for operational GHG emissions include:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the project site.
- **Natural Gas:** These emissions refer to the GHG emissions that occur when natural gas is burned on the project site. Natural gas uses could include heating water, space heating, dryers, stoves, or other uses.
- **Indirect Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the project.
- **Area Sources:** These emissions refer to those produced during activities such as landscape maintenance.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the project.

Table 22 presents the estimated annual GHG emissions from the project's operational activities. As shown in Table 22, the project would generate approximately 1,407 MT CO_2e per year after the inclusion of 17 MT CO_2e per year from project construction.

Table 22: Operational Greenhouse Gas Emissions

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Area	0.002
Energy	37
Waste	108
Water	16

GHG Emissions Source	GHG Emissions (MT CO_2e per year)
Mobile—Passenger Vehicles	29
Mobile—Trucks	1,200
Amortized Construction Emissions	17
Total Annual Project Emissions	**1,407**
Applicable Threshold of Significance	**10,000**
Exceeds Threshold of Significance?	**No**
Source: Appendix A.	

Summary

As shown in Table 22, the project's combined amortized construction and annual operational GHG emissions would not exceed the applicable threshold of significance of 10,000 MT CO_2e per year. Thus, the project's construction and operational GHG emissions would not result in a significant impact on the environment.

Standard Conditions

None required.

Level of Significance

Less than significant impact.

6.2.2 - Greenhouse Gas Reduction Plans

Impact GHG-2: **The project would not conflict with any applicable plan, policy or regulation of an agency adopted to reduce the emissions of greenhouse gases.**

Impact Analysis

This impact is addressed by assessing the project's consistency with the ARB's adopted 2017 Scoping Plan Update.

SB 32 2017 Scoping Plan Update

The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017. Table 23 provides an analysis of the project's consistency with the 2017 Scoping Plan Update measures. As shown in Table 23, many of the measures are not applicable to the project, while the project is consistent with strategies that are applicable.

Table 23: Consistency with SB 32 2017 Scoping Plan Update

2017 Scoping Plan Update Reduction Measure	Project Consistency
SB 350 50 percent Renewable Mandate. Utilities subject to the legislation will be required to increase their renewable energy mix from 33 percent in 2020 to 50 percent in 2030.	**Not applicable.** This measure would apply to utilities and not to individual development projects. The proposed project would purchase electricity from a utility subject to the SB 350 Renewable Mandate.
SB 350 Double Building Energy Efficiency by 2030. This is equivalent to a 20 percent reduction from 2014 building energy usage compared to current projected 2030 levels.	**Not applicable**. This measure applies to existing buildings. New structures are required to comply with Title 24 Energy Efficiency Standards that are expected to increase in stringency over time. The proposed project would comply with the applicable Title 24 Energy Efficiency Standards in effect at the time building permits are received.
Low Carbon Fuel Standard. This measure requires fuel providers to meet an 18 percent reduction in carbon content by 2030.	**Not applicable.** This is a Statewide measure that cannot be implemented by a project applicant or lead agency. However, vehicles accessing the project site would benefit from the standards.
Mobile Source Strategy (Cleaner Technology and Fuels Scenario). Vehicle manufacturers will be required to meet existing regulations mandated by the LEV III and Heavy-Duty Vehicle programs. The strategy includes a goal of having 4.2 million ZEVs on the road by 2030 and increasing numbers of ZEV trucks and buses.	**Consistent with Standard Conditions.** The proposed project is industrial in nature and would support truck and freight operations. It is expected that deliveries throughout the State would be made with an increasing number of ZEV delivery trucks, including trips that would be coming to and from the project site. SC GHG-1 through SC GHG-3 would require the project to install infrastructure for the support and operation of zero and near-zero freight vehicles and equipment powered by renewable energy.
Sustainable Freight Action Plan The plan's target is to improve freight system efficiency 25 percent by increasing the value of goods and services produced from the freight sector, relative to the amount of carbon that it produces by 2030. This would be achieved by deploying over 100,000 freight vehicles and equipment capable of zero emission operation and maximize near-zero emission freight vehicles and equipment powered by renewable energy by 2030.	**Consistent with Standard Conditions.** This measure applies to owners and operators of trucks and freight operations. The proposed project is industrial in nature and would support truck and freight operations. SC GHG-1 through SC GHG-3 would require the project to install infrastructure for the support and operation of zero and near-zero freight vehicles and equipment powered by renewable energy.
Short-Lived Climate Pollutant (SLCP) Reduction Strategy. The strategy requires the reduction of SLCPs by 40 percent from 2013 levels by 2030 and the reduction of black carbon by 50 percent from 2013 levels by 2030.	**Consistent.** The proposed project would not include major sources of black carbon. This measure revolves around ARB's SLCP Reduction Strategy that was released in April 2016 as a result of SB 650. SB 650 required the State to develop a strategy to reduce emissions of SLCPs. DPM reductions have come from strong efforts to reduce on-road vehicle emissions. Car and truck engines used to be the largest sources of anthropogenic black carbon emissions in California, but the State's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel

2017 Scoping Plan Update Reduction Measure	Project Consistency
	engines within 10 years. These policies are based on existing technologies.
SB 375 Sustainable Communities Strategies. Requires Regional Transportation Plans to include a sustainable communities strategy for reduction of per capita vehicle miles traveled.	**Not applicable.** The proposed project does not include the development of a Regional Transportation Plan.
Post-2020 Cap-and-Trade Program. The Post 2020 Cap-and-Trade Program continues the existing program for another 10 years. The Cap-and-Trade Program applies to large industrial sources such as power plants, refineries, and cement manufacturers.	**Not applicable.** The proposed project is not one targeted by the cap-and-trade system regulations, and, therefore, this measure does not apply to the project. However, the post-2020 Cap-and-Trade Program indirectly affects people and entities who use the products and services produced by the regulated industrial sources when increased cost of products or services (such as electricity and fuel) are transferred to the consumers.
Natural and Working Lands Action Plan. The ARB is working in coordination with several other agencies at the federal, State, and local levels, stakeholders, and with the public, to develop measures as outlined in the Scoping Plan Update and the governor's Executive Order B-30-15 to reduce GHG emissions and to cultivate net carbon sequestration potential for California's natural and working land.	**Not Applicable**. The project site is in a built-up urban area and would not be considered natural or working lands.
Source: California Air Resource Board (ARB). 2017. California's 2017 Climate Change Scoping Plan. November. Website: https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed January 13, 2020.	

As discussed in Table 23, the proposed project would not conflict with any applicable 2017 Scoping Plan Update reduction measures with incorporation of SC GHG-1 through SC GHG-3. As shown in Impact GHG-1, the project's combined amortized construction and annual operational GHG emissions would not exceed the applicable threshold of 10,000 MT CO_2e per year. Considering this information, the proposed project would not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce GHG emissions. Given that the proposed project must comply with SC GHG-1 through SC GHG-3, impacts are considered less than significant.

Standard Conditions

SC GHG-1 The project shall be designed to incorporate a minimum of six percent of all vehicle parking spaces (including for trucks) with electric vehicle charging spaces and minimum eight percent of all spaces designated for clean air vehicles, consistent with the applicable California Green Building Standards Code Nonresidential Mandatory Measures (Section 5.106). Electric vehicle charging spaces must provide electrical vehicle charging infrastructure to support future

installation of electric vehicle supply equipment and shall meet the design space requirements of California Green Building Standards Code Section 5.106.5.3.2.

SC GHG-2 All buildings shall be designed to provide infrastructure to support use of electric-powered forklifts and/or other interior vehicles.

SC GHG-3 All buildings shall be designed to provide electric infrastructure to support use of exterior yard trucks and on-site vehicles. The operation of yard trucks that are used to move trailers and on-site vehicles within the project site shall be powered by electricity unless the project applicant can reasonably demonstrate that specific equipment is not available for a task.

Level of Significance

Less than significant impact.

SECTION 7: ENERGY IMPACT ANALYSIS

7.1 - CEQA Guidelines

CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial, adverse change in the environment." To determine if a project would have a significant impact on Energy, the type, level, and impact of emissions generated by the project must be evaluated.

The following GHG significance thresholds are contained in Appendix G of the CEQA Guidelines, which were amendments adopted into the Guidelines on March 18, 2010, pursuant to SB 97. A significant impact would occur if the project would:

- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

7.2 - Impact Analysis

7.2.1 - Project Energy Consumption

Impact ENER-1:	**The project would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during construction or operation**

Impact Analysis

A discussion of the project's energy use is presented below. Energy use consumed by the proposed project was estimated and includes natural gas, electricity, and fuel consumption for project construction and operation. Energy calculations are included as part of Appendix A.

Construction Impacts

The anticipated construction schedule was assumed to begin in October 2020 and conclude in October 2021. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require removal of existing hardscape, site preparation, grading, building construction, architectural coating, and paving. The construction phase would require energy for the manufacture and transportation of building materials, site preparation (e.g., demolition, site clearing, and grading), and actual construction of the warehouse building. Petroleum-based fuels such as diesel and gasoline would be the primary sources of energy for these tasks.

Types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, bulldozers,

frontend loaders, forklifts, and cranes. Construction equipment is estimated to consume a total of 15,919 gallons of diesel fuel over the entire construction duration (Appendix D).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) projected number of trips the project would generate, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the EMFAC mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix D. In total, the proposed project is estimated to generate 274,137 VMT and a combined 13,223 gallons of gasoline and diesel for vehicle travel during construction.

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. Section 9.50.070 of the Rialto Code of Ordinances restricts construction activity to the weekday hours of 7:00 a.m. to 5:30 p.m. from October 1st through April 30th, 6:00 a.m. to 7:00 p.m. from May 1st through September 30th, and Saturday hours of 8:00 a.m. to 5:00 p.m., while construction on Sundays or State holidays is not allowed.[71] As on-site construction activities would be restricted to these hours, it is anticipated that use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 to 720 square feet. A typical 720-square-foot office trailer would consume approximately 7,305 kilowatt-hours (kWh) during the approximately 12- to 13-month construction phase (Appendix D).

The overall construction schedule and process is already designed to be efficient and avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to added expenses associated with renting, maintaining, and fueling equipment. Therefore, opportunities for future efficiency gains during construction are limited. In addition, California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Therefore, it is anticipated that the construction phase of the project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operational Impacts

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 24.

Table 24: Estimated Annual Project Energy Consumption

Energy Consumption Activity	Annual Consumption
Operational Electricity Consumption	134,001 kWh/year
Operational Natural Gas Consumption	76,975 kBTU/year
Operational Fuel Consumption[1]	Trucks: 122,601 gallons of gasoline and diesel
	Passenger Vehicles: 12,847 gallons of gasoline and diesel
	Total: 135,448

[71] City of Rialto. 2008. Rialto Code of Ordinances Section 9.50.070 – Disturbances from construction activity.

	gallons of gasoline and diesel

Note: kBTU = kilo-British Thermal Unit
Source: Appendix D.

Operation of the proposed project would consume an estimated 134,001 kWh of electricity and an estimated 76,975 kilo-British Thermal Unit (kBTU) of natural gas on an annual basis. The proposed buildings would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the State's Building Energy Efficiency Standards. These are widely regarded as the most advanced building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary.

Project-related passenger vehicle trips are anticipated to result in 334,286 VMT and consume an estimated 12,847 gallons of gasoline and diesel combined on an annual basis. Project-related truck trips would result in approximately 815,360 VMT and consume an estimated 122,601 gallons of gasoline and diesel combined on an annual basis. Fuel consumption associated with vehicle trips generated by project operations would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. Furthermore, the proposed project is in an urbanized portion of the City and would provide industrial warehouse development and jobs to operate it. The existing sidewalk on Merrill Avenue would facilitate pedestrian connectivity to adjacent land uses.

Regional access to the site is provided via I-215 at the West 5th Street exit and via I-10 at the South Riverside Avenue and Cedar Avenue exits, which are approximately 4.7, 1.8, and 1.9 miles from the project site, respectively. In addition, the project site is approximately 0.6 mile from the Metrolink Rialto Station on the San Bernardino line, and approximately 0.1 mile from the nearest bus stop for the Omnitrans 15 bus route. With nearby public transit options, transportation fuel consumption would not be wasteful, inefficient, or unnecessary. Impacts would be less than significant.

Standard Conditions

None required.

Level of Significance

Less than significant impact.

7.2.2 - Energy Plan Consistency

Impact ENER-2: **The project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency**

Impact Analysis

The proposed project would be served with electricity provided by Southern California Edison. In 2017, Southern California Edison obtained 29 percent of its electricity from renewable energy

sources.[72] The project building would be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings as applicable. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning and water heating systems), and indoor and outdoor lighting. Incorporation of Title 24 standards into design of the proposed project would ensure that the project would not result in wasteful energy use.

The proposed project would comply with existing State energy standards. As such, the project would not conflict with State or local renewable or energy efficiency objectives. Impacts would be less than significant.

Standard Conditions

None required.

Level of Significance

Less than significant impact.

[72] California Energy Commission. 2018. 2017 Power Content Label: Southern California Edison. July.

Appendix A: CalEEMod Output

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CalEEMod Output

Table of Contents

Dedeaux Industrial Center Project – Construction and Passenger Operations

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Unmitigated Construction and Passenger and Building Operations
Unmitigated Operations - area, energy, and passenger vehicle operations (truck operations analyzed in a separate run)
CO2 intensity factor adjusted based on Renewable Portfolio Standard.

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Earliest anticipated construction schedule

Off-road Equipment -
Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Additional daily vendor trips added where default value was zero to account for miscellaneous trips.

Demolition - Estimate of 3,819 tons of debris to be removed (removal of existing hardscape); see supporting information for conversion of hardscape to tons of debris

Grading - 3,100 cubic yards of material to be exported during the grading phase

Architectural Coating -

Vehicle Trips - Passenger vehicle daily trip rate consistent with Dedeaux Industrial Center Traffic Impact Analysis - Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.
78 daily passenger vehicle trips.

Consumer Products - Updated based on 2017 ARB VOC inventory data and 2017 population estimates based on the State of California's Department of Finance demographic projections were used to estimate a statewide VOC EF for 2017.

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403

Energy Mitigation -

Water Mitigation - Compliance with Green Building Code Standards

Fleet Mix - Passenger vehicle fleet mix

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConsumerProducts	ROG_EF	1.98E-05	1.6E-06
tblFleetMix	HHD	0.06	0.00

tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.2670e-003	0.00
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblGrading	MaterialExported	0.00	3,100.00
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	2.40
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	2.40
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	2.40

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1101	1.0998	0.7856	1.7500e-003	0.1370	0.0510	0.1879	0.0512	0.0474	0.0986	0.0000	156.9605	156.9605	0.0319	0.0000	157.7580
2021	0.4096	2.0052	1.9301	3.9600e-003	0.0819	0.0971	0.1790	0.0221	0.0913	0.1134	0.0000	349.6415	349.6415	0.0615	0.0000	351.1779
Maximum	**0.4096**	**2.0052**	**1.9301**	**3.9600e-003**	**0.1370**	**0.0971**	**0.1879**	**0.0512**	**0.0913**	**0.1134**	**0.0000**	**349.6415**	**349.6415**	**0.0615**	**0.0000**	**351.1779**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1101	1.0998	0.7856	1.7500e-003	0.0684	0.0510	0.1194	0.0240	0.0474	0.0714	0.0000	156.9603	156.9603	0.0319	0.0000	157.7579
2021	0.4096	2.0052	1.9301	3.9600e-003	0.0819	0.0971	0.1790	0.0221	0.0913	0.1134	0.0000	349.6412	349.6412	0.0615	0.0000	351.1776
Maximum	**0.4096**	**2.0052**	**1.9301**	**3.9600e-003**	**0.0819**	**0.0971**	**0.1790**	**0.0240**	**0.0913**	**0.1134**	**0.0000**	**349.6412**	**349.6412**	**0.0615**	**0.0000**	**351.1776**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**31.33**	**0.00**	**18.69**	**37.05**	**0.00**	**12.81**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**10-5-2020**	**1-4-2021**	1.2218	1.2218
2	**1-5-2021**	**4-4-2021**	0.7133	0.7133
3	**4-5-2021**	**7-4-2021**	0.7216	0.7216
4	**7-5-2021**	**9-30-2021**	0.6978	0.6978
		Highest	1.2218	1.2218

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	0.0360	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Energy	4.2000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	36.4783	36.4783	1.8400e-003	4.4000e-004	36.6555
Mobile	0.0204	0.0369	0.3653	1.1900e-003	0.1246	7.3000e-004	0.1253	0.0331	6.8000e-004	0.0337	0.0000	107.8709	107.8709	2.5500e-003	0.0000	107.9346
Waste						0.0000	0.0000		0.0000	0.0000	6.5789	0.0000	6.5789	0.3888	0.0000	16.2990
Water						0.0000	0.0000		0.0000	0.0000	2.4971	25.3431	27.8402	0.2579	6.3400e-003	36.1765
Total	**0.0569**	**0.0407**	**0.3692**	**1.2100e-003**	**0.1246**	**1.0200e-003**	**0.1256**	**0.0331**	**9.7000e-004**	**0.0340**	**9.0761**	**169.6937**	**178.7698**	**0.6511**	**6.7800e-003**	**197.0671**

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	0.0360	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Energy	4.2000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	36.4783	36.4783	1.8400e-003	4.4000e-004	36.6555
Mobile	0.0204	0.0369	0.3653	1.1900e-003	0.1246	7.3000e-004	0.1253	0.0331	6.8000e-004	0.0337	0.0000	107.8709	107.8709	2.5500e-003	0.0000	107.9346
Waste						0.0000	0.0000		0.0000	0.0000	6.5789	0.0000	6.5789	0.3888	0.0000	16.2990
Water						0.0000	0.0000		0.0000	0.0000	1.9977	20.3914	22.3891	0.2063	5.0700e-003	29.0587
Total	**0.0569**	**0.0407**	**0.3692**	**1.2100e-003**	**0.1246**	**1.0200e-003**	**0.1256**	**0.0331**	**9.7000e-004**	**0.0340**	**8.5767**	**164.7420**	**173.3187**	**0.5995**	**5.5100e-003**	**189.9493**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**5.50**	**2.92**	**3.05**	**7.92**	**18.73**	**3.61**

3.0 Construction Detail

Construction Phase

Dedeaux Industrial Center Project – Construction and Passenger Operations - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/5/2020	10/30/2020	5	20	
2	Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5	
3	Grading	Grading	11/7/2020	11/18/2020	5	8	
4	Building Construction	Building Construction	11/19/2020	10/6/2021	5	230	
5	Paving	Paving	11/19/2020	12/14/2020	5	18	
6	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	378.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	388.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	24.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0409	0.0000	0.0409	6.1900e-003	0.0000	6.1900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**0.0409**	**0.0166**	**0.0575**	**6.1900e-003**	**0.0154**	**0.0216**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-003	0.0477	7.3100e-003	1.5000e-004	3.2500e-003	1.4000e-004	3.3900e-003	8.9000e-004	1.3000e-004	1.0300e-003	0.0000	14.1211	14.1211	8.0000e-004	0.0000	14.1411
Vendor	1.2000e-004	4.2700e-003	8.9000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.0213	1.0213	7.0000e-005	0.0000	1.0230
Worker	7.4000e-004	5.8000e-004	5.8200e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4097	1.4097	4.0000e-005	0.0000	1.4108
Total	**2.0600e-003**	**0.0526**	**0.0140**	**1.8000e-004**	**5.1400e-003**	**1.7000e-004**	**5.3200e-003**	**1.4000e-003**	**1.6000e-004**	**1.5700e-003**	**0.0000**	**16.5521**	**16.5521**	**9.1000e-004**	**0.0000**	**16.5749**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0159	0.0000	0.0159	2.4100e-003	0.0000	2.4100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**0.0159**	**0.0166**	**0.0325**	**2.4100e-003**	**0.0154**	**0.0178**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-003	0.0477	7.3100e-003	1.5000e-004	3.2500e-003	1.4000e-004	3.3900e-003	8.9000e-004	1.3000e-004	1.0300e-003	0.0000	14.1211	14.1211	8.0000e-004	0.0000	14.1411
Vendor	1.2000e-004	4.2700e-003	8.9000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.0213	1.0213	7.0000e-005	0.0000	1.0230
Worker	7.4000e-004	5.8000e-004	5.8200e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4097	1.4097	4.0000e-005	0.0000	1.4108
Total	**2.0600e-003**	**0.0526**	**0.0140**	**1.8000e-004**	**5.1400e-003**	**1.7000e-004**	**5.3200e-003**	**1.4000e-003**	**1.6000e-004**	**1.5700e-003**	**0.0000**	**16.5521**	**16.5521**	**9.1000e-004**	**0.0000**	**16.5749**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253
Total	**0.0102**	**0.1060**	**0.0538**	**1.0000e-004**	**0.0452**	**5.4900e-003**	**0.0507**	**0.0248**	**5.0500e-003**	**0.0299**	**0.0000**	**8.3577**	**8.3577**	**2.7000e-003**	**0.0000**	**8.4253**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	1.0700e-003	2.2000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2553	0.2553	2.0000e-005	0.0000	0.2558
Worker	2.2000e-004	1.7000e-004	1.7500e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4229	0.4229	1.0000e-005	0.0000	0.4232
Total	**2.5000e-004**	**1.2400e-003**	**1.9700e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.7000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.6782**	**0.6782**	**3.0000e-005**	**0.0000**	**0.6790**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0176	0.0000	0.0176	9.6800e-003	0.0000	9.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252
Total	**0.0102**	**0.1060**	**0.0538**	**1.0000e-004**	**0.0176**	**5.4900e-003**	**0.0231**	**9.6800e-003**	**5.0500e-003**	**0.0147**	**0.0000**	**8.3577**	**8.3577**	**2.7000e-003**	**0.0000**	**8.4252**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	1.0700e-003	2.2000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2553	0.2553	2.0000e-005	0.0000	0.2558
Worker	2.2000e-004	1.7000e-004	1.7500e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4229	0.4229	1.0000e-005	0.0000	0.4232
Total	**2.5000e-004**	**1.2400e-003**	**1.9700e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.7000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.6782**	**0.6782**	**3.0000e-005**	**0.0000**	**0.6790**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0264	0.0000	0.0264	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	**9.7200e-003**	**0.1055**	**0.0642**	**1.2000e-004**	**0.0264**	**5.0900e-003**	**0.0315**	**0.0135**	**4.6900e-003**	**0.0182**	**0.0000**	**10.4235**	**10.4235**	**3.3700e-003**	**0.0000**	**10.5078**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2300e-003	0.0490	7.5000e-003	1.5000e-004	3.3400e-003	1.4000e-004	3.4800e-003	9.2000e-004	1.4000e-004	1.0500e-003	0.0000	14.4947	14.4947	8.2000e-004	0.0000	14.5152
Vendor	5.0000e-005	1.7100e-003	3.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4085	0.4085	3.0000e-005	0.0000	0.4092
Worker	3.0000e-004	2.3000e-004	2.3300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5639	0.5639	2.0000e-005	0.0000	0.5643
Total	**1.5800e-003**	**0.0509**	**0.0102**	**1.6000e-004**	**4.1000e-003**	**1.5000e-004**	**4.2500e-003**	**1.1200e-003**	**1.5000e-004**	**1.2700e-003**	**0.0000**	**15.4671**	**15.4671**	**8.7000e-004**	**0.0000**	**15.4887**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0103	0.0000	0.0103	5.2600e-003	0.0000	5.2600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	**9.7200e-003**	**0.1055**	**0.0642**	**1.2000e-004**	**0.0103**	**5.0900e-003**	**0.0154**	**5.2600e-003**	**4.6900e-003**	**9.9500e-003**	**0.0000**	**10.4235**	**10.4235**	**3.3700e-003**	**0.0000**	**10.5078**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2300e-003	0.0490	7.5000e-003	1.5000e-004	3.3400e-003	1.4000e-004	3.4800e-003	9.2000e-004	1.4000e-004	1.0500e-003	0.0000	14.4947	14.4947	8.2000e-004	0.0000	14.5152
Vendor	5.0000e-005	1.7100e-003	3.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4085	0.4085	3.0000e-005	0.0000	0.4092
Worker	3.0000e-004	2.3000e-004	2.3300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5639	0.5639	2.0000e-005	0.0000	0.5643
Total	**1.5800e-003**	**0.0509**	**0.0102**	**1.6000e-004**	**4.1000e-003**	**1.5000e-004**	**4.2500e-003**	**1.1200e-003**	**1.5000e-004**	**1.2700e-003**	**0.0000**	**15.4671**	**15.4671**	**8.7000e-004**	**0.0000**	**15.4887**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0329	0.2974	0.2612	4.2000e-004		0.0173	0.0173		0.0163	0.0163	0.0000	35.8996	35.8996	8.7600e-003	0.0000	36.1185
Total	**0.0329**	**0.2974**	**0.2612**	**4.2000e-004**		**0.0173**	**0.0173**		**0.0163**	**0.0163**	**0.0000**	**35.8996**	**35.8996**	**8.7600e-003**	**0.0000**	**36.1185**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1500e-003	0.0397	8.3000e-003	1.0000e-004	2.3500e-003	1.8000e-004	2.5300e-003	6.8000e-004	1.7000e-004	8.5000e-004	0.0000	9.4978	9.4978	6.6000e-004	0.0000	9.5142
Worker	4.5900e-003	3.6100e-003	0.0361	1.0000e-004	0.0102	7.0000e-005	0.0103	2.7100e-003	6.0000e-005	2.7700e-003	0.0000	8.7403	8.7403	2.6000e-004	0.0000	8.7469
Total	**5.7400e-003**	**0.0433**	**0.0444**	**2.0000e-004**	**0.0126**	**2.5000e-004**	**0.0128**	**3.3900e-003**	**2.3000e-004**	**3.6200e-003**	**0.0000**	**18.2381**	**18.2381**	**9.2000e-004**	**0.0000**	**18.2611**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0329	0.2974	0.2612	4.2000e-004		0.0173	0.0173		0.0163	0.0163	0.0000	35.8995	35.8995	8.7600e-003	0.0000	36.1185
Total	**0.0329**	**0.2974**	**0.2612**	**4.2000e-004**		**0.0173**	**0.0173**		**0.0163**	**0.0163**	**0.0000**	**35.8995**	**35.8995**	**8.7600e-003**	**0.0000**	**36.1185**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1500e-003	0.0397	8.3000e-003	1.0000e-004	2.3500e-003	1.8000e-004	2.5300e-003	6.8000e-004	1.7000e-004	8.5000e-004	0.0000	9.4978	9.4978	6.6000e-004	0.0000	9.5142
Worker	4.5900e-003	3.6100e-003	0.0361	1.0000e-004	0.0102	7.0000e-005	0.0103	2.7100e-003	6.0000e-005	2.7700e-003	0.0000	8.7403	8.7403	2.6000e-004	0.0000	8.7469
Total	**5.7400e-003**	**0.0433**	**0.0444**	**2.0000e-004**	**0.0126**	**2.5000e-004**	**0.0128**	**3.3900e-003**	**2.3000e-004**	**3.6200e-003**	**0.0000**	**18.2381**	**18.2381**	**9.2000e-004**	**0.0000**	**18.2611**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1891	1.7345	1.6492	2.6800e-003		0.0954	0.0954		0.0897	0.0897	0.0000	230.4791	230.4791	0.0556	0.0000	231.8692
Total	**0.1891**	**1.7345**	**1.6492**	**2.6800e-003**		**0.0954**	**0.0954**		**0.0897**	**0.0897**	**0.0000**	**230.4791**	**230.4791**	**0.0556**	**0.0000**	**231.8692**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3300e-003	0.2323	0.0473	6.3000e-004	0.0151	4.0000e-004	0.0155	4.3500e-003	3.8000e-004	4.7300e-003	0.0000	60.6464	60.6464	4.0900e-003	0.0000	60.7486
Worker	0.0275	0.0208	0.2127	6.0000e-004	0.0655	4.3000e-004	0.0659	0.0174	3.9000e-004	0.0178	0.0000	54.3211	54.3211	1.5200e-003	0.0000	54.3591
Total	**0.0338**	**0.2531**	**0.2600**	**1.2300e-003**	**0.0805**	**8.3000e-004**	**0.0814**	**0.0217**	**7.7000e-004**	**0.0225**	**0.0000**	**114.9675**	**114.9675**	**5.6100e-003**	**0.0000**	**115.1077**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1891	1.7345	1.6492	2.6800e-003		0.0954	0.0954		0.0897	0.0897	0.0000	230.4788	230.4788	0.0556	0.0000	231.8689
Total	**0.1891**	**1.7345**	**1.6492**	**2.6800e-003**		**0.0954**	**0.0954**		**0.0897**	**0.0897**	**0.0000**	**230.4788**	**230.4788**	**0.0556**	**0.0000**	**231.8689**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3300e-003	0.2323	0.0473	6.3000e-004	0.0151	4.0000e-004	0.0155	4.3500e-003	3.8000e-004	4.7300e-003	0.0000	60.6464	60.6464	4.0900e-003	0.0000	60.7486
Worker	0.0275	0.0208	0.2127	6.0000e-004	0.0655	4.3000e-004	0.0659	0.0174	3.9000e-004	0.0178	0.0000	54.3211	54.3211	1.5200e-003	0.0000	54.3591
Total	**0.0338**	**0.2531**	**0.2600**	**1.2300e-003**	**0.0805**	**8.3000e-004**	**0.0814**	**0.0217**	**7.7000e-004**	**0.0225**	**0.0000**	**114.9675**	**114.9675**	**5.6100e-003**	**0.0000**	**115.1077**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	2.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0135**	**0.1062**	**0.1105**	**1.7000e-004**		**5.8600e-003**	**5.8600e-003**		**5.4000e-003**	**5.4000e-003**	**0.0000**	**14.7348**	**14.7348**	**4.6300e-003**	**0.0000**	**14.8506**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	3.8400e-003	8.0000e-004	1.0000e-005	2.3000e-004	2.0000e-005	2.4000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.9191	0.9191	6.0000e-005	0.0000	0.9207
Worker	8.9000e-004	7.0000e-004	6.9800e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6917	1.6917	5.0000e-005	0.0000	1.6930
Total	**1.0000e-003**	**4.5400e-003**	**7.7800e-003**	**3.0000e-005**	**2.2000e-003**	**3.0000e-005**	**2.2300e-003**	**5.9000e-004**	**3.0000e-005**	**6.2000e-004**	**0.0000**	**2.6108**	**2.6108**	**1.1000e-004**	**0.0000**	**2.6137**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	2.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0135**	**0.1062**	**0.1105**	**1.7000e-004**		**5.8600e-003**	**5.8600e-003**		**5.4000e-003**	**5.4000e-003**	**0.0000**	**14.7348**	**14.7348**	**4.6300e-003**	**0.0000**	**14.8506**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	3.8400e-003	8.0000e-004	1.0000e-005	2.3000e-004	2.0000e-005	2.4000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.9191	0.9191	6.0000e-005	0.0000	0.9207
Worker	8.9000e-004	7.0000e-004	6.9800e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6917	1.6917	5.0000e-005	0.0000	1.6930
Total	**1.0000e-003**	**4.5400e-003**	**7.7800e-003**	**3.0000e-005**	**2.2000e-003**	**3.0000e-005**	**2.2300e-003**	**5.9000e-004**	**3.0000e-005**	**6.2000e-004**	**0.0000**	**2.6108**	**2.6108**	**1.1000e-004**	**0.0000**	**2.6137**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1840					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	**0.1860**	**0.0137**	**0.0164**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.6000e-004**	**0.0000**	**2.3019**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.5000e-003	7.1000e-004	1.0000e-005	2.3000e-004	1.0000e-005	2.3000e-004	7.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9143	0.9143	6.0000e-005	0.0000	0.9158
Worker	5.0000e-004	3.8000e-004	3.8500e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9827	0.9827	3.0000e-005	0.0000	0.9834
Total	**6.0000e-004**	**3.8800e-003**	**4.5600e-003**	**2.0000e-005**	**1.4100e-003**	**2.0000e-005**	**1.4200e-003**	**3.8000e-004**	**2.0000e-005**	**3.9000e-004**	**0.0000**	**1.8970**	**1.8970**	**9.0000e-005**	**0.0000**	**1.8992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1840					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	**0.1860**	**0.0137**	**0.0164**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.6000e-004**	**0.0000**	**2.3019**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.5000e-003	7.1000e-004	1.0000e-005	2.3000e-004	1.0000e-005	2.3000e-004	7.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9143	0.9143	6.0000e-005	0.0000	0.9158
Worker	5.0000e-004	3.8000e-004	3.8500e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9827	0.9827	3.0000e-005	0.0000	0.9834
Total	**6.0000e-004**	**3.8800e-003**	**4.5600e-003**	**2.0000e-005**	**1.4100e-003**	**2.0000e-005**	**1.4200e-003**	**3.8000e-004**	**2.0000e-005**	**3.9000e-004**	**0.0000**	**1.8970**	**1.8970**	**9.0000e-005**	**0.0000**	**1.8992**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0204	0.0369	0.3653	1.1900e-003	0.1246	7.3000e-004	0.1253	0.0331	6.8000e-004	0.0337	0.0000	107.8709	107.8709	2.5500e-003	0.0000	107.9346
Unmitigated	0.0204	0.0369	0.3653	1.1900e-003	0.1246	7.3000e-004	0.1253	0.0331	6.8000e-004	0.0337	0.0000	107.8709	107.8709	2.5500e-003	0.0000	107.9346

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	78.00	78.00	78.00	334,286	334,286
Total	78.00	78.00	78.00	334,286	334,286

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.620587	0.041891	0.202723	0.134800	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.3706	32.3706	1.7600e-003	3.6000e-004	32.5234
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	32.3706	32.3706	1.7600e-003	3.6000e-004	32.5234
NaturalGas Mitigated	4.2000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1077	4.1077	8.0000e-005	8.0000e-005	4.1321
NaturalGas Unmitigated	4.2000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1077	4.1077	8.0000e-005	8.0000e-005	4.1321

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					
General Office Building	6940	4.0000e-005	3.4000e-004	2.9000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3703	0.3703	1.0000e-005	1.0000e-005	0.3726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	70035	3.8000e-004	3.4300e-003	2.8800e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7373	3.7373	7.0000e-005	7.0000e-005	3.7595
Total		**4.2000e-004**	**3.7700e-003**	**3.1700e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.1077**	**4.1077**	**8.0000e-005**	**8.0000e-005**	**4.1321**

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					
General Office Building	6940	4.0000e-005	3.4000e-004	2.9000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3703	0.3703	1.0000e-005	1.0000e-005	0.3726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	70035	3.8000e-004	3.4300e-003	2.8800e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7373	3.7373	7.0000e-005	7.0000e-005	3.7595
Total		**4.2000e-004**	**3.7700e-003**	**3.1700e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.1077**	**4.1077**	**8.0000e-005**	**8.0000e-005**	**4.1321**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	19040	4.5995	2.5000e-004	5.0000e-005	4.6212
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33541.2	8.1025	4.4000e-004	9.0000e-005	8.1408
Unrefrigerated Warehouse-No Rail	81420	19.6686	1.0700e-003	2.2000e-004	19.7614
Total		**32.3706**	**1.7600e-003**	**3.6000e-004**	**32.5234**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	19040	4.5995	2.5000e-004	5.0000e-005	4.6212
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33541.2	8.1025	4.4000e-004	9.0000e-005	8.1408
Unrefrigerated Warehouse-No Rail	81420	19.6686	1.0700e-003	2.2000e-004	19.7614
Total		**32.3706**	**1.7600e-003**	**3.6000e-004**	**32.5234**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0360	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Unmitigated	0.0360	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Total	**0.0360**	**1.0000e-005**	**7.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4600e-003**	**1.4600e-003**	**0.0000**	**0.0000**	**1.5600e-003**

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	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.5000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4600e-003	1.4600e-003	0.0000	0.0000	1.5600e-003
Total	**0.0360**	**1.0000e-005**	**7.5000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.4600e-003**	**1.4600e-003**	**0.0000**	**0.0000**	**1.5600e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	22.3891	0.2063	5.0700e-003	29.0587
Unmitigated	27.8402	0.2579	6.3400e-003	36.1765

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.355467 / 0.217867	1.8156	0.0117	2.9000e-004	2.1947
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	7.51563 / 0	26.0246	0.2462	6.0500e-003	33.9818
Total		**27.8402**	**0.2579**	**6.3400e-003**	**36.1765**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.284374 / 0.217867	1.5694	9.3500e-003	2.4000e-004	1.8733
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	6.0125 / 0	20.8197	0.1970	4.8400e-003	27.1854
Total		**22.3891**	**0.2063**	**5.0800e-003**	**29.0587**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.5789	0.3888	0.0000	16.2990
Unmitigated	6.5789	0.3888	0.0000	16.2990

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	1.86	0.3776	0.0223	0.0000	0.9354
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	30.55	6.2014	0.3665	0.0000	15.3636
Total		**6.5789**	**0.3888**	**0.0000**	**16.2990**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	1.86	0.3776	0.0223	0.0000	0.9354
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	30.55	6.2014	0.3665	0.0000	15.3636
Total		**6.5789**	**0.3888**	**0.0000**	**16.2990**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dedeaux Industrial Center Project – Construction and Passenger Operations

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Unmitigated Construction and Passenger and Building Operations
Unmitigated Operations - area, energy, and passenger vehicle operations (truck operations analyzed in a separate run)
CO2 intensity factor adjusted based on Renewable Portfolio Standard.

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Earliest anticipated construction schedule

Off-road Equipment -
Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Additional daily vendor trips added where default value was zero to account for miscellaneous trips.

Demolition - Estimate of 3,819 tons of debris to be removed (removal of existing hardscape); see supporting information for conversion of hardscape to tons of debris

Grading - 3,100 cubic yards of material to be exported during the grading phase

Architectural Coating -

Vehicle Trips - Passenger vehicle daily trip rate consistent with Dedeaux Industrial Center Traffic Impact Analysis - Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.
78 daily passenger vehicle trips.

Consumer Products - Updated based on 2017 ARB VOC inventory data and 2017 population estimates based on the State of California's Department of Finance demographic projections were used to estimate a statewide VOC EF for 2017.

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403

Energy Mitigation -

Water Mitigation - Compliance with Green Building Code Standards

Fleet Mix - Passenger vehicle fleet mix

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConsumerProducts	ROG_EF	1.98E-05	1.6E-06
tblFleetMix	HHD	0.06	0.00

tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.2670e-003	0.00
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblGrading	MaterialExported	0.00	3,100.00
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	2.40
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	2.40
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	2.40

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1869	42.9025	33.3045	0.0705	18.2931	2.2007	20.4938	9.9914	2.0247	12.0161	0.0000	7,195.0725	7,195.0725	1.2695	0.0000	7,224.0620
2021	23.0072	21.8853	21.8815	0.0454	0.9841	1.0625	2.0466	0.2651	1.0045	1.2696	0.0000	4,419.4000	4,419.4000	0.7081	0.0000	4,437.1026
Maximum	**23.0072**	**42.9025**	**33.3045**	**0.0705**	**18.2931**	**2.2007**	**20.4938**	**9.9914**	**2.0247**	**12.0161**	**0.0000**	**7,195.0725**	**7,195.0725**	**1.2695**	**0.0000**	**7,224.0620**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1869	42.9025	33.3045	0.0705	7.2727	2.2007	9.4733	3.9337	2.0247	5.9584	0.0000	7,195.0725	7,195.0725	1.2695	0.0000	7,224.0620
2021	23.0072	21.8853	21.8815	0.0454	0.9841	1.0625	2.0466	0.2651	1.0045	1.2696	0.0000	4,419.4000	4,419.4000	0.7081	0.0000	4,437.1026
Maximum	**23.0072**	**42.9025**	**33.3045**	**0.0705**	**7.2727**	**2.2007**	**9.4733**	**3.9337**	**2.0247**	**5.9584**	**0.0000**	**7,195.0725**	**7,195.0725**	**1.2695**	**0.0000**	**7,224.0620**

Dedeaux Industrial Center Project – Construction and Passenger Operations - San Bernardino-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	57.17	0.00	48.89	59.06	0.00	45.60	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.1393	0.1840	2.3239	7.1600e-003	0.6977	4.0400e-003	0.7017	0.1850	3.7200e-003	0.1887		713.3508	713.3508	0.0171		713.7775
Total	**0.3393**	**0.2047**	**2.3473**	**7.2800e-003**	**0.6977**	**5.6300e-003**	**0.7033**	**0.1850**	**5.3100e-003**	**0.1903**		**738.1744**	**738.1744**	**0.0176**	**4.5000e-004**	**738.7493**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.1393	0.1840	2.3239	7.1600e-003	0.6977	4.0400e-003	0.7017	0.1850	3.7200e-003	0.1887		713.3508	713.3508	0.0171		713.7775
Total	**0.3393**	**0.2047**	**2.3473**	**7.2800e-003**	**0.6977**	**5.6300e-003**	**0.7033**	**0.1850**	**5.3100e-003**	**0.1903**		**738.1744**	**738.1744**	**0.0176**	**4.5000e-004**	**738.7493**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	10/5/2020	10/30/2020	5	20	
2	Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5	
3	Grading	Grading	11/7/2020	11/18/2020	5	8	
4	Building Construction	Building Construction	11/19/2020	10/6/2021	5	230	
5	Paving	Paving	11/19/2020	12/14/2020	5	18	
6	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	378.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	388.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	24.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0861	0.0000	4.0861	0.6187	0.0000	0.6187			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**4.0861**	**1.6587**	**5.7448**	**0.6187**	**1.5419**	**2.1605**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1174	4.6558	0.6870	0.0148	0.3308	0.0139	0.3446	0.0907	0.0133	0.1040		1,573.8183	1,573.8183	0.0849		1,575.9416
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	**0.2114**	**5.1305**	**1.4439**	**0.0176**	**0.5240**	**0.0169**	**0.5410**	**0.1425**	**0.0161**	**0.1587**		**1,857.7715**	**1,857.7715**	**0.0975**		**1,860.2100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5936	0.0000	1.5936	0.2413	0.0000	0.2413			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.5936**	**1.6587**	**3.2523**	**0.2413**	**1.5419**	**1.7831**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1174	4.6558	0.6870	0.0148	0.3308	0.0139	0.3446	0.0907	0.0133	0.1040		1,573.8183	1,573.8183	0.0849		1,575.9416
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	**0.2114**	**5.1305**	**1.4439**	**0.0176**	**0.5240**	**0.0169**	**0.5410**	**0.1425**	**0.0161**	**0.1587**		**1,857.7715**	**1,857.7715**	**0.0975**		**1,860.2100**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0982	0.0631	0.8095	2.0400e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		203.4151	203.4151	6.2100e-003		203.5704
Total	**0.1104**	**0.4852**	**0.8918**	**3.1300e-003**	**0.2268**	**3.2600e-003**	**0.2301**	**0.0607**	**3.0700e-003**	**0.0638**		**317.8557**	**317.8557**	**0.0136**		**318.1968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**7.0458**	**2.1974**	**9.2433**	**3.8730**	**2.0216**	**5.8946**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0982	0.0631	0.8095	2.0400e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		203.4151	203.4151	6.2100e-003		203.5704
Total	**0.1104**	**0.4852**	**0.8918**	**3.1300e-003**	**0.2268**	**3.2600e-003**	**0.2301**	**0.0607**	**3.0700e-003**	**0.0638**		**317.8557**	**317.8557**	**0.0136**		**318.1968**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5962	0.0000	6.5962	3.3741	0.0000	3.3741			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5962**	**1.2734**	**7.8696**	**3.3741**	**1.1716**	**4.5457**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3013	11.9474	1.7630	0.0381	0.8488	0.0356	0.8844	0.2327	0.0341	0.2668		4,038.6342	4,038.6342	0.2180		4,044.0830
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	**0.3953**	**12.4221**	**2.5199**	**0.0408**	**1.0421**	**0.0386**	**1.0807**	**0.2846**	**0.0369**	**0.3215**		**4,322.5874**	**4,322.5874**	**0.2306**		**4,328.3514**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.5725	0.0000	2.5725	1.3159	0.0000	1.3159			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**2.5725**	**1.2734**	**3.8459**	**1.3159**	**1.1716**	**2.4875**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3013	11.9474	1.7630	0.0381	0.8488	0.0356	0.8844	0.2327	0.0341	0.2668		4,038.6342	4,038.6342	0.2180		4,044.0830
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	**0.3953**	**12.4221**	**2.5199**	**0.0408**	**1.0421**	**0.0386**	**1.0807**	**0.2846**	**0.0369**	**0.3215**		**4,322.5874**	**4,322.5874**	**0.2306**		**4,328.3514**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0729	2.5327	0.4936	6.5100e-003	0.1537	0.0117	0.1654	0.0443	0.0112	0.0554		686.6433	686.6433	0.0446		687.7583
Worker	0.3275	0.2102	2.6984	6.8100e-003	0.6707	4.3900e-003	0.6751	0.1779	4.0500e-003	0.1819		678.0505	678.0505	0.0207		678.5680
Total	**0.4003**	**2.7429**	**3.1920**	**0.0133**	**0.8244**	**0.0160**	**0.8404**	**0.2221**	**0.0152**	**0.2373**		**1,364.6938**	**1,364.6938**	**0.0653**		**1,366.3263**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0729	2.5327	0.4936	6.5100e-003	0.1537	0.0117	0.1654	0.0443	0.0112	0.0554		686.6433	686.6433	0.0446		687.7583
Worker	0.3275	0.2102	2.6984	6.8100e-003	0.6707	4.3900e-003	0.6751	0.1779	4.0500e-003	0.1819		678.0505	678.0505	0.0207		678.5680
Total	**0.4003**	**2.7429**	**3.1920**	**0.0133**	**0.8244**	**0.0160**	**0.8404**	**0.2221**	**0.0152**	**0.2373**		**1,364.6938**	**1,364.6938**	**0.0653**		**1,366.3263**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0621	2.3145	0.4355	6.4700e-003	0.1537	3.9700e-003	0.1577	0.0443	3.8000e-003	0.0481		683.0143	683.0143	0.0432		684.0934
Worker	0.3049	0.1884	2.4839	6.5900e-003	0.6707	4.2900e-003	0.6750	0.1779	3.9500e-003	0.1818		656.4483	656.4483	0.0187		656.9154
Total	**0.3670**	**2.5029**	**2.9194**	**0.0131**	**0.8244**	**8.2600e-003**	**0.8326**	**0.2221**	**7.7500e-003**	**0.2299**		**1,339.4627**	**1,339.4627**	**0.0618**		**1,341.0088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0621	2.3145	0.4355	6.4700e-003	0.1537	3.9700e-003	0.1577	0.0443	3.8000e-003	0.0481		683.0143	683.0143	0.0432		684.0934
Worker	0.3049	0.1884	2.4839	6.5900e-003	0.6707	4.2900e-003	0.6750	0.1779	3.9500e-003	0.1818		656.4483	656.4483	0.0187		656.9154
Total	**0.3670**	**2.5029**	**2.9194**	**0.0131**	**0.8244**	**8.2600e-003**	**0.8326**	**0.2221**	**7.7500e-003**	**0.2299**		**1,339.4627**	**1,339.4627**	**0.0618**		**1,341.0088**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.3202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5039**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**		**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	**0.1213**	**0.4922**	**0.9817**	**3.3600e-003**	**0.2492**	**3.4000e-003**	**0.2526**	**0.0667**	**3.2100e-003**	**0.0699**		**340.4574**	**340.4574**	**0.0143**		**340.8157**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.3202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5039**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**	**0.0000**	**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	**0.1213**	**0.4922**	**0.9817**	**3.3600e-003**	**0.2492**	**3.4000e-003**	**0.2526**	**0.0667**	**3.2100e-003**	**0.0699**		**340.4574**	**340.4574**	**0.0143**		**340.8157**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**20.6680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3858	0.0726	1.0800e-003	0.0256	6.6000e-004	0.0263	7.3800e-003	6.3000e-004	8.0100e-003		113.8357	113.8357	7.1900e-003		114.0156
Worker	0.0610	0.0377	0.4968	1.3200e-003	0.1341	8.6000e-004	0.1350	0.0356	7.9000e-004	0.0364		131.2897	131.2897	3.7400e-003		131.3831
Total	**0.0713**	**0.4234**	**0.5694**	**2.4000e-003**	**0.1598**	**1.5200e-003**	**0.1613**	**0.0430**	**1.4200e-003**	**0.0444**		**245.1254**	**245.1254**	**0.0109**		**245.3987**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	20.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**20.6680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3858	0.0726	1.0800e-003	0.0256	6.6000e-004	0.0263	7.3800e-003	6.3000e-004	8.0100e-003		113.8357	113.8357	7.1900e-003		114.0156
Worker	0.0610	0.0377	0.4968	1.3200e-003	0.1341	8.6000e-004	0.1350	0.0356	7.9000e-004	0.0364		131.2897	131.2897	3.7400e-003		131.3831
Total	**0.0713**	**0.4234**	**0.5694**	**2.4000e-003**	**0.1598**	**1.5200e-003**	**0.1613**	**0.0430**	**1.4200e-003**	**0.0444**		**245.1254**	**245.1254**	**0.0109**		**245.3987**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1393	0.1840	2.3239	7.1600e-003	0.6977	4.0400e-003	0.7017	0.1850	3.7200e-003	0.1887		713.3508	713.3508	0.0171		713.7775
Unmitigated	0.1393	0.1840	2.3239	7.1600e-003	0.6977	4.0400e-003	0.7017	0.1850	3.7200e-003	0.1887		713.3508	713.3508	0.0171		713.7775

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	78.00	78.00	78.00	334,286	334,286
Total	78.00	78.00	78.00	334,286	334,286

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.620587	0.041891	0.202723	0.134800	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
NaturalGas Unmitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581

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					
General Office Building	19.0137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	191.877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

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					
General Office Building	0.0190137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.191877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dedeaux Industrial Center Project – Construction and Passenger Operations

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Unmitigated Construction and Passenger and Building Operations
Unmitigated Operations - area, energy, and passenger vehicle operations (truck operations analyzed in a separate run)
CO2 intensity factor adjusted based on Renewable Portfolio Standard.

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Earliest anticipated construction schedule

Off-road Equipment -
Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Additional daily vendor trips added where default value was zero to account for miscellaneous trips.

Demolition - Estimate of 3,819 tons of debris to be removed (removal of existing hardscape); see supporting information for conversion of hardscape to tons of debris

Grading - 3,100 cubic yards of material to be exported during the grading phase

Architectural Coating -

Vehicle Trips - Passenger vehicle daily trip rate consistent with Dedeaux Industrial Center Traffic Impact Analysis - Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.
78 daily passenger vehicle trips.

Consumer Products - Updated based on 2017 ARB VOC inventory data and 2017 population estimates based on the State of California's Department of Finance demographic projections were used to estimate a statewide VOC EF for 2017.

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403

Energy Mitigation -

Water Mitigation - Compliance with Green Building Code Standards

Fleet Mix - Passenger vehicle fleet mix

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConsumerProducts	ROG_EF	1.98E-05	1.6E-06
tblFleetMix	HHD	0.06	0.00

tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.2670e-003	0.00
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblGrading	MaterialExported	0.00	3,100.00
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	2.40
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	2.40
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	2.40

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1876	42.9024	32.7552	0.0693	18.2931	2.2007	20.4938	9.9914	2.0247	12.0161	0.0000	7,067.8770	7,067.8770	1.2716	0.0000	7,097.3342
2021	23.0124	21.8683	21.4319	0.0442	0.9841	1.0626	2.0468	0.2651	1.0047	1.2697	0.0000	4,307.3886	4,307.3886	0.7108	0.0000	4,325.1590
Maximum	**23.0124**	**42.9024**	**32.7552**	**0.0693**	**18.2931**	**2.2007**	**20.4938**	**9.9914**	**2.0247**	**12.0161**	**0.0000**	**7,067.8770**	**7,067.8770**	**1.2716**	**0.0000**	**7,097.3342**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1876	42.9024	32.7552	0.0693	7.2727	2.2007	9.4734	3.9337	2.0247	5.9584	0.0000	7,067.8770	7,067.8770	1.2716	0.0000	7,097.3342
2021	23.0124	21.8683	21.4319	0.0442	0.9841	1.0626	2.0468	0.2651	1.0047	1.2697	0.0000	4,307.3886	4,307.3886	0.7108	0.0000	4,325.1590
Maximum	**23.0124**	**42.9024**	**32.7552**	**0.0693**	**7.2727**	**2.2007**	**9.4734**	**3.9337**	**2.0247**	**5.9584**	**0.0000**	**7,067.8770**	**7,067.8770**	**1.2716**	**0.0000**	**7,097.3342**

Dedeaux Industrial Center Project – Construction and Passenger Operations - San Bernardino-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	57.17	0.00	48.89	59.06	0.00	45.60	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.1148	0.1928	1.9141	6.4200e-003	0.6977	4.0400e-003	0.7017	0.1850	3.7200e-003	0.1887		640.1618	640.1618	0.0151		640.5382
Total	**0.3147**	**0.2136**	**1.9375**	**6.5400e-003**	**0.6977**	**5.6300e-003**	**0.7033**	**0.1850**	**5.3100e-003**	**0.1903**		**664.9854**	**664.9854**	**0.0156**	**4.5000e-004**	**665.5100**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.1148	0.1928	1.9141	6.4200e-003	0.6977	4.0400e-003	0.7017	0.1850	3.7200e-003	0.1887		640.1618	640.1618	0.0151		640.5382
Total	**0.3147**	**0.2136**	**1.9375**	**6.5400e-003**	**0.6977**	**5.6300e-003**	**0.7033**	**0.1850**	**5.3100e-003**	**0.1903**		**664.9854**	**664.9854**	**0.0156**	**4.5000e-004**	**665.5100**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	10/5/2020	10/30/2020	5	20	
2	Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5	
3	Grading	Grading	11/7/2020	11/18/2020	5	8	
4	Building Construction	Building Construction	11/19/2020	10/6/2021	5	230	
5	Paving	Paving	11/19/2020	12/14/2020	5	18	
6	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Dedeaux Industrial Center Project – Construction and Passenger Operations - San Bernardino-South Coast 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	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	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
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	378.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	388.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	24.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0861	0.0000	4.0861	0.6187	0.0000	0.6187			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**4.0861**	**1.6587**	**5.7448**	**0.6187**	**1.5419**	**2.1605**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1227	4.6805	0.7860	0.0144	0.3308	0.0141	0.3448	0.0907	0.0135	0.1041		1,532.7819	1,532.7819	0.0922		1,535.0861
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	**0.2174**	**5.1545**	**1.4358**	**0.0170**	**0.5240**	**0.0171**	**0.5412**	**0.1425**	**0.0163**	**0.1589**		**1,794.8445**	**1,794.8445**	**0.1049**		**1,797.4676**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5936	0.0000	1.5936	0.2413	0.0000	0.2413			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**1.5936**	**1.6587**	**3.2523**	**0.2413**	**1.5419**	**1.7831**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1227	4.6805	0.7860	0.0144	0.3308	0.0141	0.3448	0.0907	0.0135	0.1041		1,532.7819	1,532.7819	0.0922		1,535.0861
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	**0.2174**	**5.1545**	**1.4358**	**0.0170**	**0.5240**	**0.0171**	**0.5412**	**0.1425**	**0.0163**	**0.1589**		**1,794.8445**	**1,794.8445**	**0.1049**		**1,797.4676**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0983	0.0663	0.6653	1.8300e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		182.4750	182.4750	5.4500e-003		182.6112
Total	**0.1111**	**0.4850**	**0.7607**	**2.8700e-003**	**0.2268**	**3.2900e-003**	**0.2301**	**0.0607**	**3.0900e-003**	**0.0638**		**292.4750**	**292.4750**	**0.0137**		**292.8167**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**7.0458**	**2.1974**	**9.2433**	**3.8730**	**2.0216**	**5.8946**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0983	0.0663	0.6653	1.8300e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		182.4750	182.4750	5.4500e-003		182.6112
Total	**0.1111**	**0.4850**	**0.7607**	**2.8700e-003**	**0.2268**	**3.2900e-003**	**0.2301**	**0.0607**	**3.0900e-003**	**0.0638**		**292.4750**	**292.4750**	**0.0137**		**292.8167**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5962	0.0000	6.5962	3.3741	0.0000	3.3741			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5962**	**1.2734**	**7.8696**	**3.3741**	**1.1716**	**4.5457**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3149	12.0109	2.0171	0.0371	0.8488	0.0361	0.8849	0.2327	0.0345	0.2672		3,933.3293	3,933.3293	0.2365		3,939.2421
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	**0.4097**	**12.4848**	**2.6669**	**0.0396**	**1.0421**	**0.0392**	**1.0812**	**0.2846**	**0.0374**	**0.3220**		**4,195.3918**	**4,195.3918**	**0.2493**		**4,201.6235**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.5725	0.0000	2.5725	1.3159	0.0000	1.3159			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**2.5725**	**1.2734**	**3.8459**	**1.3159**	**1.1716**	**2.4875**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3149	12.0109	2.0171	0.0371	0.8488	0.0361	0.8849	0.2327	0.0345	0.2672		3,933.3293	3,933.3293	0.2365		3,939.2421
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	**0.4097**	**12.4848**	**2.6669**	**0.0396**	**1.0421**	**0.0392**	**1.0812**	**0.2846**	**0.0374**	**0.3220**		**4,195.3918**	**4,195.3918**	**0.2493**		**4,201.6235**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0768	2.5122	0.5721	6.2600e-003	0.1537	0.0118	0.1655	0.0443	0.0113	0.0556		660.0003	660.0003	0.0493		661.2330
Worker	0.3277	0.2212	2.2177	6.1100e-003	0.6707	4.3900e-003	0.6751	0.1779	4.0500e-003	0.1819		608.2499	608.2499	0.0182		608.7038
Total	**0.4045**	**2.7333**	**2.7898**	**0.0124**	**0.8244**	**0.0162**	**0.8406**	**0.2221**	**0.0153**	**0.2375**		**1,268.2501**	**1,268.2501**	**0.0675**		**1,269.9369**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0768	2.5122	0.5721	6.2600e-003	0.1537	0.0118	0.1655	0.0443	0.0113	0.0556		660.0003	660.0003	0.0493		661.2330
Worker	0.3277	0.2212	2.2177	6.1100e-003	0.6707	4.3900e-003	0.6751	0.1779	4.0500e-003	0.1819		608.2499	608.2499	0.0182		608.7038
Total	**0.4045**	**2.7333**	**2.7898**	**0.0124**	**0.8244**	**0.0162**	**0.8406**	**0.2221**	**0.0153**	**0.2375**		**1,268.2501**	**1,268.2501**	**0.0675**		**1,269.9369**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0659	2.2899	0.5094	6.2200e-003	0.1537	4.0800e-003	0.1578	0.0443	3.9000e-003	0.0482		656.4843	656.4843	0.0478		657.6804
Worker	0.3055	0.1982	2.0374	5.9100e-003	0.6707	4.2900e-003	0.6750	0.1779	3.9500e-003	0.1818		588.8986	588.8986	0.0164		589.3084
Total	**0.3714**	**2.4881**	**2.5468**	**0.0121**	**0.8244**	**8.3700e-003**	**0.8327**	**0.2221**	**7.8500e-003**	**0.2300**		**1,245.3829**	**1,245.3829**	**0.0642**		**1,246.9888**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0659	2.2899	0.5094	6.2200e-003	0.1537	4.0800e-003	0.1578	0.0443	3.9000e-003	0.0482		656.4843	656.4843	0.0478		657.6804
Worker	0.3055	0.1982	2.0374	5.9100e-003	0.6707	4.2900e-003	0.6750	0.1779	3.9500e-003	0.1818		588.8986	588.8986	0.0164		589.3084
Total	**0.3714**	**2.4881**	**2.5468**	**0.0121**	**0.8244**	**8.3700e-003**	**0.8327**	**0.2221**	**7.8500e-003**	**0.2300**		**1,245.3829**	**1,245.3829**	**0.0642**		**1,246.9888**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.3202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5039**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**		**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	**0.1220**	**0.4924**	**0.8346**	**3.0800e-003**	**0.2492**	**3.4300e-003**	**0.2526**	**0.0667**	**3.2300e-003**	**0.0699**		**312.7500**	**312.7500**	**0.0143**		**313.1068**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.3202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5039**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**	**0.0000**	**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	**0.1220**	**0.4924**	**0.8346**	**3.0800e-003**	**0.2492**	**3.4300e-003**	**0.2526**	**0.0667**	**3.2300e-003**	**0.0699**		**312.7500**	**312.7500**	**0.0143**		**313.1068**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**20.6680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0110	0.3816	0.0849	1.0400e-003	0.0256	6.8000e-004	0.0263	7.3800e-003	6.5000e-004	8.0300e-003		109.4141	109.4141	7.9700e-003		109.6134
Worker	0.0611	0.0396	0.4075	1.1800e-003	0.1341	8.6000e-004	0.1350	0.0356	7.9000e-004	0.0364		117.7797	117.7797	3.2800e-003		117.8617
Total	**0.0721**	**0.4213**	**0.4924**	**2.2200e-003**	**0.1598**	**1.5400e-003**	**0.1613**	**0.0430**	**1.4400e-003**	**0.0444**		**227.1938**	**227.1938**	**0.0113**		**227.4751**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	20.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**20.6680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0110	0.3816	0.0849	1.0400e-003	0.0256	6.8000e-004	0.0263	7.3800e-003	6.5000e-004	8.0300e-003		109.4141	109.4141	7.9700e-003		109.6134
Worker	0.0611	0.0396	0.4075	1.1800e-003	0.1341	8.6000e-004	0.1350	0.0356	7.9000e-004	0.0364		117.7797	117.7797	3.2800e-003		117.8617
Total	**0.0721**	**0.4213**	**0.4924**	**2.2200e-003**	**0.1598**	**1.5400e-003**	**0.1613**	**0.0430**	**1.4400e-003**	**0.0444**		**227.1938**	**227.1938**	**0.0113**		**227.4751**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1148	0.1928	1.9141	6.4200e-003	0.6977	4.0400e-003	0.7017	0.1850	3.7200e-003	0.1887		640.1618	640.1618	0.0151		640.5382
Unmitigated	0.1148	0.1928	1.9141	6.4200e-003	0.6977	4.0400e-003	0.7017	0.1850	3.7200e-003	0.1887		640.1618	640.1618	0.0151		640.5382

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	78.00	78.00	78.00	334,286	334,286
Total	78.00	78.00	78.00	334,286	334,286

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.620587	0.041891	0.202723	0.134800	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
NaturalGas Unmitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581

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					
General Office Building	19.0137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	191.877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

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					
General Office Building	0.0190137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.191877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dedeaux Industrial Center Project – Construction with Standard Conditions

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Dedeaux Industrial Center Project – Construction with Standard Conditions - San Bernardino-South Coast County, Annual

Project Characteristics - Construction with incorporation of standard conditions

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Earliest anticipated construction schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Additional daily vendor trips added where default value was zero to account for miscellaneous trips.

Demolition - Estimate of 3,819 tons of debris to be removed (removal of existing hardscape); see supporting information for conversion of hardscape to tons of debris

Grading - 3,100 cubic yards of material to be exported during the grading phase

Architectural Coating -

Vehicle Trips - Construction run only

Consumer Products - Construction run only

Area Coating -

Landscape Equipment - Construction run only

Energy Use - Construction run only

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403
Tier IV Interim mitigation for construction equipment >100 HP

Energy Mitigation -

Water Mitigation -

Fleet Mix -

Dedeaux Industrial Center Project – Construction with Standard Conditions - San Bernardino-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConsumerProducts	ROG_EF	1.98E-05	1.6E-06
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	0.37	0.00
tblGrading	MaterialExported	0.00	3,100.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.1101	1.0998	0.7856	1.7500e-003	0.1370	0.0510	0.1879	0.0512	0.0474	0.0986	0.0000	156.9605	156.9605	0.0319	0.0000	157.7580
2021	0.4096	2.0052	1.9301	3.9600e-003	0.0819	0.0971	0.1790	0.0221	0.0913	0.1134	0.0000	349.6415	349.6415	0.0615	0.0000	351.1779
Maximum	**0.4096**	**2.0052**	**1.9301**	**3.9600e-003**	**0.1370**	**0.0971**	**0.1879**	**0.0512**	**0.0913**	**0.1134**	**0.0000**	**349.6415**	**349.6415**	**0.0615**	**0.0000**	**351.1779**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2020	0.0640	0.7270	0.8536	1.7500e-003	0.0684	0.0241	0.0925	0.0240	0.0228	0.0468	0.0000	156.9603	156.9603	0.0319	0.0000	157.7579
2021	0.3818	1.7157	2.0250	3.9600e-003	0.0819	0.0808	0.1627	0.0221	0.0764	0.0985	0.0000	349.6412	349.6412	0.0615	0.0000	351.1776
Maximum	**0.3818**	**1.7157**	**2.0250**	**3.9600e-003**	**0.0819**	**0.0808**	**0.1627**	**0.0240**	**0.0764**	**0.0985**	**0.0000**	**349.6412**	**349.6412**	**0.0615**	**0.0000**	**351.1776**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**14.20**	**21.33**	**-6.00**	**0.00**	**31.33**	**29.20**	**30.47**	**37.05**	**28.55**	**31.48**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-5-2020	1-4-2021	1.2218	0.8090
2	1-5-2021	4-4-2021	0.7133	0.6109
3	4-5-2021	7-4-2021	0.7216	0.6180
4	7-5-2021	9-30-2021	0.6978	0.5976
		Highest	1.2218	0.8090

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	0.0360	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	4.2000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	31.9114	31.9114	1.5900e-003	3.9000e-004	32.0670
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	6.5789	0.0000	6.5789	0.3888	0.0000	16.2990
Water						0.0000	0.0000		0.0000	0.0000	2.4971	25.3431	27.8402	0.2579	6.3400e-003	36.1765
Total	**0.0364**	**3.7700e-003**	**3.1700e-003**	**2.0000e-005**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**9.0761**	**57.2545**	**66.3306**	**0.6483**	**6.7300e-003**	**84.5426**

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	0.0360	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	4.2000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	31.9114	31.9114	1.5900e-003	3.9000e-004	32.0670
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	6.5789	0.0000	6.5789	0.3888	0.0000	16.2990
Water						0.0000	0.0000		0.0000	0.0000	2.4971	25.3431	27.8402	0.2579	6.3400e-003	36.1765
Total	**0.0364**	**3.7700e-003**	**3.1700e-003**	**2.0000e-005**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**0.0000**	**2.9000e-004**	**2.9000e-004**	**9.0761**	**57.2545**	**66.3306**	**0.6483**	**6.7300e-003**	**84.5426**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Dedeaux Industrial Center Project – Construction with Standard Conditions - San Bernardino-South Coast County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	10/5/2020	10/30/2020	5	20	
2	Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5	
3	Grading	Grading	11/7/2020	11/18/2020	5	8	
4	Building Construction	Building Construction	11/19/2020	10/6/2021	5	230	
5	Paving	Paving	11/19/2020	12/14/2020	5	18	
6	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Dedeaux Industrial Center Project – Construction with Standard Conditions - San Bernardino-South Coast 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	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	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
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	378.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	388.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	24.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0409	0.0000	0.0409	6.1900e-003	0.0000	6.1900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0331	0.3320	0.2175	3.9000e-004		0.0166	0.0166		0.0154	0.0154	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2386
Total	**0.0331**	**0.3320**	**0.2175**	**3.9000e-004**	**0.0409**	**0.0166**	**0.0575**	**6.1900e-003**	**0.0154**	**0.0216**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2386**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-003	0.0477	7.3100e-003	1.5000e-004	3.2500e-003	1.4000e-004	3.3900e-003	8.9000e-004	1.3000e-004	1.0300e-003	0.0000	14.1211	14.1211	8.0000e-004	0.0000	14.1411
Vendor	1.2000e-004	4.2700e-003	8.9000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.0213	1.0213	7.0000e-005	0.0000	1.0230
Worker	7.4000e-004	5.8000e-004	5.8200e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4097	1.4097	4.0000e-005	0.0000	1.4108
Total	**2.0600e-003**	**0.0526**	**0.0140**	**1.8000e-004**	**5.1400e-003**	**1.7000e-004**	**5.3200e-003**	**1.4000e-003**	**1.6000e-004**	**1.5700e-003**	**0.0000**	**16.5521**	**16.5521**	**9.1000e-004**	**0.0000**	**16.5749**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0159	0.0000	0.0159	2.4100e-003	0.0000	2.4100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.8800e-003	0.1462	0.2450	3.9000e-004		2.5100e-003	2.5100e-003		2.5100e-003	2.5100e-003	0.0000	33.9986	33.9986	9.6000e-003	0.0000	34.2385
Total	**8.8800e-003**	**0.1462**	**0.2450**	**3.9000e-004**	**0.0159**	**2.5100e-003**	**0.0185**	**2.4100e-003**	**2.5100e-003**	**4.9200e-003**	**0.0000**	**33.9986**	**33.9986**	**9.6000e-003**	**0.0000**	**34.2385**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-003	0.0477	7.3100e-003	1.5000e-004	3.2500e-003	1.4000e-004	3.3900e-003	8.9000e-004	1.3000e-004	1.0300e-003	0.0000	14.1211	14.1211	8.0000e-004	0.0000	14.1411
Vendor	1.2000e-004	4.2700e-003	8.9000e-004	1.0000e-005	2.5000e-004	2.0000e-005	2.7000e-004	7.0000e-005	2.0000e-005	9.0000e-005	0.0000	1.0213	1.0213	7.0000e-005	0.0000	1.0230
Worker	7.4000e-004	5.8000e-004	5.8200e-003	2.0000e-005	1.6400e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4097	1.4097	4.0000e-005	0.0000	1.4108
Total	**2.0600e-003**	**0.0526**	**0.0140**	**1.8000e-004**	**5.1400e-003**	**1.7000e-004**	**5.3200e-003**	**1.4000e-003**	**1.6000e-004**	**1.5700e-003**	**0.0000**	**16.5521**	**16.5521**	**9.1000e-004**	**0.0000**	**16.5749**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0102	0.1060	0.0538	1.0000e-004		5.4900e-003	5.4900e-003		5.0500e-003	5.0500e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4253
Total	**0.0102**	**0.1060**	**0.0538**	**1.0000e-004**	**0.0452**	**5.4900e-003**	**0.0507**	**0.0248**	**5.0500e-003**	**0.0299**	**0.0000**	**8.3577**	**8.3577**	**2.7000e-003**	**0.0000**	**8.4253**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	1.0700e-003	2.2000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2553	0.2553	2.0000e-005	0.0000	0.2558
Worker	2.2000e-004	1.7000e-004	1.7500e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4229	0.4229	1.0000e-005	0.0000	0.4232
Total	**2.5000e-004**	**1.2400e-003**	**1.9700e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.7000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.6782**	**0.6782**	**3.0000e-005**	**0.0000**	**0.6790**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0176	0.0000	0.0176	9.6800e-003	0.0000	9.6800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1400e-003	0.0379	0.0568	1.0000e-004		1.4400e-003	1.4400e-003		1.3300e-003	1.3300e-003	0.0000	8.3577	8.3577	2.7000e-003	0.0000	8.4252
Total	**3.1400e-003**	**0.0379**	**0.0568**	**1.0000e-004**	**0.0176**	**1.4400e-003**	**0.0191**	**9.6800e-003**	**1.3300e-003**	**0.0110**	**0.0000**	**8.3577**	**8.3577**	**2.7000e-003**	**0.0000**	**8.4252**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.0000e-005	1.0700e-003	2.2000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2553	0.2553	2.0000e-005	0.0000	0.2558
Worker	2.2000e-004	1.7000e-004	1.7500e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4229	0.4229	1.0000e-005	0.0000	0.4232
Total	**2.5000e-004**	**1.2400e-003**	**1.9700e-003**	**0.0000**	**5.5000e-004**	**0.0000**	**5.7000e-004**	**1.5000e-004**	**0.0000**	**1.5000e-004**	**0.0000**	**0.6782**	**0.6782**	**3.0000e-005**	**0.0000**	**0.6790**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0264	0.0000	0.0264	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7200e-003	0.1055	0.0642	1.2000e-004		5.0900e-003	5.0900e-003		4.6900e-003	4.6900e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	**9.7200e-003**	**0.1055**	**0.0642**	**1.2000e-004**	**0.0264**	**5.0900e-003**	**0.0315**	**0.0135**	**4.6900e-003**	**0.0182**	**0.0000**	**10.4235**	**10.4235**	**3.3700e-003**	**0.0000**	**10.5078**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2300e-003	0.0490	7.5000e-003	1.5000e-004	3.3400e-003	1.4000e-004	3.4800e-003	9.2000e-004	1.4000e-004	1.0500e-003	0.0000	14.4947	14.4947	8.2000e-004	0.0000	14.5152
Vendor	5.0000e-005	1.7100e-003	3.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4085	0.4085	3.0000e-005	0.0000	0.4092
Worker	3.0000e-004	2.3000e-004	2.3300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5639	0.5639	2.0000e-005	0.0000	0.5643
Total	**1.5800e-003**	**0.0509**	**0.0102**	**1.6000e-004**	**4.1000e-003**	**1.5000e-004**	**4.2500e-003**	**1.1200e-003**	**1.5000e-004**	**1.2700e-003**	**0.0000**	**15.4671**	**15.4671**	**8.7000e-004**	**0.0000**	**15.4887**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					0.0103	0.0000	0.0103	5.2600e-003	0.0000	5.2600e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.7600e-003	0.0503	0.0752	1.2000e-004		1.7300e-003	1.7300e-003		1.6000e-003	1.6000e-003	0.0000	10.4235	10.4235	3.3700e-003	0.0000	10.5078
Total	**3.7600e-003**	**0.0503**	**0.0752**	**1.2000e-004**	**0.0103**	**1.7300e-003**	**0.0120**	**5.2600e-003**	**1.6000e-003**	**6.8600e-003**	**0.0000**	**10.4235**	**10.4235**	**3.3700e-003**	**0.0000**	**10.5078**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2300e-003	0.0490	7.5000e-003	1.5000e-004	3.3400e-003	1.4000e-004	3.4800e-003	9.2000e-004	1.4000e-004	1.0500e-003	0.0000	14.4947	14.4947	8.2000e-004	0.0000	14.5152
Vendor	5.0000e-005	1.7100e-003	3.6000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4085	0.4085	3.0000e-005	0.0000	0.4092
Worker	3.0000e-004	2.3000e-004	2.3300e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5639	0.5639	2.0000e-005	0.0000	0.5643
Total	**1.5800e-003**	**0.0509**	**0.0102**	**1.6000e-004**	**4.1000e-003**	**1.5000e-004**	**4.2500e-003**	**1.1200e-003**	**1.5000e-004**	**1.2700e-003**	**0.0000**	**15.4671**	**15.4671**	**8.7000e-004**	**0.0000**	**15.4887**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0329	0.2974	0.2612	4.2000e-004		0.0173	0.0173		0.0163	0.0163	0.0000	35.8996	35.8996	8.7600e-003	0.0000	36.1185
Total	**0.0329**	**0.2974**	**0.2612**	**4.2000e-004**		**0.0173**	**0.0173**		**0.0163**	**0.0163**	**0.0000**	**35.8996**	**35.8996**	**8.7600e-003**	**0.0000**	**36.1185**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1500e-003	0.0397	8.3000e-003	1.0000e-004	2.3500e-003	1.8000e-004	2.5300e-003	6.8000e-004	1.7000e-004	8.5000e-004	0.0000	9.4978	9.4978	6.6000e-004	0.0000	9.5142
Worker	4.5900e-003	3.6100e-003	0.0361	1.0000e-004	0.0102	7.0000e-005	0.0103	2.7100e-003	6.0000e-005	2.7700e-003	0.0000	8.7403	8.7403	2.6000e-004	0.0000	8.7469
Total	**5.7400e-003**	**0.0433**	**0.0444**	**2.0000e-004**	**0.0126**	**2.5000e-004**	**0.0128**	**3.3900e-003**	**2.3000e-004**	**3.6200e-003**	**0.0000**	**18.2381**	**18.2381**	**9.2000e-004**	**0.0000**	**18.2611**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.0280	0.2449	0.2741	4.2000e-004		0.0144	0.0144		0.0136	0.0136	0.0000	35.8995	35.8995	8.7600e-003	0.0000	36.1185
Total	**0.0280**	**0.2449**	**0.2741**	**4.2000e-004**		**0.0144**	**0.0144**		**0.0136**	**0.0136**	**0.0000**	**35.8995**	**35.8995**	**8.7600e-003**	**0.0000**	**36.1185**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1500e-003	0.0397	8.3000e-003	1.0000e-004	2.3500e-003	1.8000e-004	2.5300e-003	6.8000e-004	1.7000e-004	8.5000e-004	0.0000	9.4978	9.4978	6.6000e-004	0.0000	9.5142
Worker	4.5900e-003	3.6100e-003	0.0361	1.0000e-004	0.0102	7.0000e-005	0.0103	2.7100e-003	6.0000e-005	2.7700e-003	0.0000	8.7403	8.7403	2.6000e-004	0.0000	8.7469
Total	**5.7400e-003**	**0.0433**	**0.0444**	**2.0000e-004**	**0.0126**	**2.5000e-004**	**0.0128**	**3.3900e-003**	**2.3000e-004**	**3.6200e-003**	**0.0000**	**18.2381**	**18.2381**	**9.2000e-004**	**0.0000**	**18.2611**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1891	1.7345	1.6492	2.6800e-003		0.0954	0.0954		0.0897	0.0897	0.0000	230.4791	230.4791	0.0556	0.0000	231.8692
Total	**0.1891**	**1.7345**	**1.6492**	**2.6800e-003**		**0.0954**	**0.0954**		**0.0897**	**0.0897**	**0.0000**	**230.4791**	**230.4791**	**0.0556**	**0.0000**	**231.8692**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3300e-003	0.2323	0.0473	6.3000e-004	0.0151	4.0000e-004	0.0155	4.3500e-003	3.8000e-004	4.7300e-003	0.0000	60.6464	60.6464	4.0900e-003	0.0000	60.7486
Worker	0.0275	0.0208	0.2127	6.0000e-004	0.0655	4.3000e-004	0.0659	0.0174	3.9000e-004	0.0178	0.0000	54.3211	54.3211	1.5200e-003	0.0000	54.3591
Total	**0.0338**	**0.2531**	**0.2600**	**1.2300e-003**	**0.0805**	**8.3000e-004**	**0.0814**	**0.0217**	**7.7000e-004**	**0.0225**	**0.0000**	**114.9675**	**114.9675**	**5.6100e-003**	**0.0000**	**115.1077**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1614	1.4450	1.7441	2.6800e-003		0.0791	0.0791		0.0747	0.0747	0.0000	230.4788	230.4788	0.0556	0.0000	231.8689
Total	**0.1614**	**1.4450**	**1.7441**	**2.6800e-003**		**0.0791**	**0.0791**		**0.0747**	**0.0747**	**0.0000**	**230.4788**	**230.4788**	**0.0556**	**0.0000**	**231.8689**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.3300e-003	0.2323	0.0473	6.3000e-004	0.0151	4.0000e-004	0.0155	4.3500e-003	3.8000e-004	4.7300e-003	0.0000	60.6464	60.6464	4.0900e-003	0.0000	60.7486
Worker	0.0275	0.0208	0.2127	6.0000e-004	0.0655	4.3000e-004	0.0659	0.0174	3.9000e-004	0.0178	0.0000	54.3211	54.3211	1.5200e-003	0.0000	54.3591
Total	**0.0338**	**0.2531**	**0.2600**	**1.2300e-003**	**0.0805**	**8.3000e-004**	**0.0814**	**0.0217**	**7.7000e-004**	**0.0225**	**0.0000**	**114.9675**	**114.9675**	**5.6100e-003**	**0.0000**	**115.1077**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0107	0.1062	0.1105	1.7000e-004		5.8600e-003	5.8600e-003		5.4000e-003	5.4000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	2.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0135**	**0.1062**	**0.1105**	**1.7000e-004**		**5.8600e-003**	**5.8600e-003**		**5.4000e-003**	**5.4000e-003**	**0.0000**	**14.7348**	**14.7348**	**4.6300e-003**	**0.0000**	**14.8506**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	3.8400e-003	8.0000e-004	1.0000e-005	2.3000e-004	2.0000e-005	2.4000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.9191	0.9191	6.0000e-005	0.0000	0.9207
Worker	8.9000e-004	7.0000e-004	6.9800e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6917	1.6917	5.0000e-005	0.0000	1.6930
Total	**1.0000e-003**	**4.5400e-003**	**7.7800e-003**	**3.0000e-005**	**2.2000e-003**	**3.0000e-005**	**2.2300e-003**	**5.9000e-004**	**3.0000e-005**	**6.2000e-004**	**0.0000**	**2.6108**	**2.6108**	**1.1000e-004**	**0.0000**	**2.6137**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	6.6900e-003	0.0950	0.1242	1.7000e-004		3.3400e-003	3.3400e-003		3.1000e-003	3.1000e-003	0.0000	14.7348	14.7348	4.6300e-003	0.0000	14.8506
Paving	2.8800e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**9.5700e-003**	**0.0950**	**0.1242**	**1.7000e-004**		**3.3400e-003**	**3.3400e-003**		**3.1000e-003**	**3.1000e-003**	**0.0000**	**14.7348**	**14.7348**	**4.6300e-003**	**0.0000**	**14.8506**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.1000e-004	3.8400e-003	8.0000e-004	1.0000e-005	2.3000e-004	2.0000e-005	2.4000e-004	7.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.9191	0.9191	6.0000e-005	0.0000	0.9207
Worker	8.9000e-004	7.0000e-004	6.9800e-003	2.0000e-005	1.9700e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.6917	1.6917	5.0000e-005	0.0000	1.6930
Total	**1.0000e-003**	**4.5400e-003**	**7.7800e-003**	**3.0000e-005**	**2.2000e-003**	**3.0000e-005**	**2.2300e-003**	**5.9000e-004**	**3.0000e-005**	**6.2000e-004**	**0.0000**	**2.6108**	**2.6108**	**1.1000e-004**	**0.0000**	**2.6137**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1840					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	**0.1860**	**0.0137**	**0.0164**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.6000e-004**	**0.0000**	**2.3019**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.5000e-003	7.1000e-004	1.0000e-005	2.3000e-004	1.0000e-005	2.3000e-004	7.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9143	0.9143	6.0000e-005	0.0000	0.9158
Worker	5.0000e-004	3.8000e-004	3.8500e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9827	0.9827	3.0000e-005	0.0000	0.9834
Total	**6.0000e-004**	**3.8800e-003**	**4.5600e-003**	**2.0000e-005**	**1.4100e-003**	**2.0000e-005**	**1.4200e-003**	**3.8000e-004**	**2.0000e-005**	**3.9000e-004**	**0.0000**	**1.8970**	**1.8970**	**9.0000e-005**	**0.0000**	**1.8992**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.1840					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9700e-003	0.0137	0.0164	3.0000e-005		8.5000e-004	8.5000e-004		8.5000e-004	8.5000e-004	0.0000	2.2979	2.2979	1.6000e-004	0.0000	2.3019
Total	**0.1860**	**0.0137**	**0.0164**	**3.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.5000e-004**	**8.5000e-004**	**0.0000**	**2.2979**	**2.2979**	**1.6000e-004**	**0.0000**	**2.3019**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-004	3.5000e-003	7.1000e-004	1.0000e-005	2.3000e-004	1.0000e-005	2.3000e-004	7.0000e-005	1.0000e-005	7.0000e-005	0.0000	0.9143	0.9143	6.0000e-005	0.0000	0.9158
Worker	5.0000e-004	3.8000e-004	3.8500e-003	1.0000e-005	1.1800e-003	1.0000e-005	1.1900e-003	3.1000e-004	1.0000e-005	3.2000e-004	0.0000	0.9827	0.9827	3.0000e-005	0.0000	0.9834
Total	**6.0000e-004**	**3.8800e-003**	**4.5600e-003**	**2.0000e-005**	**1.4100e-003**	**2.0000e-005**	**1.4200e-003**	**3.8000e-004**	**2.0000e-005**	**3.9000e-004**	**0.0000**	**1.8970**	**1.8970**	**9.0000e-005**	**0.0000**	**1.8992**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

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	27.8038	27.8038	1.5100e-003	3.1000e-004	27.9350
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	27.8038	27.8038	1.5100e-003	3.1000e-004	27.9350
NaturalGas Mitigated	4.2000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1077	4.1077	8.0000e-005	8.0000e-005	4.1321
NaturalGas Unmitigated	4.2000e-004	3.7700e-003	3.1700e-003	2.0000e-005		2.9000e-004	2.9000e-004		2.9000e-004	2.9000e-004	0.0000	4.1077	4.1077	8.0000e-005	8.0000e-005	4.1321

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					
General Office Building	6940	4.0000e-005	3.4000e-004	2.9000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3703	0.3703	1.0000e-005	1.0000e-005	0.3726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	70035	3.8000e-004	3.4300e-003	2.8800e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7373	3.7373	7.0000e-005	7.0000e-005	3.7595
Total		**4.2000e-004**	**3.7700e-003**	**3.1700e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.1077**	**4.1077**	**8.0000e-005**	**8.0000e-005**	**4.1321**

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					
General Office Building	6940	4.0000e-005	3.4000e-004	2.9000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.3703	0.3703	1.0000e-005	1.0000e-005	0.3726
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	70035	3.8000e-004	3.4300e-003	2.8800e-003	2.0000e-005		2.6000e-004	2.6000e-004		2.6000e-004	2.6000e-004	0.0000	3.7373	3.7373	7.0000e-005	7.0000e-005	3.7595
Total		**4.2000e-004**	**3.7700e-003**	**3.1700e-003**	**2.0000e-005**		**2.9000e-004**	**2.9000e-004**		**2.9000e-004**	**2.9000e-004**	**0.0000**	**4.1077**	**4.1077**	**8.0000e-005**	**8.0000e-005**	**4.1321**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12900	3.1163	1.7000e-004	4.0000e-005	3.1310
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33541.2	8.1025	4.4000e-004	9.0000e-005	8.1408
Unrefrigerated Warehouse-No Rail	68655	16.5850	9.0000e-004	1.9000e-004	16.6632
Total		**27.8038**	**1.5100e-003**	**3.2000e-004**	**27.9350**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	12900	3.1163	1.7000e-004	4.0000e-005	3.1310
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	33541.2	8.1025	4.4000e-004	9.0000e-005	8.1408
Unrefrigerated Warehouse-No Rail	68655	16.5850	9.0000e-004	1.9000e-004	16.6632
Total		**27.8038**	**1.5100e-003**	**3.2000e-004**	**27.9350**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0360	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	0.0360	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

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	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**0.0360**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

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	0.0184					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0176					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**0.0360**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	27.8402	0.2579	6.3400e-003	36.1765
Unmitigated	27.8402	0.2579	6.3400e-003	36.1765

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.355467 / 0.217867	1.8156	0.0117	2.9000e-004	2.1947
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	7.51563 / 0	26.0246	0.2462	6.0500e-003	33.9818
Total		**27.8402**	**0.2579**	**6.3400e-003**	**36.1765**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0.355467 / 0.217867	1.8156	0.0117	2.9000e-004	2.1947
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	7.51563 / 0	26.0246	0.2462	6.0500e-003	33.9818
Total		**27.8402**	**0.2579**	**6.3400e-003**	**36.1765**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	6.5789	0.3888	0.0000	16.2990
Unmitigated	6.5789	0.3888	0.0000	16.2990

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	1.86	0.3776	0.0223	0.0000	0.9354
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	30.55	6.2014	0.3665	0.0000	15.3636
Total		**6.5789**	**0.3888**	**0.0000**	**16.2990**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	1.86	0.3776	0.0223	0.0000	0.9354
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	30.55	6.2014	0.3665	0.0000	15.3636
Total		**6.5789**	**0.3888**	**0.0000**	**16.2990**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dedeaux Industrial Center Project – Construction with Standard Conditions

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction with incorporation of standard conditions

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Earliest anticipated construction schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Additional daily vendor trips added where default value was zero to account for miscellaneous trips.

Demolition - Estimate of 3,819 tons of debris to be removed (removal of existing hardscape); see supporting information for conversion of hardscape to tons of debris

Grading - 3,100 cubic yards of material to be exported during the grading phase

Architectural Coating -

Vehicle Trips - Construction run only

Consumer Products - Construction run only

Area Coating -

Landscape Equipment - Construction run only

Energy Use - Construction run only

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403
Tier IV Interim mitigation for construction equipment >100 HP

Energy Mitigation -

Water Mitigation -

Fleet Mix -

Dedeaux Industrial Center Project – Construction with Standard Conditions - San Bernardino-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConsumerProducts	ROG_EF	1.98E-05	1.6E-06
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	0.37	0.00
tblGrading	MaterialExported	0.00	3,100.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1869	42.9025	33.3045	0.0705	18.2931	2.2007	20.4938	9.9914	2.0247	12.0161	0.0000	7,195.0725	7,195.0725	1.2695	0.0000	7,224.0620
2021	23.0072	21.8853	21.8815	0.0454	0.9841	1.0625	2.0466	0.2651	1.0045	1.2696	0.0000	4,419.4000	4,419.4000	0.7081	0.0000	4,437.1026
Maximum	**23.0072**	**42.9025**	**33.3045**	**0.0705**	**18.2931**	**2.2007**	**20.4938**	**9.9914**	**2.0247**	**12.0161**	**0.0000**	**7,195.0725**	**7,195.0725**	**1.2695**	**0.0000**	**7,224.0620**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	3.3907	29.5895	35.6561	0.0705	7.2727	1.3217	7.8502	3.9337	1.2429	4.4685	0.0000	7,195.0725	7,195.0725	1.2695	0.0000	7,224.0620
2021	22.7286	18.9758	22.8345	0.0454	0.9841	0.8985	1.8826	0.2651	0.8543	1.1194	0.0000	4,419.4000	4,419.4000	0.7081	0.0000	4,437.1026
Maximum	**22.7286**	**29.5895**	**35.6561**	**0.0705**	**7.2727**	**1.3217**	**7.8502**	**3.9337**	**1.2429**	**4.4685**	**0.0000**	**7,195.0725**	**7,195.0725**	**1.2695**	**0.0000**	**7,224.0620**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.95**	**25.04**	**-5.99**	**0.00**	**57.17**	**31.96**	**56.82**	**59.06**	**30.77**	**57.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.1999**	**0.0207**	**0.0234**	**1.2000e-004**	**0.0000**	**1.5900e-003**	**1.5900e-003**	**0.0000**	**1.5900e-003**	**1.5900e-003**		**24.8235**	**24.8235**	**5.1000e-004**	**4.5000e-004**	**24.9718**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.1999**	**0.0207**	**0.0234**	**1.2000e-004**	**0.0000**	**1.5900e-003**	**1.5900e-003**	**0.0000**	**1.5900e-003**	**1.5900e-003**		**24.8235**	**24.8235**	**5.1000e-004**	**4.5000e-004**	**24.9718**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	10/5/2020	10/30/2020	5	20	
2	Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5	
3	Grading	Grading	11/7/2020	11/18/2020	5	8	
4	Building Construction	Building Construction	11/19/2020	10/6/2021	5	230	
5	Paving	Paving	11/19/2020	12/14/2020	5	18	
6	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	378.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	388.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	24.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0861	0.0000	4.0861	0.6187	0.0000	0.6187			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**4.0861**	**1.6587**	**5.7448**	**0.6187**	**1.5419**	**2.1605**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1174	4.6558	0.6870	0.0148	0.3308	0.0139	0.3446	0.0907	0.0133	0.1040		1,573.8183	1,573.8183	0.0849		1,575.9416
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	**0.2114**	**5.1305**	**1.4439**	**0.0176**	**0.5240**	**0.0169**	**0.5410**	**0.1425**	**0.0161**	**0.1587**		**1,857.7715**	**1,857.7715**	**0.0975**		**1,860.2100**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5936	0.0000	1.5936	0.2413	0.0000	0.2413			0.0000			0.0000
Off-Road	0.8876	14.6244	24.5018	0.0388		0.2514	0.2514		0.2514	0.2514	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**0.8876**	**14.6244**	**24.5018**	**0.0388**	**1.5936**	**0.2514**	**1.8450**	**0.2413**	**0.2514**	**0.4927**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1174	4.6558	0.6870	0.0148	0.3308	0.0139	0.3446	0.0907	0.0133	0.1040		1,573.8183	1,573.8183	0.0849		1,575.9416
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	**0.2114**	**5.1305**	**1.4439**	**0.0176**	**0.5240**	**0.0169**	**0.5410**	**0.1425**	**0.0161**	**0.1587**		**1,857.7715**	**1,857.7715**	**0.0975**		**1,860.2100**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0982	0.0631	0.8095	2.0400e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		203.4151	203.4151	6.2100e-003		203.5704
Total	**0.1104**	**0.4852**	**0.8918**	**3.1300e-003**	**0.2268**	**3.2600e-003**	**0.2301**	**0.0607**	**3.0700e-003**	**0.0638**		**317.8557**	**317.8557**	**0.0136**		**318.1968**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	1.2562	15.1642	22.7106	0.0380		0.5743	0.5743		0.5317	0.5317	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**1.2562**	**15.1642**	**22.7106**	**0.0380**	**7.0458**	**0.5743**	**7.6201**	**3.8730**	**0.5317**	**4.4047**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0982	0.0631	0.8095	2.0400e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		203.4151	203.4151	6.2100e-003		203.5704
Total	**0.1104**	**0.4852**	**0.8918**	**3.1300e-003**	**0.2268**	**3.2600e-003**	**0.2301**	**0.0607**	**3.0700e-003**	**0.0638**		**317.8557**	**317.8557**	**0.0136**		**318.1968**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5962	0.0000	6.5962	3.3741	0.0000	3.3741			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5962**	**1.2734**	**7.8696**	**3.3741**	**1.1716**	**4.5457**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3013	11.9474	1.7630	0.0381	0.8488	0.0356	0.8844	0.2327	0.0341	0.2668		4,038.6342	4,038.6342	0.2180		4,044.0830
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	**0.3953**	**12.4221**	**2.5199**	**0.0408**	**1.0421**	**0.0386**	**1.0807**	**0.2846**	**0.0369**	**0.3215**		**4,322.5874**	**4,322.5874**	**0.2306**		**4,328.3514**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.5725	0.0000	2.5725	1.3159	0.0000	1.3159			0.0000			0.0000
Off-Road	0.9396	12.5844	18.8035	0.0297		0.4326	0.4326		0.4006	0.4006	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**0.9396**	**12.5844**	**18.8035**	**0.0297**	**2.5725**	**0.4326**	**3.0051**	**1.3159**	**0.4006**	**1.7166**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3013	11.9474	1.7630	0.0381	0.8488	0.0356	0.8844	0.2327	0.0341	0.2668		4,038.6342	4,038.6342	0.2180		4,044.0830
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	**0.3953**	**12.4221**	**2.5199**	**0.0408**	**1.0421**	**0.0386**	**1.0807**	**0.2846**	**0.0369**	**0.3215**		**4,322.5874**	**4,322.5874**	**0.2306**		**4,328.3514**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0729	2.5327	0.4936	6.5100e-003	0.1537	0.0117	0.1654	0.0443	0.0112	0.0554		686.6433	686.6433	0.0446		687.7583
Worker	0.3275	0.2102	2.6984	6.8100e-003	0.6707	4.3900e-003	0.6751	0.1779	4.0500e-003	0.1819		678.0505	678.0505	0.0207		678.5680
Total	**0.4003**	**2.7429**	**3.1920**	**0.0133**	**0.8244**	**0.0160**	**0.8404**	**0.2221**	**0.0152**	**0.2373**		**1,364.6938**	**1,364.6938**	**0.0653**		**1,366.3263**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8058	15.8021	17.6855	0.0269		0.9308	0.9308		0.8797	0.8797	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**1.8058**	**15.8021**	**17.6855**	**0.0269**		**0.9308**	**0.9308**		**0.8797**	**0.8797**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0729	2.5327	0.4936	6.5100e-003	0.1537	0.0117	0.1654	0.0443	0.0112	0.0554		686.6433	686.6433	0.0446		687.7583
Worker	0.3275	0.2102	2.6984	6.8100e-003	0.6707	4.3900e-003	0.6751	0.1779	4.0500e-003	0.1819		678.0505	678.0505	0.0207		678.5680
Total	**0.4003**	**2.7429**	**3.1920**	**0.0133**	**0.8244**	**0.0160**	**0.8404**	**0.2221**	**0.0152**	**0.2373**		**1,364.6938**	**1,364.6938**	**0.0653**		**1,366.3263**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0621	2.3145	0.4355	6.4700e-003	0.1537	3.9700e-003	0.1577	0.0443	3.8000e-003	0.0481		683.0143	683.0143	0.0432		684.0934
Worker	0.3049	0.1884	2.4839	6.5900e-003	0.6707	4.2900e-003	0.6750	0.1779	3.9500e-003	0.1818		656.4483	656.4483	0.0187		656.9154
Total	**0.3670**	**2.5029**	**2.9194**	**0.0131**	**0.8244**	**8.2600e-003**	**0.8326**	**0.2221**	**7.7500e-003**	**0.2299**		**1,339.4627**	**1,339.4627**	**0.0618**		**1,341.0088**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.6223	14.5226	17.5281	0.0269		0.7946	0.7946		0.7511	0.7511	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.6223**	**14.5226**	**17.5281**	**0.0269**		**0.7946**	**0.7946**		**0.7511**	**0.7511**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0621	2.3145	0.4355	6.4700e-003	0.1537	3.9700e-003	0.1577	0.0443	3.8000e-003	0.0481		683.0143	683.0143	0.0432		684.0934
Worker	0.3049	0.1884	2.4839	6.5900e-003	0.6707	4.2900e-003	0.6750	0.1779	3.9500e-003	0.1818		656.4483	656.4483	0.0187		656.9154
Total	**0.3670**	**2.5029**	**2.9194**	**0.0131**	**0.8244**	**8.2600e-003**	**0.8326**	**0.2221**	**7.7500e-003**	**0.2299**		**1,339.4627**	**1,339.4627**	**0.0618**		**1,341.0088**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.3202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5039**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**		**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	**0.1213**	**0.4922**	**0.9817**	**3.3600e-003**	**0.2492**	**3.4000e-003**	**0.2526**	**0.0667**	**3.2100e-003**	**0.0699**		**340.4574**	**340.4574**	**0.0143**		**340.8157**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7431	10.5524	13.7970	0.0189		0.3714	0.3714		0.3448	0.3448	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.3202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0633**	**10.5524**	**13.7970**	**0.0189**		**0.3714**	**0.3714**		**0.3448**	**0.3448**	**0.0000**	**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.1092	0.0701	0.8995	2.2700e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		226.0168	226.0168	6.9000e-003		226.1893
Total	**0.1213**	**0.4922**	**0.9817**	**3.3600e-003**	**0.2492**	**3.4000e-003**	**0.2526**	**0.0667**	**3.2100e-003**	**0.0699**		**340.4574**	**340.4574**	**0.0143**		**340.8157**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**20.6680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3858	0.0726	1.0800e-003	0.0256	6.6000e-004	0.0263	7.3800e-003	6.3000e-004	8.0100e-003		113.8357	113.8357	7.1900e-003		114.0156
Worker	0.0610	0.0377	0.4968	1.3200e-003	0.1341	8.6000e-004	0.1350	0.0356	7.9000e-004	0.0364		131.2897	131.2897	3.7400e-003		131.3831
Total	**0.0713**	**0.4234**	**0.5694**	**2.4000e-003**	**0.1598**	**1.5200e-003**	**0.1613**	**0.0430**	**1.4200e-003**	**0.0444**		**245.1254**	**245.1254**	**0.0109**		**245.3987**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	20.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**20.6680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0104	0.3858	0.0726	1.0800e-003	0.0256	6.6000e-004	0.0263	7.3800e-003	6.3000e-004	8.0100e-003		113.8357	113.8357	7.1900e-003		114.0156
Worker	0.0610	0.0377	0.4968	1.3200e-003	0.1341	8.6000e-004	0.1350	0.0356	7.9000e-004	0.0364		131.2897	131.2897	3.7400e-003		131.3831
Total	**0.0713**	**0.4234**	**0.5694**	**2.4000e-003**	**0.1598**	**1.5200e-003**	**0.1613**	**0.0430**	**1.4200e-003**	**0.0444**		**245.1254**	**245.1254**	**0.0109**		**245.3987**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

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	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
NaturalGas Unmitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581

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					
General Office Building	19.0137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	191.877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

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					
General Office Building	0.0190137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.191877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dedeaux Industrial Center Project – Construction with Standard Conditions

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction with incorporation of standard conditions

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Earliest anticipated construction schedule

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Additional daily vendor trips added where default value was zero to account for miscellaneous trips.

Demolition - Estimate of 3,819 tons of debris to be removed (removal of existing hardscape); see supporting information for conversion of hardscape to tons of debris

Grading - 3,100 cubic yards of material to be exported during the grading phase

Architectural Coating -

Vehicle Trips - Construction run only

Consumer Products - Construction run only

Area Coating -

Landscape Equipment - Construction run only

Energy Use - Construction run only

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403
Tier IV Interim mitigation for construction equipment >100 HP

Energy Mitigation -

Water Mitigation -

Fleet Mix -

Dedeaux Industrial Center Project – Construction with Standard Conditions - San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConstEquipMitigation	Tier	No Change	Tier 4 Interim
tblConsumerProducts	ROG_EF	1.98E-05	1.6E-06
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	0.37	0.00
tblGrading	MaterialExported	0.00	3,100.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	4.1876	42.9024	32.7552	0.0693	18.2931	2.2007	20.4938	9.9914	2.0247	12.0161	0.0000	7,067.8770	7,067.8770	1.2716	0.0000	7,097.3342
2021	23.0124	21.8683	21.4319	0.0442	0.9841	1.0626	2.0468	0.2651	1.0047	1.2697	0.0000	4,307.3886	4,307.3886	0.7108	0.0000	4,325.1590
Maximum	**23.0124**	**42.9024**	**32.7552**	**0.0693**	**18.2931**	**2.2007**	**20.4938**	**9.9914**	**2.0247**	**12.0161**	**0.0000**	**7,067.8770**	**7,067.8770**	**1.2716**	**0.0000**	**7,097.3342**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2020	3.3956	29.5802	35.1069	0.0693	7.2727	1.3218	7.8503	3.9337	1.2430	4.4685	0.0000	7,067.8770	7,067.8770	1.2716	0.0000	7,097.3342
2021	22.7338	18.9587	22.3848	0.0442	0.9841	0.8986	1.8828	0.2651	0.8544	1.1195	0.0000	4,307.3886	4,307.3886	0.7108	0.0000	4,325.1590
Maximum	**22.7338**	**29.5802**	**35.1069**	**0.0693**	**7.2727**	**1.3218**	**7.8503**	**3.9337**	**1.2430**	**4.4685**	**0.0000**	**7,067.8770**	**7,067.8770**	**1.2716**	**0.0000**	**7,097.3342**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**3.94**	**25.06**	**-6.10**	**0.00**	**57.17**	**31.96**	**56.82**	**59.06**	**30.76**	**57.94**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.1999**	**0.0207**	**0.0234**	**1.2000e-004**	**0.0000**	**1.5900e-003**	**1.5900e-003**	**0.0000**	**1.5900e-003**	**1.5900e-003**		**24.8235**	**24.8235**	**5.1000e-004**	**4.5000e-004**	**24.9718**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.1999**	**0.0207**	**0.0234**	**1.2000e-004**	**0.0000**	**1.5900e-003**	**1.5900e-003**	**0.0000**	**1.5900e-003**	**1.5900e-003**		**24.8235**	**24.8235**	**5.1000e-004**	**4.5000e-004**	**24.9718**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	10/5/2020	10/30/2020	5	20	
2	Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5	
3	Grading	Grading	11/7/2020	11/18/2020	5	8	
4	Building Construction	Building Construction	11/19/2020	10/6/2021	5	230	
5	Paving	Paving	11/19/2020	12/14/2020	5	18	
6	Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	4.00	378.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	4.00	388.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	60.00	24.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.0861	0.0000	4.0861	0.6187	0.0000	0.6187			0.0000			0.0000
Off-Road	3.3121	33.2010	21.7532	0.0388		1.6587	1.6587		1.5419	1.5419		3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**3.3121**	**33.2010**	**21.7532**	**0.0388**	**4.0861**	**1.6587**	**5.7448**	**0.6187**	**1.5419**	**2.1605**		**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1227	4.6805	0.7860	0.0144	0.3308	0.0141	0.3448	0.0907	0.0135	0.1041		1,532.7819	1,532.7819	0.0922		1,535.0861
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	**0.2174**	**5.1545**	**1.4358**	**0.0170**	**0.5240**	**0.0171**	**0.5412**	**0.1425**	**0.0163**	**0.1589**		**1,794.8445**	**1,794.8445**	**0.1049**		**1,797.4676**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.5936	0.0000	1.5936	0.2413	0.0000	0.2413			0.0000			0.0000
Off-Road	0.8876	14.6244	24.5018	0.0388		0.2514	0.2514		0.2514	0.2514	0.0000	3,747.7049	3,747.7049	1.0580		3,774.1536
Total	**0.8876**	**14.6244**	**24.5018**	**0.0388**	**1.5936**	**0.2514**	**1.8450**	**0.2413**	**0.2514**	**0.4927**	**0.0000**	**3,747.7049**	**3,747.7049**	**1.0580**		**3,774.1536**

3.2 Demolition - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1227	4.6805	0.7860	0.0144	0.3308	0.0141	0.3448	0.0907	0.0135	0.1041		1,532.7819	1,532.7819	0.0922		1,535.0861
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	**0.2174**	**5.1545**	**1.4358**	**0.0170**	**0.5240**	**0.0171**	**0.5412**	**0.1425**	**0.0163**	**0.1589**		**1,794.8445**	**1,794.8445**	**0.1049**		**1,797.4676**

3.3 Site Preparation - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.0765	42.4173	21.5136	0.0380		2.1974	2.1974		2.0216	2.0216		3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**4.0765**	**42.4173**	**21.5136**	**0.0380**	**18.0663**	**2.1974**	**20.2637**	**9.9307**	**2.0216**	**11.9523**		**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0983	0.0663	0.6653	1.8300e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		182.4750	182.4750	5.4500e-003		182.6112
Total	**0.1111**	**0.4850**	**0.7607**	**2.8700e-003**	**0.2268**	**3.2900e-003**	**0.2301**	**0.0607**	**3.0900e-003**	**0.0638**		**292.4750**	**292.4750**	**0.0137**		**292.8167**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0458	0.0000	7.0458	3.8730	0.0000	3.8730			0.0000			0.0000
Off-Road	1.2562	15.1642	22.7106	0.0380		0.5743	0.5743		0.5317	0.5317	0.0000	3,685.1016	3,685.1016	1.1918		3,714.8975
Total	**1.2562**	**15.1642**	**22.7106**	**0.0380**	**7.0458**	**0.5743**	**7.6201**	**3.8730**	**0.5317**	**4.4047**	**0.0000**	**3,685.1016**	**3,685.1016**	**1.1918**		**3,714.8975**

3.3 Site Preparation - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0983	0.0663	0.6653	1.8300e-003	0.2012	1.3200e-003	0.2025	0.0534	1.2100e-003	0.0546		182.4750	182.4750	5.4500e-003		182.6112
Total	**0.1111**	**0.4850**	**0.7607**	**2.8700e-003**	**0.2268**	**3.2900e-003**	**0.2301**	**0.0607**	**3.0900e-003**	**0.0638**		**292.4750**	**292.4750**	**0.0137**		**292.8167**

3.4 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.5962	0.0000	6.5962	3.3741	0.0000	3.3741			0.0000			0.0000
Off-Road	2.4288	26.3859	16.0530	0.0297		1.2734	1.2734		1.1716	1.1716		2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**2.4288**	**26.3859**	**16.0530**	**0.0297**	**6.5962**	**1.2734**	**7.8696**	**3.3741**	**1.1716**	**4.5457**		**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3149	12.0109	2.0171	0.0371	0.8488	0.0361	0.8849	0.2327	0.0345	0.2672		3,933.3293	3,933.3293	0.2365		3,939.2421
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	**0.4097**	**12.4848**	**2.6669**	**0.0396**	**1.0421**	**0.0392**	**1.0812**	**0.2846**	**0.0374**	**0.3220**		**4,195.3918**	**4,195.3918**	**0.2493**		**4,201.6235**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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					2.5725	0.0000	2.5725	1.3159	0.0000	1.3159			0.0000			0.0000
Off-Road	0.9396	12.5844	18.8035	0.0297		0.4326	0.4326		0.4006	0.4006	0.0000	2,872.4851	2,872.4851	0.9290		2,895.7106
Total	**0.9396**	**12.5844**	**18.8035**	**0.0297**	**2.5725**	**0.4326**	**3.0051**	**1.3159**	**0.4006**	**1.7166**	**0.0000**	**2,872.4851**	**2,872.4851**	**0.9290**		**2,895.7106**

3.4 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3149	12.0109	2.0171	0.0371	0.8488	0.0361	0.8849	0.2327	0.0345	0.2672		3,933.3293	3,933.3293	0.2365		3,939.2421
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	**0.4097**	**12.4848**	**2.6669**	**0.0396**	**1.0421**	**0.0392**	**1.0812**	**0.2846**	**0.0374**	**0.3220**		**4,195.3918**	**4,195.3918**	**0.2493**		**4,201.6235**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503		2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**2.1198**	**19.1860**	**16.8485**	**0.0269**		**1.1171**	**1.1171**		**1.0503**	**1.0503**		**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0768	2.5122	0.5721	6.2600e-003	0.1537	0.0118	0.1655	0.0443	0.0113	0.0556		660.0003	660.0003	0.0493		661.2330
Worker	0.3277	0.2212	2.2177	6.1100e-003	0.6707	4.3900e-003	0.6751	0.1779	4.0500e-003	0.1819		608.2499	608.2499	0.0182		608.7038
Total	**0.4045**	**2.7333**	**2.7898**	**0.0124**	**0.8244**	**0.0162**	**0.8406**	**0.2221**	**0.0153**	**0.2375**		**1,268.2501**	**1,268.2501**	**0.0675**		**1,269.9369**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.8058	15.8021	17.6855	0.0269		0.9308	0.9308		0.8797	0.8797	0.0000	2,553.0631	2,553.0631	0.6229		2,568.6345
Total	**1.8058**	**15.8021**	**17.6855**	**0.0269**		**0.9308**	**0.9308**		**0.8797**	**0.8797**	**0.0000**	**2,553.0631**	**2,553.0631**	**0.6229**		**2,568.6345**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0768	2.5122	0.5721	6.2600e-003	0.1537	0.0118	0.1655	0.0443	0.0113	0.0556		660.0003	660.0003	0.0493		661.2330
Worker	0.3277	0.2212	2.2177	6.1100e-003	0.6707	4.3900e-003	0.6751	0.1779	4.0500e-003	0.1819		608.2499	608.2499	0.0182		608.7038
Total	**0.4045**	**2.7333**	**2.7898**	**0.0124**	**0.8244**	**0.0162**	**0.8406**	**0.2221**	**0.0153**	**0.2375**		**1,268.2501**	**1,268.2501**	**0.0675**		**1,269.9369**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0659	2.2899	0.5094	6.2200e-003	0.1537	4.0800e-003	0.1578	0.0443	3.9000e-003	0.0482		656.4843	656.4843	0.0478		657.6804
Worker	0.3055	0.1982	2.0374	5.9100e-003	0.6707	4.2900e-003	0.6750	0.1779	3.9500e-003	0.1818		588.8986	588.8986	0.0164		589.3084
Total	**0.3714**	**2.4881**	**2.5468**	**0.0121**	**0.8244**	**8.3700e-003**	**0.8327**	**0.2221**	**7.8500e-003**	**0.2300**		**1,245.3829**	**1,245.3829**	**0.0642**		**1,246.9888**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	1.6223	14.5226	17.5281	0.0269		0.7946	0.7946		0.7511	0.7511	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.6223**	**14.5226**	**17.5281**	**0.0269**		**0.7946**	**0.7946**		**0.7511**	**0.7511**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0659	2.2899	0.5094	6.2200e-003	0.1537	4.0800e-003	0.1578	0.0443	3.9000e-003	0.0482		656.4843	656.4843	0.0478		657.6804
Worker	0.3055	0.1982	2.0374	5.9100e-003	0.6707	4.2900e-003	0.6750	0.1779	3.9500e-003	0.1818		588.8986	588.8986	0.0164		589.3084
Total	**0.3714**	**2.4881**	**2.5468**	**0.0121**	**0.8244**	**8.3700e-003**	**0.8327**	**0.2221**	**7.8500e-003**	**0.2300**		**1,245.3829**	**1,245.3829**	**0.0642**		**1,246.9888**

3.6 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1837	11.8015	12.2823	0.0189		0.6509	0.6509		0.6005	0.6005		1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.3202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.5039**	**11.8015**	**12.2823**	**0.0189**		**0.6509**	**0.6509**		**0.6005**	**0.6005**		**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.6 Paving - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	**0.1220**	**0.4924**	**0.8346**	**3.0800e-003**	**0.2492**	**3.4300e-003**	**0.2526**	**0.0667**	**3.2300e-003**	**0.0699**		**312.7500**	**312.7500**	**0.0143**		**313.1068**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	0.7431	10.5524	13.7970	0.0189		0.3714	0.3714		0.3448	0.3448	0.0000	1,804.7070	1,804.7070	0.5670		1,818.8830
Paving	0.3202					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0633**	**10.5524**	**13.7970**	**0.0189**		**0.3714**	**0.3714**		**0.3448**	**0.3448**	**0.0000**	**1,804.7070**	**1,804.7070**	**0.5670**		**1,818.8830**

3.6 Paving - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.1092	0.0737	0.7393	2.0400e-003	0.2236	1.4600e-003	0.2250	0.0593	1.3500e-003	0.0606		202.7500	202.7500	6.0500e-003		202.9013
Total	**0.1220**	**0.4924**	**0.8346**	**3.0800e-003**	**0.2492**	**3.4300e-003**	**0.2526**	**0.0667**	**3.2300e-003**	**0.0699**		**312.7500**	**312.7500**	**0.0143**		**313.1068**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	20.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**20.6680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0110	0.3816	0.0849	1.0400e-003	0.0256	6.8000e-004	0.0263	7.3800e-003	6.5000e-004	8.0300e-003		109.4141	109.4141	7.9700e-003		109.6134
Worker	0.0611	0.0396	0.4075	1.1800e-003	0.1341	8.6000e-004	0.1350	0.0356	7.9000e-004	0.0364		117.7797	117.7797	3.2800e-003		117.8617
Total	**0.0721**	**0.4213**	**0.4924**	**2.2200e-003**	**0.1598**	**1.5400e-003**	**0.1613**	**0.0430**	**1.4400e-003**	**0.0444**		**227.1938**	**227.1938**	**0.0113**		**227.4751**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	20.4491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**20.6680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0110	0.3816	0.0849	1.0400e-003	0.0256	6.8000e-004	0.0263	7.3800e-003	6.5000e-004	8.0300e-003		109.4141	109.4141	7.9700e-003		109.6134
Worker	0.0611	0.0396	0.4075	1.1800e-003	0.1341	8.6000e-004	0.1350	0.0356	7.9000e-004	0.0364		117.7797	117.7797	3.2800e-003		117.8617
Total	**0.0721**	**0.4213**	**0.4924**	**2.2200e-003**	**0.1598**	**1.5400e-003**	**0.1613**	**0.0430**	**1.4400e-003**	**0.0444**		**227.1938**	**227.1938**	**0.0113**		**227.4751**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

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	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
NaturalGas Unmitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581

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					
General Office Building	19.0137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	191.877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

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					
General Office Building	0.0190137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.191877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dedeaux Industrial Center Project – Truck Operations

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Dedeaux Industrial Center Project – Truck Operations - San Bernardino-South Coast County, Annual

Project Characteristics - Truck Operations
CO2 intensity factor adjusted based on Renewable Portfolio Standard

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Grading -

Energy Use - Operational truck only run

Trips and VMT - Operational run only

On-road Fugitive Dust -

Architectural Coating - Operational run only

Vehicle Trips - Truck trip generation rate consistent with the project-specific traffic memo dated 05/08/20. (56 daily truck trips)
40-mile trip length for truck trips, consistent with SCAQMD recommendations

Fleet Mix - Truck only fleet mix
Consistent with the project-specific truck mix included in the Dedeaux Industrial Center Traffic Impact Analysis - Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.

Area Coating - Operational truck only run

Landscape Equipment - Operational truck only run

Water And Wastewater - Operational truck only run

Solid Waste - Operational truck only run0

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0
tblAreaCoating	Area_EF_Nonresidential_Interior	100	0

tblAreaCoating	Area_EF_Parking	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintParkingValue	100	0
tblConstructionPhase	NumDays	18.00	1.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	2.00	0.00
tblFleetMix	HHD	0.06	0.68
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	5.2670e-003	8.3620e-003
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.29
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00

tblFleetMix	UBUS	1.6070e-003	0.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblSolidWaste	SolidWasteGenerationRate	1.86	0.00
tblSolidWaste	SolidWasteGenerationRate	30.55	0.00
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblVehicleTrips	CC_TL	8.40	40.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	1.72
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	1.72
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	1.72
tblWater	IndoorWaterUseRate	355,467.50	0.00
tblWater	IndoorWaterUseRate	7,515,625.00	0.00
tblWater	OutdoorWaterUseRate	217,867.17	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		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	0.1388	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0846	2.9070	0.5902	0.0125	0.3619	0.0106	0.3726	0.1024	0.0102	0.1125	0.0000	1,198.5622	1,198.5622	0.0405	0.0000	1,199.5733
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2234**	**2.9070**	**0.5902**	**0.0125**	**0.3619**	**0.0106**	**0.3726**	**0.1024**	**0.0102**	**0.1125**	**0.0000**	**1,198.5622**	**1,198.5622**	**0.0405**	**0.0000**	**1,199.5733**

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	0.1388	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0846	2.9070	0.5902	0.0125	0.3619	0.0106	0.3726	0.1024	0.0102	0.1125	0.0000	1,198.5622	1,198.5622	0.0405	0.0000	1,199.5733
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.2234**	**2.9070**	**0.5902**	**0.0125**	**0.3619**	**0.0106**	**0.3726**	**0.1024**	**0.0102**	**0.1125**	**0.0000**	**1,198.5622**	**1,198.5622**	**0.0405**	**0.0000**	**1,199.5733**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/2/2021	11/2/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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**

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

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

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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

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	0.0846	2.9070	0.5902	0.0125	0.3619	0.0106	0.3726	0.1024	0.0102	0.1125	0.0000	1,198.5622	1,198.5622	0.0405	0.0000	1,199.5733
Unmitigated	0.0846	2.9070	0.5902	0.0125	0.3619	0.0106	0.3726	0.1024	0.0102	0.1125	0.0000	1,198.5622	1,198.5622	0.0405	0.0000	1,199.5733

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	56.00	56.00	56.00	815,360	815,360
Total	56.00	56.00	56.00	815,360	815,360

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	40.00	40.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.027352	0.008362	0.285714	0.678571	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 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					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1388	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	0.1388	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

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	0.1388					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**0.1388**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

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	0.1388					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**0.1388**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

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

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

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

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dedeaux Industrial Center Project – Truck Operations

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Dedeaux Industrial Center Project – Truck Operations - San Bernardino-South Coast County, Summer

Project Characteristics - Truck Operations
CO2 intensity factor adjusted based on Renewable Portfolio Standard

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Grading -

Energy Use - Operational truck only run

Trips and VMT - Operational run only

On-road Fugitive Dust -

Architectural Coating - Operational run only

Vehicle Trips - Truck trip generation rate consistent with the project-specific traffic memo dated 05/08/20. (56 daily truck trips)
40-mile trip length for truck trips, consistent with SCAQMD recommendations

Fleet Mix - Truck only fleet mix
Consistent with the project-specific truck mix included in the Dedeaux Industrial Center Traffic Impact Analysis - Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.

Area Coating - Operational truck only run

Landscape Equipment - Operational truck only run

Water And Wastewater - Operational truck only run

Solid Waste - Operational truck only run0

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0
tblAreaCoating	Area_EF_Nonresidential_Interior	100	0

Dedeaux Industrial Center Project – Truck Operations - San Bernardino-South Coast County, Summer

tblAreaCoating	Area_EF_Parking	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintParkingValue	100	0
tblConstructionPhase	NumDays	18.00	1.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	2.00	0.00
tblFleetMix	HHD	0.06	0.68
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	5.2670e-003	8.3620e-003
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.29
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00

tblFleetMix	UBUS	1.6070e-003	0.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblSolidWaste	SolidWasteGenerationRate	1.86	0.00
tblSolidWaste	SolidWasteGenerationRate	30.55	0.00
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblVehicleTrips	CC_TL	8.40	40.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	1.72
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	1.72
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	1.72
tblWater	IndoorWaterUseRate	355,467.50	0.00
tblWater	IndoorWaterUseRate	7,515,625.00	0.00
tblWater	OutdoorWaterUseRate	217,867.17	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4603	15.3876	3.1602	0.0691	2.0210	0.0583	2.0793	0.5704	0.0558	0.6262		7,302.7630	7,302.7630	0.2390		7,308.7371
Total	**1.2214**	**15.3876**	**3.1662**	**0.0691**	**2.0210**	**0.0584**	**2.0794**	**0.5704**	**0.0558**	**0.6262**		**7,302.7759**	**7,302.7759**	**0.2390**	**0.0000**	**7,308.7508**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4603	15.3876	3.1602	0.0691	2.0210	0.0583	2.0793	0.5704	0.0558	0.6262		7,302.7630	7,302.7630	0.2390		7,308.7371
Total	**1.2214**	**15.3876**	**3.1662**	**0.0691**	**2.0210**	**0.0584**	**2.0794**	**0.5704**	**0.0558**	**0.6262**		**7,302.7759**	**7,302.7759**	**0.2390**	**0.0000**	**7,308.7508**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/2/2021	11/2/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	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**

Mitigated Construction Off-Site

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

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	0.4603	15.3876	3.1602	0.0691	2.0210	0.0583	2.0793	0.5704	0.0558	0.6262		7,302.7630	7,302.7630	0.2390		7,308.7371
Unmitigated	0.4603	15.3876	3.1602	0.0691	2.0210	0.0583	2.0793	0.5704	0.0558	0.6262		7,302.7630	7,302.7630	0.2390		7,308.7371

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	56.00	56.00	56.00	815,360	815,360
Total	56.00	56.00	56.00	815,360	815,360

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	40.00	40.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.027352	0.008362	0.285714	0.678571	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.7606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.7611**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.7606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.7611**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Dedeaux Industrial Center Project – Truck Operations

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Truck Operations
CO2 intensity factor adjusted based on Renewable Portfolio Standard

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Grading -

Energy Use - Operational truck only run

Trips and VMT - Operational run only

On-road Fugitive Dust -

Architectural Coating - Operational run only

Vehicle Trips - Truck trip generation rate consistent with the project-specific traffic memo dated 05/08/20. (56 daily truck trips)
40-mile trip length for truck trips, consistent with SCAQMD recommendations

Fleet Mix - Truck only fleet mix
Consistent with the project-specific truck mix included in the Dedeaux Industrial Center Traffic Impact Analysis - Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.

Area Coating - Operational truck only run

Landscape Equipment - Operational truck only run

Water And Wastewater - Operational truck only run

Solid Waste - Operational truck only run0

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0
tblAreaCoating	Area_EF_Nonresidential_Interior	100	0

Dedeaux Industrial Center Project – Truck Operations - San Bernardino-South Coast County, Winter

tblAreaCoating	Area_EF_Parking	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialExteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintNonresidentialInteriorValue	100	0
tblAreaMitigation	UseLowVOCPaintParkingValue	100	0
tblConstructionPhase	NumDays	18.00	1.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	2.00	0.00
tblFleetMix	HHD	0.06	0.68
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	5.2670e-003	8.3620e-003
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.29
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00

tblFleetMix	UBUS	1.6070e-003	0.00
tblLandscapeEquipment	NumberSummerDays	250	1
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblSolidWaste	SolidWasteGenerationRate	1.86	0.00
tblSolidWaste	SolidWasteGenerationRate	30.55	0.00
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblVehicleTrips	CC_TL	8.40	40.00
tblVehicleTrips	CNW_TL	6.90	40.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	1.72
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	1.72
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	1.72
tblWater	IndoorWaterUseRate	355,467.50	0.00
tblWater	IndoorWaterUseRate	7,515,625.00	0.00
tblWater	OutdoorWaterUseRate	217,867.17	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4706	15.7130	3.3555	0.0683	2.0210	0.0587	2.0797	0.5704	0.0561	0.6265		7,219.8126	7,219.8126	0.2534		7,226.1474
Total	**1.2317**	**15.7131**	**3.3616**	**0.0683**	**2.0210**	**0.0587**	**2.0797**	**0.5704**	**0.0561**	**0.6265**		**7,219.8255**	**7,219.8255**	**0.2534**	**0.0000**	**7,226.1611**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.4706	15.7130	3.3555	0.0683	2.0210	0.0587	2.0797	0.5704	0.0561	0.6265		7,219.8126	7,219.8126	0.2534		7,226.1474
Total	**1.2317**	**15.7131**	**3.3616**	**0.0683**	**2.0210**	**0.0587**	**2.0797**	**0.5704**	**0.0561**	**0.6265**		**7,219.8255**	**7,219.8255**	**0.2534**	**0.0000**	**7,226.1611**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/2/2021	11/2/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	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**

Mitigated Construction Off-Site

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

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	0.4706	15.7130	3.3555	0.0683	2.0210	0.0587	2.0797	0.5704	0.0561	0.6265		7,219.8126	7,219.8126	0.2534		7,226.1474
Unmitigated	0.4706	15.7130	3.3555	0.0683	2.0210	0.0587	2.0797	0.5704	0.0561	0.6265		7,219.8126	7,219.8126	0.2534		7,226.1474

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	56.00	56.00	56.00	815,360	815,360
Total	56.00	56.00	56.00	815,360	815,360

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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	40.00	40.00	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.027352	0.008362	0.285714	0.678571	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.7606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.7611**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.7606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.7611**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Unmitigated Building and Passenger Vehicle Operations - LST

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Unmitigated Building and Passenger Vehicle Operations - LST - San Bernardino-South Coast County, Summer

Project Characteristics - Dedeaux Industrial Center Project - Unmitigated Building and Passenger Vehicle Operations - LST
Unmitigated area, energy, and passenger vehicle operations - on-site only
CO2 intensity factor adjusted based on Renewable Portfolio Standard.

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Trips and VMT - Operational run only

Demolition -

Grading -

Architectural Coating - Operational run only

Vehicle Trips - 78 daily passenger vehicle trips.
Trip lengths updated to 0.16 mile to account for on-site emissions from mobile sources for LST analysis. 100% primary trips for LST analysis.

Consumer Products - Updated based on 2017 ARB VOC inventory data and 2017 population estimates based on the State of California's Department of Finance demographic projections were used to estimate a statewide VOC EF for 2017.

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Energy Mitigation -

Water Mitigation - Compliance with Green Building Code Standards

Fleet Mix - Passenger vehicle fleet mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00

Unmitigated Building and Passenger Vehicle Operations - LST - San Bernardino-South Coast County, Summer

tblArchitecturalCoating	EF_Parking	100.00	0.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	1.00
tblConsumerProducts	ROG_EF	1.98E-05	1.6E-06
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.2670e-003	0.00
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblVehicleTrips	CC_TL	8.40	0.16
tblVehicleTrips	CNW_TL	6.90	0.16
tblVehicleTrips	CW_TL	16.60	0.16

tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	2.40
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	2.40
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	2.40

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.0997	0.0255	0.2913	2.2000e-004	9.4800e-003	4.7000e-004	9.9500e-003	2.5100e-003	4.3000e-004	2.9400e-003		21.8030	21.8030	1.5900e-003		21.8428
Total	**0.2996**	**0.0462**	**0.3147**	**3.4000e-004**	**9.4800e-003**	**2.0600e-003**	**0.0115**	**2.5100e-003**	**2.0200e-003**	**4.5300e-003**		**46.6266**	**46.6266**	**2.1000e-003**	**4.5000e-004**	**46.8146**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.0997	0.0255	0.2913	2.2000e-004	9.4800e-003	4.7000e-004	9.9500e-003	2.5100e-003	4.3000e-004	2.9400e-003		21.8030	21.8030	1.5900e-003		21.8428
Total	**0.2996**	**0.0462**	**0.3147**	**3.4000e-004**	**9.4800e-003**	**2.0600e-003**	**0.0115**	**2.5100e-003**	**2.0200e-003**	**4.5300e-003**		**46.6266**	**46.6266**	**2.1000e-003**	**4.5000e-004**	**46.8146**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	10/6/2021	10/6/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	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**

Mitigated Construction Off-Site

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

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	0.0997	0.0255	0.2913	2.2000e-004	9.4800e-003	4.7000e-004	9.9500e-003	2.5100e-003	4.3000e-004	2.9400e-003		21.8030	21.8030	1.5900e-003		21.8428
Unmitigated	0.0997	0.0255	0.2913	2.2000e-004	9.4800e-003	4.7000e-004	9.9500e-003	2.5100e-003	4.3000e-004	2.9400e-003		21.8030	21.8030	1.5900e-003		21.8428

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	78.00	78.00	78.00	4,543	4,543
Total	78.00	78.00	78.00	4,543	4,543

4.3 Trip Type Information

Unmitigated Building and Passenger Vehicle Operations - LST - San Bernardino-South Coast County, Summer

	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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.16	0.16	0.16	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.620587	0.041891	0.202723	0.134800	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
NaturalGas Unmitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581

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					
General Office Building	19.0137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	191.877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

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					
General Office Building	0.0190137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.191877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Unmitigated Building and Passenger Vehicle Operations - LST

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Unmitigated Building and Passenger Vehicle Operations - LST - San Bernardino-South Coast County, Winter

Project Characteristics - Dedeaux Industrial Center Project - Unmitigated Building and Passenger Vehicle Operations - LST
Unmitigated area, energy, and passenger vehicle operations - on-site only
CO2 intensity factor adjusted based on Renewable Portfolio Standard.

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Trips and VMT - Operational run only

Demolition -

Grading -

Architectural Coating - Operational run only

Vehicle Trips - 78 daily passenger vehicle trips.
Trip lengths updated to 0.16 mile to account for on-site emissions from mobile sources for LST analysis. 100% primary trips for LST analysis.

Consumer Products - Updated based on 2017 ARB VOC inventory data and 2017 population estimates based on the State of California's Department of Finance demographic projections were used to estimate a statewide VOC EF for 2017.

Area Coating -

Energy Use -

Water And Wastewater -

Solid Waste -

Construction Off-road Equipment Mitigation -

Energy Mitigation -

Water Mitigation - Compliance with Green Building Code Standards

Fleet Mix - Passenger vehicle fleet mix

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00

Unmitigated Building and Passenger Vehicle Operations - LST - San Bernardino-South Coast County, Winter

tblArchitecturalCoating	EF_Parking	100.00	0.00
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	1.00
tblConsumerProducts	ROG_EF	1.98E-05	1.6E-06
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.55	0.62
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.2670e-003	0.00
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.13
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblVehicleTrips	CC_TL	8.40	0.16
tblVehicleTrips	CNW_TL	6.90	0.16
tblVehicleTrips	CW_TL	16.60	0.16

tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	2.40
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	2.40
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	2.40

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.0807	0.0270	0.3348	2.1000e-004	9.4800e-003	4.7000e-004	9.9500e-003	2.5100e-003	4.3000e-004	2.9400e-003		20.8084	20.8084	1.8200e-003		20.8540
Total	**0.2806**	**0.0477**	**0.3582**	**3.3000e-004**	**9.4800e-003**	**2.0600e-003**	**0.0115**	**2.5100e-003**	**2.0200e-003**	**4.5300e-003**		**45.6320**	**45.6320**	**2.3300e-003**	**4.5000e-004**	**45.8258**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
Mobile	0.0807	0.0270	0.3348	2.1000e-004	9.4800e-003	4.7000e-004	9.9500e-003	2.5100e-003	4.3000e-004	2.9400e-003		20.8084	20.8084	1.8200e-003		20.8540
Total	**0.2806**	**0.0477**	**0.3582**	**3.3000e-004**	**9.4800e-003**	**2.0600e-003**	**0.0115**	**2.5100e-003**	**2.0200e-003**	**4.5300e-003**		**45.6320**	**45.6320**	**2.3300e-003**	**4.5000e-004**	**45.8258**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	10/6/2021	10/6/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	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**

Mitigated Construction Off-Site

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

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	0.0807	0.0270	0.3348	2.1000e-004	9.4800e-003	4.7000e-004	9.9500e-003	2.5100e-003	4.3000e-004	2.9400e-003		20.8084	20.8084	1.8200e-003		20.8540
Unmitigated	0.0807	0.0270	0.3348	2.1000e-004	9.4800e-003	4.7000e-004	9.9500e-003	2.5100e-003	4.3000e-004	2.9400e-003		20.8084	20.8084	1.8200e-003		20.8540

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	78.00	78.00	78.00	4,543	4,543
Total	78.00	78.00	78.00	4,543	4,543

4.3 Trip Type Information

Unmitigated Building and Passenger Vehicle Operations - LST - San Bernardino-South Coast County, Winter

	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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.16	0.16	0.16	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.620587	0.041891	0.202723	0.134800	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581
NaturalGas Unmitigated	2.2700e-003	0.0207	0.0174	1.2000e-004		1.5700e-003	1.5700e-003		1.5700e-003	1.5700e-003		24.8106	24.8106	4.8000e-004	4.5000e-004	24.9581

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					
General Office Building	19.0137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	191.877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

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					
General Office Building	0.0190137	2.1000e-004	1.8600e-003	1.5700e-003	1.0000e-005		1.4000e-004	1.4000e-004		1.4000e-004	1.4000e-004		2.2369	2.2369	4.0000e-005	4.0000e-005	2.2502
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.191877	2.0700e-003	0.0188	0.0158	1.1000e-004		1.4300e-003	1.4300e-003		1.4300e-003	1.4300e-003		22.5737	22.5737	4.3000e-004	4.1000e-004	22.7079
Total		**2.2800e-003**	**0.0207**	**0.0174**	**1.2000e-004**		**1.5700e-003**	**1.5700e-003**		**1.5700e-003**	**1.5700e-003**		**24.8106**	**24.8106**	**4.7000e-004**	**4.5000e-004**	**24.9581**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.1977	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.1008					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0963					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.1977**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Truck Operations - LST Analysis

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Truck Operations - LST Analysis - San Bernardino-South Coast County, Summer

Project Characteristics - Dedeaux Industrial Center Project – On-site Truck Operations
CO2 intensity factor adjusted based on Renewable Portfolio Standard

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Trips and VMT - Operational run only

On-road Fugitive Dust -

Grading -

Architectural Coating - Operational run only

Vehicle Trips - 56 daily truck trips
Trip lengths updated to 0.16 mile to account for on-site emissions from mobile sources for LST analysis.
100% primary trips for LST analysis.

Area Coating - Operational truck only run

Landscape Equipment - Operational truck only run

Energy Use - Operational truck only run

Water And Wastewater - Operational truck only run

Solid Waste - Operational truck only run0

Fleet Mix - Truck only fleet mix
Consistent with the project-specific truck mix included in the Dedeaux Industrial Center Traffic Impact Analysis - Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0

Truck Operations - LST Analysis - San Bernardino-South Coast County, Summer

tblAreaCoating	Area_EF_Nonresidential_Interior	100	0
tblAreaCoating	Area_EF_Parking	100	0
tblConstructionPhase	NumDays	18.00	1.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	2.00	0.00
tblFleetMix	HHD	0.06	0.68
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	5.2670e-003	8.3620e-003
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.29
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblLandscapeEquipment	NumberSummerDays	250	1

Truck Operations - LST Analysis - San Bernardino-South Coast County, Summer

tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblSolidWaste	SolidWasteGenerationRate	1.86	0.00
tblSolidWaste	SolidWasteGenerationRate	30.55	0.00
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblVehicleTrips	CC_TL	8.40	0.16
tblVehicleTrips	CNW_TL	6.90	0.16
tblVehicleTrips	CW_TL	16.60	0.16
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	1.72
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	1.72
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	1.72
tblWater	IndoorWaterUseRate	355,467.50	0.00
tblWater	IndoorWaterUseRate	7,515,625.00	0.00
tblWater	OutdoorWaterUseRate	217,867.17	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0957	4.6014	0.5890	6.1900e-003	8.0800e-003	1.2900e-003	9.3700e-003	2.2800e-003	1.2300e-003	3.5100e-003		654.6499	654.6499	0.1103		657.4068
Total	**0.8568**	**4.6015**	**0.5950**	**6.1900e-003**	**8.0800e-003**	**1.3100e-003**	**9.3900e-003**	**2.2800e-003**	**1.2500e-003**	**3.5300e-003**		**654.6628**	**654.6628**	**0.1103**	**0.0000**	**657.4205**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0957	4.6014	0.5890	6.1900e-003	8.0800e-003	1.2900e-003	9.3700e-003	2.2800e-003	1.2300e-003	3.5100e-003		654.6499	654.6499	0.1103		657.4068
Total	**0.8568**	**4.6015**	**0.5950**	**6.1900e-003**	**8.0800e-003**	**1.3100e-003**	**9.3900e-003**	**2.2800e-003**	**1.2500e-003**	**3.5300e-003**		**654.6628**	**654.6628**	**0.1103**	**0.0000**	**657.4205**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/2/2021	11/2/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	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**

Mitigated Construction Off-Site

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

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	0.0957	4.6014	0.5890	6.1900e-003	8.0800e-003	1.2900e-003	9.3700e-003	2.2800e-003	1.2300e-003	3.5100e-003		654.6499	654.6499	0.1103		657.4068
Unmitigated	0.0957	4.6014	0.5890	6.1900e-003	8.0800e-003	1.2900e-003	9.3700e-003	2.2800e-003	1.2300e-003	3.5100e-003		654.6499	654.6499	0.1103		657.4068

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	56.00	56.00	56.00	3,261	3,261
Total	56.00	56.00	56.00	3,261	3,261

4.3 Trip Type Information

Truck Operations - LST Analysis - San Bernardino-South Coast County, Summer

	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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.16	0.16	0.16	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.027352	0.008362	0.285714	0.678571	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.7606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.7611**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.7606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.7611**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Truck Operations - LST Analysis

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	2.00	1000sqft	0.05	2,000.00	0
Unrefrigerated Warehouse-No Rail	32.50	1000sqft	0.75	34,500.00	0
Other Non-Asphalt Surfaces	22.15	1000sqft	0.51	11,075.00	0
Parking Lot	2.20	Acre	2.20	95,832.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Truck Operations - LST Analysis - San Bernardino-South Coast County, Winter

Project Characteristics - Dedeaux Industrial Center Project – On-site Truck Operations
CO2 intensity factor adjusted based on Renewable Portfolio Standard

Land Use - Land uses based on information in project description and site plan dated 3/26/20.
Total lot = 3.51 acres
Warehouse = 32,500sf (+ 2,000sf Mezzanine = total 34,500sf) +2,000 sf office
Landscaping (50% assumed paved)
Parking (car + trailer)

Construction Phase - Operational run only

Off-road Equipment - Operational run only

Off-road Equipment -

Trips and VMT - Operational run only

On-road Fugitive Dust -

Grading -

Architectural Coating - Operational run only

Vehicle Trips - 56 daily truck trips
Trip lengths updated to 0.16 mile to account for on-site emissions from mobile sources for LST analysis.
100% primary trips for LST analysis.

Area Coating - Operational truck only run

Landscape Equipment - Operational truck only run

Energy Use - Operational truck only run

Water And Wastewater - Operational truck only run

Solid Waste - Operational truck only run0

Fleet Mix - Truck only fleet mix
Consistent with the project-specific truck mix included in the Dedeaux Industrial Center Traffic Impact Analysis - Scoping Agreement prepared by Urban Crossroads, dated May 8, 2020.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	0.00
tblArchitecturalCoating	EF_Parking	100.00	0.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	0

Truck Operations - LST Analysis - San Bernardino-South Coast County, Winter

tblAreaCoating	Area_EF_Nonresidential_Interior	100	0
tblAreaCoating	Area_EF_Parking	100	0
tblConstructionPhase	NumDays	18.00	1.00
tblEnergyUse	LightingElect	3.66	0.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	2.79	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	3.07	0.00
tblEnergyUse	T24E	0.37	0.00
tblEnergyUse	T24NG	3.47	0.00
tblEnergyUse	T24NG	2.00	0.00
tblFleetMix	HHD	0.06	0.68
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.03
tblFleetMix	LHD2	5.2670e-003	8.3620e-003
tblFleetMix	MCY	6.0000e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0100e-003	0.00
tblFleetMix	MHD	0.02	0.29
tblFleetMix	OBUS	1.3480e-003	0.00
tblFleetMix	SBUS	8.1200e-004	0.00
tblFleetMix	UBUS	1.6070e-003	0.00
tblLandscapeEquipment	NumberSummerDays	250	1

Truck Operations - LST Analysis - San Bernardino-South Coast County, Winter

tblLandUse	LandUseSquareFeet	32,500.00	34,500.00
tblLandUse	LandUseSquareFeet	22,150.00	11,075.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblSolidWaste	SolidWasteGenerationRate	1.86	0.00
tblSolidWaste	SolidWasteGenerationRate	30.55	0.00
tblTripsAndVMT	WorkerTripNumber	12.00	0.00
tblVehicleTrips	CC_TL	8.40	0.16
tblVehicleTrips	CNW_TL	6.90	0.16
tblVehicleTrips	CW_TL	16.60	0.16
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	ST_TR	1.68	1.72
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	SU_TR	1.68	1.72
tblVehicleTrips	WD_TR	11.03	0.00
tblVehicleTrips	WD_TR	1.68	1.72
tblWater	IndoorWaterUseRate	355,467.50	0.00
tblWater	IndoorWaterUseRate	7,515,625.00	0.00
tblWater	OutdoorWaterUseRate	217,867.17	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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

	ROG	NOx	CO	SO2	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1065	4.4250	0.8029	5.4100e-003	8.0800e-003	1.6300e-003	9.7100e-003	2.2800e-003	1.5600e-003	3.8400e-003		571.6995	571.6995	0.1249		574.8226
Total	**0.8677**	**4.4250**	**0.8089**	**5.4100e-003**	**8.0800e-003**	**1.6500e-003**	**9.7300e-003**	**2.2800e-003**	**1.5800e-003**	**3.8600e-003**		**571.7124**	**571.7124**	**0.1250**	**0.0000**	**574.8364**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1065	4.4250	0.8029	5.4100e-003	8.0800e-003	1.6300e-003	9.7100e-003	2.2800e-003	1.5600e-003	3.8400e-003		571.6995	571.6995	0.1249		574.8226
Total	**0.8677**	**4.4250**	**0.8089**	**5.4100e-003**	**8.0800e-003**	**1.6500e-003**	**9.7300e-003**	**2.2800e-003**	**1.5800e-003**	**3.8600e-003**		**571.7124**	**571.7124**	**0.1250**	**0.0000**	**574.8364**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	11/2/2021	11/2/2021	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 2.71

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 54,750; Non-Residential Outdoor: 18,250; Striped Parking Area: 6,414 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Architectural Coating - 2021

Unmitigated Construction On-Site

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

Unmitigated Construction Off-Site

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

3.2 Architectural Coating - 2021

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 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	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**

Mitigated Construction Off-Site

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

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	0.1065	4.4250	0.8029	5.4100e-003	8.0800e-003	1.6300e-003	9.7100e-003	2.2800e-003	1.5600e-003	3.8400e-003		571.6995	571.6995	0.1249		574.8226
Unmitigated	0.1065	4.4250	0.8029	5.4100e-003	8.0800e-003	1.6300e-003	9.7100e-003	2.2800e-003	1.5600e-003	3.8400e-003		571.6995	571.6995	0.1249		574.8226

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	56.00	56.00	56.00	3,261	3,261
Total	56.00	56.00	56.00	3,261	3,261

4.3 Trip Type Information

Truck Operations - LST Analysis - San Bernardino-South Coast County, Winter

	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
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.16	0.16	0.16	59.00	0.00	41.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Other Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Parking Lot	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.027352	0.008362	0.285714	0.678571	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
General Office Building	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Unmitigated	0.7611	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137

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	0.7606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.7611**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

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	0.7606					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.6000e-004	6.0000e-005	6.0300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0129	0.0129	3.0000e-005		0.0137
Total	**0.7611**	**6.0000e-005**	**6.0300e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0129**	**0.0129**	**3.0000e-005**		**0.0137**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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Appendix B:
Construction Health Risk Assessment

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Dedeaux Industrial Center Project

Estimation of Annual Onsite Construction Emissions

Start of Construction	10/5/2020	
End of Construction	10/29/2021	**Total**
Number of Days	389	389
Number of Hours	9,336	9,336

Size of the construction area source: **14,132.2** **sq-meters**

Year	**On-site Construction Activity**	**Unmitigated On-site DPM (tons)**
2020	On-site Demolition	0.01660
2020	On-site Site Preparation	0.00549
2020	On-site Grading	0.00509
2020	On-site Paving	0.00586
2020	On-site Building Construction	0.01730
2021	On-site Building Construction	0.09540
2021	On-site Architectural Coating	0.00085

Total Unmitigated DPM (On-site) 1.466E-01 tons

Average Emission
1.331E+05 grams
3.960E-03 grams/sec
2.802E-07 grams/m2-sec

Year	**On-site Construction Activity**	**With Standard Conditions On-site DPM (tons)**
2020	On-site Demolition	0.00251
2020	On-site Site Preparation	0.00144
2020	On-site Grading	0.00173
2020	On-site Paving	0.01440
2020	On-site Building Construction	0.07910
2021	On-site Building Construction	0.00334
2021	On-site Architectural Coating	0.00085

Total Unmitigated DPM (On-site) 1.034E-01 tons

Average Emission
9.386E+04 grams
2.793E-03 grams/sec
1.976E-07 grams/m2-sec

Dedeaux Industrial Center Project

Estimation of Annual Offsite Construction DPM Emissions (Unmitigated)

Start of Construction		10/5/2020					
End of Construction		10/29/2021				**Total**	
Number of Days		389				389	
Number of Hours		9,336				9,336	
	2020	2020	2020	2020	2020	2021	2021
Construction Trip Type	Demolition	Site Preparation	Grading	Paving	Building Construction	Building Construction	Architectural Coating
Haul Truck	0.00014	0.00000	0.00014	0.00000	0.00000	0.00000	0.00000
Vendor Truck	0.00002	0.00000	0.00001	0.00002	0.00018	0.00040	0.00001
Worker	0.00001	0.00000	0.00000	0.00001	0.00007	0.00043	0.00001
Total	0.00017	0.00000	0.00015	0.00003	0.00025	0.00083	0.00002

	Haul Truck (tons)	**Vendor Truck (tons)**	**Worker (tons)**	**Total (tons)**
Total DPM	2.800E-04	6.400E-04	5.300E-04	1.450E-03
Average Emissions				
Grams	2.542E+02	5.811E+02	4.812E+02	
Grams/sec	7.565E-06	1.729E-05	1.432E-05	
Default Vehicle Travel Distar	20	6.9	14.7	

Vehicle Travel Distances in the Construction HRA (miles)

Road Segment 1 (mi)	0.54	0.54	0.54
Road Segment 2 (mi)	0.43	0.43	0.43
Road Segment 3 (mi)	0.41	0.41	0.41

Trip Distribution (percent)

Road Segment 1	33%	33%	33%
Road Segment 2	33%	33%	33%
Road Segment 3	33%	33%	33%

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
Road Segment 1 (mi)	6.777E-08	4.490E-07	1.745E-07	6.913E-07
Road Segment 2 (mi)	5.472E-08	3.626E-07	1.409E-07	5.582E-07
Road Segment 3 (mi)	5.112E-08	3.387E-07	1.316E-07	5.214E-07

OEHHA Cancer/SCAQMD Risk Methodology

Cancer Risk = DPM x CPF x ASF x DBR x ED x EF x TAH x AF/ AT

Cancer Risk = probability of an individual contracting cancer out of a population of 1 million people over a lifetime exposure duration of 30 years

DPM = long-term average concentration of diesel PM as predicted by the air dispersion model (ug/m3)

CPF = cancer potency factor for DPM (mg.ke-day)

ASF = age sensitivity factors that are dependent on the age of the exposed individual (unitless)

DBR = daily breathing rates that are dependent on the age of the exposed individual (liters/kg-day)

ED = exposure duration (years)

EF = exposure frequency (days/year)

TAH = time at home factors that are dependent on the age of the exposed individual (%)

AT = averaging time over the lifetime of an individual (days)

AF = adjustment factor for workers and students (unitless)

Cancer Risk Equation Values as recommended by the California Office of Environmental Health Hazards Assessment

Cancer Risk Calculations Using OEHHA/BAAQMD Cancer Risk Assumptions
Dedeaux Industrial Center Project
Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant
UTM: 464753.85 3772434.57

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM10 Exhaust) Unmitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.094370721	10	361	0.85	0.25	1.1
0-1	0.094370721	10	1090	0.85	0.82	10.7
				Total		11.8

Construction Annual DPM Emissions (as PM10 Exhaust) with Standard Conditions

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.066565607	10	361	0.85	0.25	0.8
0-1	0.066565607	10	1090	0.85	0.82	7.6
					Total	8.4

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child
UTM: 464753.85 3772434.57

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM10Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.094370721	3	572	0.72	1.07	1.9
				Total		1.9

Construction Annual DPM Emissions (as PM10 Exhaust) with Standard Conditions

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.066565607	3	572	0.72	1.07	1.3
					Total	1.3

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult
UTM: 464753.85 3772434.57

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM10 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.094370721	1	261	0.73	1.07	0.3
				Total		0.3

Construction Annual DPM Emissions (as PM10 Exhaust) with Standard Conditions

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.066565607	1	261	0.73	1.07	0.2
					Total	0.2

Dedeaux Industrial Center Project

UTM: 464753.85 3772434.57

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
464753.85	3772434.57	0.0944	0.0944	0.02

With Standard Conditions

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
464753.85	3772434.57	0.0666	0.0666	0.01

Dedeaux Industrial Center Project

Construction Annual DPM Emissions (PM10 Exhaust)—Unmitigated Concentrations

		Maximum DPM (ug/m3)	UTM X	UTM Y
Annual Average Onsite Total DPM Emission Rate (grams/m2/sec):	2.80E-07	9.4371E-02	464753.85	3772434.57
Annual Average Offsite Total DPM Emission Rate - Road Segment 1 (grams/sec):	6.91E-07			
Annual Average Offsite Total DPM Emission Rate - Road Segment 2 (grams/sec):	5.58E-07			
Annual Average Offsite Total DPM Emission Rate - Road Segment 3 (grams/sec):	5.21E-07			

X	Y	Unit Emissions VALUES AVERAGED SITE AREA	Unit Emissions VALUES AVERAGED ROAD 1	Unit Emissions VALUES AVERAGED ROAD 2	Unit Emissions VALUES AVERAGED ROAD 3	Onsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 1 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 2 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 3 Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
464753.85	3772434.57	336532.6338	21.05544	76.33752	12.42952	9.43E-02	1.46E-05	4.26E-05	6.48E-06	9.4371E-02
464740.33	3772434.99	328897.085	32.0559	75.1461	14.20431	9.22E-02	2.22E-05	4.19E-05	7.41E-06	9.2239E-02
464726.81	3772435.41	300904.1922	49.26451	66.31472	16.34522	8.43E-02	3.41E-05	3.70E-05	8.52E-06	8.4402E-02
464780.9	3772433.72	298490.3045	11.31052	74.69393	9.67725	8.36E-02	7.82E-06	4.17E-05	5.05E-06	8.3701E-02
464794.42	3772433.3	261198.1586	8.93885	73.25471	8.60375	7.32E-02	6.18E-06	4.09E-05	4.49E-06	7.3248E-02
464739.86	3772420	237219.5566	18.77165	34.47409	13.35369	6.65E-02	1.30E-05	1.92E-05	6.96E-06	6.6516E-02
464753.39	3772419.58	236668.0369	14.34238	36.04311	11.71273	6.63E-02	9.91E-06	2.01E-05	6.11E-06	6.6358E-02
464726.34	3772420.42	226208.0081	24.05002	30.85516	15.36407	6.34E-02	1.66E-05	1.72E-05	8.01E-06	6.3432E-02
464708.8	3772430.17	226114.5475	45.5711	30.91275	19.47486	6.34E-02	3.15E-05	1.73E-05	1.02E-05	6.3423E-02
464818.96	3772437.2	212856.2187	6.61122	90.8266	7.15594	5.96E-02	4.57E-06	5.07E-05	3.73E-06	5.9708E-02
464780.43	3772418.73	205331.7029	8.9125	36.59793	9.19778	5.75E-02	6.16E-06	2.04E-05	4.80E-06	5.7572E-02
464793.95	3772418.31	181307.1537	7.30546	36.33892	8.21603	5.08E-02	5.05E-06	2.03E-05	4.28E-06	5.0838E-02
464739.39	3772405.01	177590.3214	12.31451	20.38628	12.79765	4.98E-02	8.51E-06	1.14E-05	6.67E-06	4.9793E-02
464725.87	3772405.43	174829.9614	14.61729	18.59544	14.73764	4.90E-02	1.01E-05	1.04E-05	7.68E-06	4.9021E-02
464752.92	3772404.58	174195.8497	10.18872	21.44379	11.22703	4.88E-02	7.04E-06	1.20E-05	5.85E-06	4.8840E-02
464706.86	3772405.36	158509.912	17.00229	14.84249	18.43482	4.44E-02	1.18E-05	8.29E-06	9.61E-06	4.4449E-02
464779.96	3772403.74	150779.3095	7.05132	22.2603	8.84514	4.23E-02	4.87E-06	1.24E-05	4.61E-06	4.2275E-02
464818.49	3772422.21	148367.4061	5.64058	42.46842	6.87374	4.16E-02	3.90E-06	2.37E-05	3.58E-06	4.1608E-02
464845.87	3772432.64	146648.9468	4.64488	73.33617	5.76807	4.11E-02	3.21E-06	4.09E-05	3.01E-06	4.1143E-02
464712.7	3772395.95	144595.7284	12.55749	12.89911	16.78587	4.05E-02	8.68E-06	7.20E-06	8.75E-06	4.0545E-02
464725.4	3772390.44	138919.7376	9.98203	12.79095	14.32165	3.89E-02	6.90E-06	7.14E-06	7.47E-06	3.8951E-02
464738.92	3772390.01	138107.7448	8.75957	13.80843	12.41648	3.87E-02	6.06E-06	7.71E-06	6.47E-06	3.8722E-02
464793.48	3772403.31	134718.0108	5.9717	22.32032	7.91998	3.78E-02	4.13E-06	1.25E-05	4.13E-06	3.7773E-02
464752.45	3772389.59	133955.2851	7.58812	14.50739	10.88424	3.75E-02	5.25E-06	8.10E-06	5.68E-06	3.7558E-02
464658.31	3772430.44	122834.4628	46.89068	9.00933	47.7474	3.44E-02	3.24E-05	5.03E-06	2.49E-05	3.4484E-02
464700.54	3772386.03	120768.4116	10.4645	9.47051	19.38357	3.38E-02	7.23E-06	5.29E-06	1.01E-05	3.3866E-02
464661.72	3772417.25	117976.7886	26.68593	8.48983	42.52221	3.31E-02	1.84E-05	4.74E-06	2.22E-05	3.3106E-02
464779.49	3772388.74	116154.3044	5.66313	15.23585	8.57919	3.26E-02	3.91E-06	8.50E-06	4.47E-06	3.2567E-02
464724.93	3772375.44	112982.9415	7.31744	9.50906	14.0388	3.17E-02	5.06E-06	5.31E-06	7.32E-06	3.1679E-02
464818.02	3772407.22	112457.0576	4.79892	25.36719	6.6428	3.15E-02	3.32E-06	1.42E-05	3.46E-06	3.1535E-02
464850.48	3772421.79	112416.8813	4.03134	43.38792	5.44166	3.15E-02	2.79E-06	2.42E-05	2.84E-06	3.1533E-02
464738.46	3772375.02	110902.7023	6.5917	10.15441	12.14368	3.11E-02	4.56E-06	5.67E-06	6.33E-06	3.1095E-02
464840.05	3772415.87	110112.908	4.21855	34.37802	5.77415	3.09E-02	2.92E-06	1.92E-05	3.01E-06	3.0882E-02
464751.98	3772374.6	106777.0618	5.87868	10.62859	10.63168	2.99E-02	4.06E-06	5.93E-06	5.54E-06	2.9938E-02
464793.01	3772388.32	105095.2781	4.92748	15.37674	7.68827	2.95E-02	3.41E-06	8.58E-06	4.01E-06	2.9467E-02
464889.22	3772432.69	97716.37888	3.12767	75.40961	4.31472	2.74E-02	2.16E-06	4.21E-05	2.25E-06	2.7430E-02
464665.18	3772386.19	97543.22163	11.03451	6.44635	37.60517	2.73E-02	7.63E-06	3.60E-06	1.96E-05	2.7366E-02
465045.03	3772657.82	97517.23283	2.14633	4.20919	2.15627	2.73E-02	1.48E-06	2.35E-06	1.12E-06	2.7332E-02
465045.32	3772643.19	96983.6303	2.12385	4.6489	2.18468	2.72E-02	1.47E-06	2.60E-06	1.14E-06	2.7183E-02
465045.62	3772628.56	95443.5857	2.0935	5.16191	2.20331	2.67E-02	1.45E-06	2.88E-06	1.15E-06	2.6752E-02
464648.24	3772403.21	95124.21664	16.22338	6.13285	66.14774	2.67E-02	1.12E-05	3.42E-06	3.45E-05	2.6706E-02
465043.34	3772698	94826.08111	2.17536	3.29071	2.04175	2.66E-02	1.50E-06	1.84E-06	1.06E-06	2.6578E-02
464724.46	3772360.45	93640.55438	5.62993	7.44554	13.84458	2.62E-02	3.89E-06	4.16E-06	7.22E-06	2.6256E-02
465048.91	3772684.71	93205.9008	2.12102	3.5401	2.0445	2.61E-02	1.47E-06	1.98E-06	1.07E-06	2.6124E-02
465045.91	3772613.93	92986.06226	2.05514	5.77947	2.21325	2.61E-02	1.42E-06	3.23E-06	1.15E-06	2.6063E-02
464779.02	3772373.75	92889.05264	4.6294	11.21636	8.37117	2.60E-02	3.20E-06	6.26E-06	4.37E-06	2.6044E-02
464737.99	3772360.03	91022.44996	5.1629	7.88311	11.94683	2.55E-02	3.57E-06	4.40E-06	6.23E-06	2.5522E-02
465054.47	3772671.41	90704.78158	2.06033	3.81938	2.03756	2.54E-02	1.42E-06	2.13E-06	1.06E-06	2.5423E-02
465046.2	3772599.3	89649.21882	2.00909	6.53133	2.21433	2.51E-02	1.39E-06	3.65E-06	1.15E-06	2.5129E-02
464817.55	3772392.22	89315.98957	4.09347	17.16127	6.45142	2.50E-02	2.83E-06	9.58E-06	3.36E-06	2.5045E-02
464677.54	3772365.63	88341.19942	7.24451	5.81642	27.98627	2.48E-02	5.01E-06	3.25E-06	1.46E-05	2.4779E-02

465060.03	3772658.11	87414.69665	1.9938	4.13534	2.02123	2.45E-02	1.38E-06	2.31E-06	1.05E-06	2.4501E-02
464751.51	3772359.6	87333.55147	4.69757	8.21376	10.44003	2.45E-02	3.25E-06	4.59E-06	5.44E-06	2.4487E-02
465047.69	3772723.78	86999.52038	2.11346	2.82808	1.89965	2.44E-02	1.46E-06	1.58E-06	9.91E-07	2.4384E-02
465053.15	3772710.7	86842.07301	2.07351	3.02655	1.91694	2.43E-02	1.43E-06	1.69E-06	1.00E-06	2.4340E-02
464700.77	3772355.54	86776.7368	5.76149	6.09714	18.7011	2.43E-02	3.98E-06	3.40E-06	9.75E-06	2.4335E-02
465060.32	3772643.49	86698.38521	1.96986	4.57182	2.04446	2.43E-02	1.36E-06	2.55E-06	1.07E-06	2.4301E-02
464839.58	3772400.88	86250.52022	3.67701	21.66557	5.61121	2.42E-02	2.54E-06	1.21E-05	2.93E-06	2.4188E-02
465058.62	3772697.63	85892.17139	2.02725	3.24587	1.92492	2.41E-02	1.40E-06	1.81E-06	1.00E-06	2.4074E-02
465046.49	3772584.68	85528.31121	1.95557	7.46121	2.20677	2.40E-02	1.35E-06	4.16E-06	1.15E-06	2.3974E-02
465060.61	3772628.86	85121.3387	1.93932	5.07781	2.05936	2.39E-02	1.34E-06	2.83E-06	1.07E-06	2.3859E-02
464792.54	3772373.33	84895.83234	4.11604	11.36771	7.50134	2.38E-02	2.85E-06	6.35E-06	3.91E-06	2.3804E-02
465064.09	3772684.56	84183.93665	1.97505	3.49012	1.92424	2.36E-02	1.37E-06	1.95E-06	1.00E-06	2.3595E-02
464654.31	3772375.71	83853.79346	8.70285	5.18441	51.63863	2.35E-02	6.02E-06	2.89E-06	2.69E-05	2.3534E-02
465060.91	3772614.23	82778.55442	1.90145	5.6875	2.06647	2.32E-02	1.31E-06	3.17E-06	1.08E-06	2.3203E-02
465069.56	3772671.49	81755.83331	1.91766	3.76189	1.91534	2.29E-02	1.33E-06	2.10E-06	9.99E-07	2.2915E-02
465046.79	3772570.05	80721.7565	1.89464	8.62861	2.19093	2.26E-02	1.31E-06	4.82E-06	1.14E-06	2.2628E-02
465061.2	3772599.6	79718.82965	1.85705	6.42834	2.0659	2.23E-02	1.28E-06	3.59E-06	1.08E-06	2.2346E-02
465063.09	3772723.11	79642.38158	1.97684	2.79775	1.80121	2.23E-02	1.37E-06	1.56E-06	9.39E-07	2.2322E-02
465057.7	3772735.99	79445.52483	2.01119	2.61979	1.78148	2.23E-02	1.39E-06	1.46E-06	9.29E-07	2.2267E-02
465068.48	3772710.23	79156.09835	1.93712	2.99103	1.81301	2.22E-02	1.34E-06	1.67E-06	9.45E-07	2.2186E-02
464723.99	3772345.46	78920.49704	4.48485	6.04149	13.70866	2.21E-02	3.10E-06	3.37E-06	7.15E-06	2.2130E-02
465075.03	3772658.41	78707.49476	1.85549	4.06967	1.89861	2.21E-02	1.28E-06	2.27E-06	9.90E-07	2.2061E-02
465052.31	3772748.87	78593.05598	2.04016	2.45618	1.75395	2.20E-02	1.41E-06	1.37E-06	9.15E-07	2.2028E-02
464896.06	3772422.39	78133.83923	2.76019	45.38373	4.05421	2.19E-02	1.91E-06	2.53E-05	2.11E-06	2.1925E-02
465073.86	3772697.35	78020.15245	1.89231	3.2039	1.81729	2.19E-02	1.31E-06	1.79E-06	9.48E-07	2.1868E-02
465075.32	3772643.79	77917.49843	1.83078	4.51352	1.91914	2.18E-02	1.27E-06	2.52E-06	1.00E-06	2.1840E-02
464671.26	3772353.15	77367.03577	5.86796	4.84943	31.85064	2.17E-02	4.06E-06	2.71E-06	1.66E-05	2.1704E-02
465075.61	3772629.16	76346.9432	1.80067	5.01739	1.93138	2.14E-02	1.24E-06	2.80E-06	1.01E-06	2.1400E-02
464778.55	3772358.76	76326.80136	3.84803	8.67268	8.20192	2.14E-02	2.66E-06	4.84E-06	4.28E-06	2.1401E-02
464737.52	3772345.04	76282.30063	4.16784	6.35313	11.79614	2.14E-02	2.88E-06	3.55E-06	6.15E-06	2.1389E-02
465079.25	3772684.47	76260.92656	1.84257	3.44029	1.81398	2.14E-02	1.27E-06	1.92E-06	9.46E-07	2.1375E-02
465049.85	3772761.28	76147.43006	2.04047	2.30027	1.7063	2.13E-02	1.41E-06	1.28E-06	8.90E-07	2.1342E-02
464658.19	3772358.83	76110.16136	6.44033	4.61387	45.19173	2.13E-02	4.45E-06	2.58E-06	2.36E-05	2.1359E-02
465061.49	3772584.98	76023.32067	1.8064	7.34495	2.05814	2.13E-02	1.25E-06	4.10E-06	1.07E-06	2.1311E-02
465047.08	3772555.42	75413.0775	1.82787	10.14492	2.16858	2.11E-02	1.26E-06	5.66E-06	1.13E-06	2.1141E-02
464697.39	3772341.81	75214.89072	4.69689	5.08727	19.48839	2.11E-02	3.25E-06	2.84E-06	1.02E-05	2.1094E-02
464876.61	3772409.83	74485.07852	2.92526	28.55436	4.47086	2.09E-02	2.02E-06	1.59E-05	2.33E-06	2.0893E-02
465075.9	3772614.53	74107.64456	1.7642	5.61285	1.93577	2.08E-02	1.22E-06	3.13E-06	1.01E-06	2.0773E-02
465084.64	3772671.59	73933.11655	1.78846	3.70427	1.80365	2.07E-02	1.24E-06	2.07E-06	9.41E-07	2.0723E-02
464645.13	3772364.5	73449.76632	6.95394	4.32388	74.65167	2.06E-02	4.81E-06	2.41E-06	3.89E-05	2.0629E-02
464817.08	3772377.23	73256.95708	3.5145	12.53961	6.28913	2.05E-02	2.43E-06	7.00E-06	3.28E-06	2.0542E-02
465073.12	3772735.27	73137.51621	1.88594	2.59396	1.69443	2.05E-02	1.30E-06	1.45E-06	8.84E-07	2.0499E-02
464751.04	3772344.61	73031.12927	3.84832	6.59481	10.28723	2.05E-02	2.66E-06	3.68E-06	5.36E-06	2.0477E-02
465078.44	3772722.56	72981.33561	1.85155	2.76514	1.70886	2.05E-02	1.28E-06	1.54E-06	8.91E-07	2.0455E-02
465067.81	3772747.98	72719.78193	1.9156	2.43549	1.67319	2.04E-02	1.32E-06	1.36E-06	8.72E-07	2.0382E-02
465083.76	3772709.85	72263.94717	1.81263	2.95201	1.71665	2.03E-02	1.25E-06	1.65E-06	8.95E-07	2.0254E-02
464710.46	3772336.14	71997.87276	4.15479	5.0846	16.11885	2.02E-02	2.87E-06	2.84E-06	8.41E-06	2.0190E-02
465061.78	3772570.35	71777.76976	1.74984	8.49542	2.04327	2.01E-02	1.21E-06	4.74E-06	1.07E-06	2.0121E-02
465062.49	3772760.69	71750.2812	1.94069	2.28755	1.64523	2.01E-02	1.34E-06	1.28E-06	8.58E-07	2.0110E-02
465076.2	3772599.9	71284.17702	1.72186	6.34075	1.93372	2.00E-02	1.19E-06	3.54E-06	1.01E-06	1.9982E-02
465090.02	3772658.71	71123.34535	1.7305	4.00339	1.78699	1.99E-02	1.20E-06	2.23E-06	9.32E-07	1.9935E-02
465089.07	3772697.14	71015.91502	1.76945	3.15818	1.7178	1.99E-02	1.22E-06	1.76E-06	8.96E-07	1.9905E-02
464609.62	3772422.54	70611.98368	18.37985	4.19153	80.9402	1.98E-02	1.27E-05	2.34E-06	4.22E-05	1.9845E-02
465090.32	3772644.09	70263.18082	1.70571	4.44621	1.80463	1.97E-02	1.18E-06	2.48E-06	9.41E-07	1.9695E-02
465057.18	3772773.4	70260.2876	1.96122	2.14346	1.61093	1.97E-02	1.36E-06	1.20E-06	8.40E-07	1.9693E-02
464792.07	3772358.33	70224.90949	3.4804	8.81851	7.34587	1.97E-02	2.41E-06	4.92E-06	3.83E-06	1.9690E-02
464839.11	3772385.88	70199.26183	3.21264	15.19446	5.4698	1.97E-02	2.22E-06	8.48E-06	2.85E-06	1.9686E-02
465047.37	3772540.79	69758.38574	1.7563	12.18589	2.14115	1.95E-02	1.21E-06	6.80E-06	1.12E-06	1.9558E-02
465094.39	3772684.43	69265.78865	1.72213	3.38751	1.71254	1.94E-02	1.19E-06	1.89E-06	8.93E-07	1.9414E-02
465090.61	3772629.46	68727.45962	1.67618	4.94513	1.81449	1.93E-02	1.16E-06	2.76E-06	9.46E-07	1.9264E-02
464672.24	3772337.53	68363.08866	4.62289	4.20399	31.01649	1.92E-02	3.20E-06	2.35E-06	1.62E-05	1.9179E-02
465051.86	3772786.11	68328.40496	1.97755	2.00495	1.57081	1.91E-02	1.37E-06	1.12E-06	8.19E-07	1.9151E-02
464659.54	3772343.05	68211.35782	5.03294	4.05802	43.27409	1.91E-02	3.48E-06	2.27E-06	2.26E-05	1.9143E-02
464924.94	3772429.1	68176.21005	2.3425	61.94302	3.46415	1.91E-02	1.62E-06	3.46E-05	1.81E-06	1.9143E-02
465076.49	3772585.28	67957.78194	1.67425	7.24479	1.92576	1.90E-02	1.16E-06	4.04E-06	1.00E-06	1.9050E-02

464723.53	3772330.47	67416.23526	3.66808	5.03539	13.60989	1.89E-02	2.54E-06	2.81E-06	7.10E-06	1.8905E-02
465086.53	3772739.38	67371.91847	1.7821	2.50505	1.6067	1.89E-02	1.23E-06	1.40E-06	8.38E-07	1.8883E-02
465092.11	3772726.04	67112.1136	1.74739	2.67458	1.61959	1.88E-02	1.21E-06	1.49E-06	8.45E-07	1.8810E-02
465062.08	3772555.72	67108.96887	1.68817	9.97774	2.02224	1.88E-02	1.17E-06	5.57E-06	1.05E-06	1.8814E-02
465080.94	3772752.73	67080.13418	1.81225	2.34763	1.58686	1.88E-02	1.25E-06	1.31E-06	8.27E-07	1.8801E-02
465099.7	3772671.72	67071.09625	1.67123	3.64492	1.70148	1.88E-02	1.16E-06	2.03E-06	8.87E-07	1.8800E-02
464646.84	3772348.56	66889.0937	5.41079	3.86824	68.97362	1.87E-02	3.74E-06	2.16E-06	3.60E-05	1.8786E-02
465090.9	3772614.83	66623.31986	1.64093	5.53155	1.81711	1.87E-02	1.13E-06	3.09E-06	9.48E-07	1.8675E-02
465097.69	3772712.69	66337.86907	1.70836	2.86232	1.62622	1.86E-02	1.18E-06	1.60E-06	8.48E-07	1.8594E-02
465075.36	3772766.07	66253.55045	1.83778	2.20109	1.56057	1.86E-02	1.27E-06	1.23E-06	8.14E-07	1.8570E-02
464697.65	3772326.5	65189.78193	3.79571	4.33675	19.2545	1.83E-02	2.62E-06	2.42E-06	1.00E-05	1.8283E-02
465103.27	3772699.35	65075.30026	1.66522	3.07246	1.6264	1.82E-02	1.15E-06	1.72E-06	8.48E-07	1.8240E-02
464737.05	3772330.04	64980.3592	3.4433	5.26371	11.67563	1.82E-02	2.38E-06	2.94E-06	6.09E-06	1.8221E-02
465069.78	3772779.42	64930.13197	1.85893	2.0605	1.52806	1.82E-02	1.29E-06	1.15E-06	7.97E-07	1.8199E-02
465105.02	3772659.01	64486.3795	1.61705	3.9368	1.68482	1.81E-02	1.12E-06	2.20E-06	8.79E-07	1.8075E-02
464778.08	3772343.77	64211.71048	3.24753	6.95474	8.05683	1.80E-02	2.25E-06	3.88E-06	4.20E-06	1.8004E-02
465076.78	3772570.65	64191.31859	1.62172	8.38332	1.9118	1.80E-02	1.12E-06	4.68E-06	9.97E-07	1.7995E-02
465091.19	3772600.2	64045.1641	1.60083	6.25017	1.81434	1.79E-02	1.11E-06	3.49E-06	9.46E-07	1.7953E-02
465047.66	3772526.17	63910.50333	1.68068	15.02269	2.10879	1.79E-02	1.16E-06	8.39E-06	1.10E-06	1.7920E-02
465105.31	3772644.39	63593.69393	1.5926	4.37577	1.70006	1.78E-02	1.10E-06	2.44E-06	8.86E-07	1.7825E-02
464610.52	3772385.05	63485.75894	8.39669	3.5461	85.73634	1.78E-02	5.80E-06	1.98E-06	4.47E-05	1.7843E-02
465108.85	3772686	63339.68151	1.61812	3.30686	1.62041	1.77E-02	1.12E-06	1.85E-06	8.45E-07	1.7754E-02
464605.07	3772397.78	63316.16436	9.99405	3.56837	63.27847	1.77E-02	6.91E-06	1.99E-06	3.30E-05	1.7785E-02
464895.9	3772407.89	63267.16839	2.50064	27.03781	3.95387	1.77E-02	1.73E-06	1.51E-05	2.06E-06	1.7748E-02
465064.2	3772792.76	63162.05511	1.87587	1.92698	1.48995	1.77E-02	1.30E-06	1.08E-06	7.77E-07	1.7703E-02
464599.62	3772410.51	62379.09222	11.78184	3.55974	49.00209	1.75E-02	8.14E-06	1.99E-06	2.56E-05	1.7516E-02
465062.37	3772541.09	62198.81197	1.62276	11.99201	1.99759	1.74E-02	1.12E-06	6.69E-06	1.04E-06	1.7439E-02
464750.57	3772329.62	62197.45199	3.21581	5.44716	10.1593	1.74E-02	2.22E-06	3.04E-06	5.30E-06	1.7440E-02
465101.99	3772738.56	62167.51012	1.67469	2.47369	1.53042	1.74E-02	1.16E-06	1.38E-06	7.98E-07	1.7425E-02
465096.49	3772751.72	62157.62008	1.70472	2.31543	1.51511	1.74E-02	1.18E-06	1.29E-06	7.90E-07	1.7422E-02
465105.6	3772629.76	62110.18123	1.56383	4.86802	1.70789	1.74E-02	1.08E-06	2.72E-06	8.91E-07	1.7410E-02
464710.35	3772320.99	62019.81234	3.41267	4.33249	15.9744	1.74E-02	2.36E-06	2.42E-06	8.33E-06	1.7393E-02
465107.5	3772725.4	61720.78731	1.64068	2.64304	1.53979	1.73E-02	1.13E-06	1.48E-06	8.03E-07	1.7300E-02
465090.98	3772764.88	61715.18948	1.73102	2.175	1.49449	1.73E-02	1.20E-06	1.21E-06	7.79E-07	1.7298E-02
464816.61	3772362.24	61569.65617	3.0413	9.64928	6.14715	1.73E-02	2.10E-06	5.39E-06	3.21E-06	1.7264E-02
465114.44	3772672.66	61175.21406	1.56747	3.5696	1.60841	1.71E-02	1.08E-06	1.99E-06	8.39E-07	1.7147E-02
465091.48	3772585.58	61048.15338	1.55616	7.14163	1.80622	1.71E-02	1.08E-06	3.99E-06	9.42E-07	1.7114E-02
465058.62	3772806.11	61002.58494	1.88885	1.80307	1.44649	1.71E-02	1.31E-06	1.01E-06	7.54E-07	1.7098E-02
465113	3772712.25	60853.94942	1.6031	2.82902	1.54373	1.71E-02	1.11E-06	1.58E-06	8.05E-07	1.7057E-02
465085.48	3772778.04	60833.4489	1.75334	2.04224	1.4683	1.70E-02	1.21E-06	1.14E-06	7.66E-07	1.7051E-02
464594.16	3772423.24	60772.22283	13.47167	3.5148	39.34946	1.70E-02	9.31E-06	1.96E-06	2.05E-05	1.7062E-02
464648.06	3772332.83	60586.57726	4.34378	3.45878	65.65453	1.70E-02	3.00E-06	1.93E-06	3.42E-05	1.7017E-02
464672.9	3772322.05	60547.43648	3.75064	3.67631	30.49255	1.70E-02	2.59E-06	2.05E-06	1.59E-05	1.6988E-02
465105.9	3772615.13	60140.34926	1.52991	5.44516	1.70909	1.69E-02	1.06E-06	3.04E-06	8.91E-07	1.6858E-02
465077.07	3772556.02	60096.7294	1.56506	9.85837	1.89276	1.68E-02	1.08E-06	5.50E-06	9.87E-07	1.6849E-02
464887.16	3772399.16	59638.08965	2.50115	21.13918	4.10669	1.67E-02	1.73E-06	1.18E-05	2.14E-06	1.6728E-02
465118.5	3772699.09	59559.11651	1.56183	3.03304	1.54189	1.67E-02	1.08E-06	1.69E-06	8.04E-07	1.6694E-02
465079.98	3772791.19	59545.64245	1.7719	1.91829	1.43698	1.67E-02	1.22E-06	1.07E-06	7.49E-07	1.6690E-02
464791.6	3772343.34	59470.87113	2.97785	7.07979	7.20826	1.67E-02	2.06E-06	3.95E-06	3.76E-06	1.6675E-02
464838.64	3772370.89	58804.38383	2.82042	11.37868	5.34299	1.65E-02	1.95E-06	6.35E-06	2.79E-06	1.6490E-02
464764.09	3772329.2	58676.61215	2.99129	5.60194	8.93519	1.64E-02	2.07E-06	3.13E-06	4.66E-06	1.6453E-02
465120.02	3772659.31	58660.5114	1.5139	3.86933	1.59129	1.64E-02	1.05E-06	2.16E-06	8.30E-07	1.6443E-02
464588.71	3772435.97	58617.28476	14.58143	3.43519	32.46553	1.64E-02	1.01E-05	1.92E-06	1.69E-05	1.6455E-02
465053.03	3772819.45	58507.50392	1.89851	1.68938	1.39885	1.64E-02	1.31E-06	9.43E-07	7.29E-07	1.6399E-02
464723.06	3772315.47	58083.15411	3.06286	4.29109	13.52588	1.63E-02	2.12E-06	2.40E-06	7.05E-06	1.6288E-02
465047.96	3772511.54	58043.18368	1.60286	19.28365	2.07419	1.63E-02	1.11E-06	1.08E-05	1.08E-06	1.6278E-02
465074.47	3772804.35	57888.84874	1.78699	1.80238	1.40089	1.62E-02	1.24E-06	1.01E-06	7.30E-07	1.6225E-02
465124.01	3772685.93	57871.69503	1.51723	3.25955	1.53454	1.62E-02	1.05E-06	1.82E-06	8.00E-07	1.6221E-02
465106.19	3772600.5	57784.02852	1.49194	6.1534	1.70571	1.62E-02	1.03E-06	3.43E-06	8.89E-07	1.6198E-02
465120.31	3772644.69	57755.84687	1.49	4.30359	1.60451	1.62E-02	1.03E-06	2.40E-06	8.37E-07	1.6189E-02
465091.78	3772570.95	57697.83606	1.50733	8.27185	1.79314	1.62E-02	1.04E-06	4.62E-06	9.35E-07	1.6175E-02
465111.97	3772750.86	57666.8408	1.6058	2.30087	1.44786	1.62E-02	1.11E-06	1.28E-06	7.55E-07	1.6163E-02
465106.54	3772763.85	57483.5491	1.632	2.15413	1.43116	1.61E-02	1.13E-06	1.20E-06	7.46E-07	1.6112E-02
465117.41	3772737.86	57462.57543	1.57599	2.45264	1.45923	1.61E-02	1.09E-06	1.37E-06	7.61E-07	1.6106E-02
465062.66	3772526.47	57141.44933	1.55432	14.79695	1.96884	1.60E-02	1.07E-06	8.26E-06	1.03E-06	1.6023E-02

465101.1	3772776.84	56937.79458	1.65482	2.02126	1.4096	1.60E-02	1.14E-06	1.13E-06	7.35E-07	1.5959E-02
464697.74	3772311.26	56881.7152	3.14291	3.75611	19.08716	1.59E-02	2.17E-06	2.10E-06	9.95E-06	1.5954E-02
465122.84	3772724.87	56880.103	1.54288	2.61527	1.46566	1.59E-02	1.07E-06	1.46E-06	7.64E-07	1.5943E-02
465120.6	3772630.06	56333.94841	1.46209	4.78736	1.61058	1.58E-02	1.01E-06	2.67E-06	8.40E-07	1.5791E-02
464594.8	3772386.35	56186.98261	7.45957	3.06631	40.19292	1.57E-02	5.16E-06	1.71E-06	2.10E-05	1.5773E-02
464736.58	3772315.05	56073.72099	2.89818	4.45495	11.57209	1.57E-02	2.00E-06	2.49E-06	6.03E-06	1.5724E-02
465095.67	3772789.83	56025.92724	1.6743	1.90301	1.38359	1.57E-02	1.16E-06	1.06E-06	7.21E-07	1.5703E-02
465128.27	3772711.88	55922.9764	1.50651	2.79294	1.46688	1.57E-02	1.04E-06	1.56E-06	7.65E-07	1.5675E-02
465068.97	3772817.51	55908.89157	1.79865	1.69421	1.36055	1.57E-02	1.24E-06	9.46E-07	7.09E-07	1.5670E-02
464605.46	3772361.46	55842.62254	5.67326	2.99393	64.19392	1.56E-02	3.92E-06	1.67E-06	3.35E-05	1.5688E-02
465129.51	3772672.77	55833.02598	1.46977	3.51088	1.52207	1.56E-02	1.02E-06	1.96E-06	7.94E-07	1.5650E-02
465077.36	3772541.39	55791.41496	1.50511	11.84177	1.86986	1.56E-02	1.04E-06	6.61E-06	9.75E-07	1.5643E-02
465047.45	3772832.8	55616.60387	1.90475	1.581	1.34708	1.56E-02	1.32E-06	8.83E-07	7.02E-07	1.5588E-02
464589.47	3772398.8	55467.90008	8.45132	3.0702	33.28224	1.55E-02	5.84E-06	1.71E-06	1.74E-05	1.5569E-02
465106.48	3772585.88	55082.74599	1.45009	7.03265	1.69766	1.54E-02	1.00E-06	3.93E-06	8.85E-07	1.5442E-02
464777.61	3772328.77	55011.18023	2.7771	5.73155	7.92717	1.54E-02	1.92E-06	3.20E-06	4.13E-06	1.5425E-02
465090.23	3772802.82	54779.64638	1.69089	1.79448	1.35373	1.54E-02	1.17E-06	1.00E-06	7.06E-07	1.5354E-02
464661.14	3772311.96	54684.94354	3.34731	3.18251	41.42605	1.53E-02	2.31E-06	1.78E-06	2.16E-05	1.5350E-02
465133.71	3772698.89	54613.02698	1.46706	2.98847	1.46315	1.53E-02	1.01E-06	1.67E-06	7.63E-07	1.5308E-02
465120.89	3772615.43	54504.5899	1.42971	5.35457	1.61068	1.53E-02	9.88E-07	2.99E-06	8.40E-07	1.5279E-02
464584.14	3772411.24	54242.20386	9.38319	3.04413	28.11463	1.52E-02	6.49E-06	1.70E-06	1.47E-05	1.5223E-02
465092.07	3772556.32	54084.99463	1.45509	9.73666	1.7757	1.52E-02	1.01E-06	5.44E-06	9.26E-07	1.5164E-02
464710.17	3772305.87	54011.78946	2.86064	3.74548	15.86388	1.51E-02	1.98E-06	2.09E-06	8.27E-06	1.5148E-02
464750.1	3772314.63	53692.15847	2.73074	4.59716	10.04536	1.50E-02	1.89E-06	2.57E-06	5.24E-06	1.5056E-02
465063.47	3772830.67	53662.46209	1.8073	1.59136	1.31648	1.50E-02	1.25E-06	8.88E-07	6.86E-07	1.5041E-02
465122.03	3772762.96	53547.05543	1.54033	2.14099	1.37083	1.50E-02	1.06E-06	1.20E-06	7.15E-07	1.5009E-02
464959.16	3772429.97	53546.6219	1.88907	65.68363	2.87428	1.50E-02	1.31E-06	3.67E-05	1.50E-06	1.5045E-02
465135.01	3772659.61	53526.46954	1.41997	3.79963	1.50536	1.50E-02	9.82E-07	2.12E-06	7.85E-07	1.5004E-02
465127.4	3772750.12	53514.54008	1.51401	2.27717	1.38355	1.50E-02	1.05E-06	1.27E-06	7.21E-07	1.5000E-02
465116.66	3772775.8	53255.4414	1.5635	2.01042	1.35364	1.49E-02	1.08E-06	1.12E-06	7.06E-07	1.4927E-02
465084.8	3772815.82	53226.84759	1.70421	1.69128	1.31964	1.49E-02	1.18E-06	9.44E-07	6.88E-07	1.4919E-02
465132.78	3772737.27	53148.80897	1.48465	2.42307	1.3917	1.49E-02	1.03E-06	1.35E-06	7.26E-07	1.4897E-02
465139.14	3772685.9	52995.88936	1.42499	3.20647	1.455	1.49E-02	9.85E-07	1.79E-06	7.59E-07	1.4855E-02
465111.29	3772788.65	52643.89718	1.58361	1.89276	1.33204	1.48E-02	1.09E-06	1.06E-06	6.95E-07	1.4755E-02
465135.31	3772644.99	52622.60608	1.39666	4.227	1.51667	1.47E-02	9.66E-07	2.36E-06	7.91E-07	1.4751E-02
464578.8	3772423.69	52571.09639	10.10048	2.9903	24.09544	1.47E-02	6.98E-06	1.67E-06	1.26E-05	1.4753E-02
465138.15	3772724.43	52468.90143	1.45254	2.58106	1.39556	1.47E-02	1.00E-06	1.44E-06	7.28E-07	1.4707E-02
464817.71	3772347.86	52421.1714	2.64035	7.77872	5.95636	1.47E-02	1.83E-06	4.34E-06	3.11E-06	1.4699E-02
465121.19	3772600.8	52345.95367	1.39374	6.05054	1.60674	1.47E-02	9.63E-07	3.38E-06	8.38E-07	1.4674E-02
465048.25	3772496.91	52304.257	1.52402	26.24505	2.0377	1.47E-02	1.05E-06	1.47E-05	1.06E-06	1.4674E-02
465106.77	3772571.25	52109.55032	1.40492	8.15938	1.68583	1.46E-02	9.71E-07	4.55E-06	8.79E-07	1.4609E-02
465062.95	3772511.84	52076.02338	1.48398	18.98356	1.93769	1.46E-02	1.03E-06	1.06E-05	1.01E-06	1.4606E-02
465105.92	3772801.49	51729.75661	1.60083	1.78508	1.30666	1.45E-02	1.11E-06	9.96E-07	6.81E-07	1.4499E-02
465143.52	3772711.59	51467.91619	1.41754	2.75166	1.39487	1.44E-02	9.80E-07	1.54E-06	7.27E-07	1.4426E-02
464924.75	3772407.4	51438.98954	2.05635	26.79067	3.34322	1.44E-02	1.42E-06	1.50E-05	1.74E-06	1.4433E-02
465079.37	3772828.81	51414.85933	1.71473	1.5934	1.28211	1.44E-02	1.19E-06	8.89E-07	6.69E-07	1.4411E-02
465077.66	3772526.77	51380.09467	1.44268	14.61607	1.8437	1.44E-02	9.97E-07	8.16E-06	9.61E-07	1.4408E-02
465135.6	3772630.36	51272.63052	1.36976	4.70219	1.52137	1.44E-02	9.47E-07	2.62E-06	7.93E-07	1.4373E-02
464830.3	3772352.81	51263.80812	2.55049	8.46188	5.48946	1.44E-02	1.76E-06	4.72E-06	2.86E-06	1.4375E-02
464612.36	3772333.13	51260.07558	4.08552	2.71803	94.5196	1.44E-02	2.82E-06	1.52E-06	4.93E-05	1.4418E-02
464791.13	3772328.35	51212.30575	2.57492	5.83704	7.08248	1.44E-02	1.78E-06	3.26E-06	3.69E-06	1.4360E-02
465144.58	3772672.9	51099.13214	1.38049	3.45049	1.4424	1.43E-02	9.54E-07	1.93E-06	7.52E-07	1.4323E-02
465057.96	3772843.83	51090.6626	1.81306	1.49249	1.269	1.43E-02	1.25E-06	8.33E-07	6.62E-07	1.4320E-02
465100.54	3772814.33	50537.97724	1.61539	1.68491	1.2777	1.42E-02	1.12E-06	9.41E-07	6.66E-07	1.4165E-02
465092.36	3772541.69	50297.94988	1.4001	11.69896	1.75456	1.41E-02	9.68E-07	6.53E-06	9.15E-07	1.4103E-02
464584.46	3772375.09	50202.61415	5.86043	2.67351	28.27262	1.41E-02	4.05E-06	1.49E-06	1.47E-05	1.4089E-02
465148.89	3772698.74	50187.80492	1.38011	2.94114	1.39003	1.41E-02	9.54E-07	1.64E-06	7.25E-07	1.4068E-02
464594.93	3772350.65	49944.11742	4.6827	2.61056	39.83975	1.40E-02	3.24E-06	1.46E-06	2.08E-05	1.4021E-02
465121.48	3772586.17	49904.65852	1.35451	6.91588	1.59875	1.40E-02	9.36E-07	3.86E-06	8.34E-07	1.3990E-02
465135.24	3772767.54	49885.04081	1.465	2.06083	1.30745	1.40E-02	1.01E-06	1.15E-06	6.82E-07	1.3982E-02
465140.83	3772754.16	49797.38725	1.43874	2.19582	1.3192	1.40E-02	9.95E-07	1.23E-06	6.88E-07	1.3958E-02
465129.64	3772780.92	49658.51358	1.48832	1.93728	1.29131	1.39E-02	1.03E-06	1.08E-06	6.73E-07	1.3919E-02
464842.89	3772357.75	49591.10301	2.45279	9.19548	5.07775	1.39E-02	1.70E-06	5.13E-06	2.65E-06	1.3906E-02
465135.89	3772615.73	49574.28452	1.33889	5.25838	1.52063	1.39E-02	9.26E-07	2.94E-06	7.93E-07	1.3897E-02
464642.38	3772304.91	49521.412	3.09864	2.74825	87.71824	1.39E-02	2.14E-06	1.53E-06	4.57E-05	1.3927E-02

465146.43	3772740.78	49401.92093	1.40962	2.34513	1.3268	1.38E-02	9.74E-07	1.31E-06	6.92E-07	1.3847E-02
464655.59	3772299.17	49373.98995	2.90701	2.82052	49.59939	1.38E-02	2.01E-06	1.57E-06	2.59E-05	1.3866E-02
465073.93	3772841.8	49336.71149	1.72248	1.49958	1.24116	1.38E-02	1.19E-06	8.37E-07	6.47E-07	1.3828E-02
465124.05	3772794.3	49121.2192	1.5086	1.82449	1.27103	1.38E-02	1.04E-06	1.02E-06	6.63E-07	1.3768E-02
465095.17	3772827.17	49085.92679	1.62732	1.59096	1.24561	1.38E-02	1.12E-06	8.88E-07	6.50E-07	1.3758E-02
465150.01	3772659.91	48984.03291	1.33415	3.72822	1.42618	1.37E-02	9.22E-07	2.08E-06	7.44E-07	1.3731E-02
465107.07	3772556.62	48909.34805	1.35673	9.61862	1.66987	1.37E-02	9.38E-07	5.37E-06	8.71E-07	1.3713E-02
464891.47	3772385.05	48840.11635	2.20032	15.26485	3.90543	1.37E-02	1.52E-06	8.52E-06	2.04E-06	1.3699E-02
465152.03	3772727.4	48701.33492	1.37767	2.50418	1.3299	1.36E-02	9.52E-07	1.40E-06	6.93E-07	1.3651E-02
465154.26	3772685.9	48660.58091	1.34053	3.15335	1.38145	1.36E-02	9.27E-07	1.76E-06	7.20E-07	1.3640E-02
465052.46	3772856.98	48296.62877	1.81597	1.39719	1.21842	1.35E-02	1.26E-06	7.80E-07	6.35E-07	1.3537E-02
465118.45	3772807.67	48294.739	1.52595	1.71844	1.24677	1.35E-02	1.05E-06	9.59E-07	6.50E-07	1.3536E-02
465150.3	3772645.29	48099.71645	1.31168	4.14748	1.436	1.35E-02	9.07E-07	2.32E-06	7.49E-07	1.3483E-02
464855.48	3772362.7	48043.86863	2.35414	10.01056	4.71084	1.35E-02	1.63E-06	5.59E-06	2.46E-06	1.3473E-02
465157.62	3772714.03	47710.4482	1.34313	2.6754	1.3288	1.34E-02	9.28E-07	1.49E-06	6.93E-07	1.3373E-02
465136.18	3772601.1	47602.63892	1.30498	5.94044	1.51635	1.33E-02	9.02E-07	3.32E-06	7.91E-07	1.3345E-02
465089.8	3772840.02	47382.14781	1.63655	1.50094	1.21024	1.33E-02	1.13E-06	8.38E-07	6.31E-07	1.3281E-02
465121.77	3772571.55	47230.92565	1.31238	8.01217	1.58696	1.32E-02	9.07E-07	4.47E-06	8.28E-07	1.3242E-02
465112.85	3772821.05	47185.73205	1.54057	1.61951	1.2189	1.32E-02	1.06E-06	9.04E-07	6.36E-07	1.3226E-02
465063.24	3772497.21	47127.90682	1.41303	25.83305	1.90508	1.32E-02	9.77E-07	1.44E-05	9.93E-07	1.3223E-02
465077.95	3772512.14	46970.9212	1.37878	18.74117	1.81498	1.32E-02	9.53E-07	1.05E-05	9.46E-07	1.3175E-02
464977.17	3772429.22	46959.91435	1.69361	64.01433	2.61459	1.32E-02	1.17E-06	3.57E-05	1.36E-06	1.3198E-02
465068.5	3772854.79	46929.82228	1.72684	1.40587	1.19606	1.32E-02	1.19E-06	7.85E-07	6.24E-07	1.3154E-02
465159.64	3772673.06	46892.06388	1.2988	3.38726	1.36875	1.31E-02	8.98E-07	1.89E-06	7.14E-07	1.3144E-02
465150.6	3772630.66	46817.78375	1.28575	4.61139	1.4394	1.31E-02	8.89E-07	2.57E-06	7.51E-07	1.3124E-02
465048.54	3772482.28	46808.90822	1.44493	39.21113	1.99949	1.31E-02	9.99E-07	2.19E-05	1.04E-06	1.3141E-02
465150.77	3772766.55	46562.72438	1.38525	2.04507	1.25384	1.30E-02	9.58E-07	1.14E-06	6.54E-07	1.3051E-02
465145.24	3772779.77	46520.00339	1.40837	1.92165	1.24079	1.30E-02	9.74E-07	1.07E-06	6.47E-07	1.3039E-02
465163.22	3772700.65	46448.2777	1.30612	2.86468	1.32345	1.30E-02	9.03E-07	1.60E-06	6.90E-07	1.3019E-02
465092.65	3772527.06	46437.00388	1.34318	14.45885	1.73066	1.30E-02	9.29E-07	8.07E-06	9.02E-07	1.3023E-02
464602.74	3772322.11	46368.8635	3.51435	2.39966	54.48133	1.30E-02	2.43E-06	1.34E-06	2.84E-05	1.3026E-02
465156.3	3772753.34	46343.86448	1.35956	2.18242	1.26309	1.30E-02	9.40E-07	1.22E-06	6.59E-07	1.2990E-02
465139.71	3772792.99	46205.83923	1.42887	1.81135	1.22409	1.29E-02	9.88E-07	1.01E-06	6.38E-07	1.2951E-02
465161.83	3772740.12	45852.73691	1.33117	2.32242	1.26812	1.28E-02	9.20E-07	1.30E-06	6.61E-07	1.2852E-02
465107.26	3772834.43	45816.96189	1.55246	1.52656	1.18779	1.28E-02	1.07E-06	8.52E-07	6.19E-07	1.2842E-02
464563.52	3772423.97	45736.41923	7.85548	2.57186	16.57696	1.28E-02	5.43E-06	1.44E-06	8.64E-06	1.2832E-02
465134.19	3772806.21	45628.33817	1.44692	1.71014	1.20412	1.28E-02	1.00E-06	9.55E-07	6.28E-07	1.2789E-02
464817.05	3772332.79	45573.72024	2.32264	6.36962	5.84376	1.28E-02	1.61E-06	3.56E-06	3.05E-06	1.2779E-02
465107.36	3772541.99	45548.75734	1.30596	11.53888	1.64952	1.28E-02	9.03E-07	6.44E-06	8.60E-07	1.2772E-02
465046.95	3772870.14	45504.25247	1.81765	1.31042	1.16726	1.28E-02	1.26E-06	7.31E-07	6.09E-07	1.2754E-02
465136.48	3772586.47	45391.38526	1.26818	6.78934	1.50841	1.27E-02	8.77E-07	3.79E-06	7.87E-07	1.2726E-02
465084.43	3772852.86	45365.18997	1.64252	1.41046	1.17063	1.27E-02	1.14E-06	7.87E-07	6.10E-07	1.2715E-02
465150.89	3772616.03	45241.16946	1.25636	5.15389	1.43799	1.27E-02	8.69E-07	2.88E-06	7.50E-07	1.2682E-02
465167.36	3772726.9	45100.56335	1.30037	2.4729	1.26935	1.26E-02	8.99E-07	1.38E-06	6.62E-07	1.2642E-02
464583.86	3772341.09	44997.14839	3.98678	2.30823	27.36172	1.26E-02	2.76E-06	1.29E-06	1.43E-05	1.2628E-02
465165.01	3772660.21	44951.00988	1.25562	3.65404	1.35298	1.26E-02	8.68E-07	2.04E-06	7.06E-07	1.2600E-02
465168.81	3772687.27	44948.53367	1.26704	3.07536	1.31433	1.26E-02	8.76E-07	1.72E-06	6.85E-07	1.2599E-02
465128.66	3772819.43	44790.92353	1.46237	1.61474	1.18061	1.26E-02	1.01E-06	9.01E-07	6.16E-07	1.2554E-02
464790.66	3772313.36	44662.64164	2.24755	4.91309	6.9626	1.25E-02	1.55E-06	2.74E-06	3.63E-06	1.2524E-02
465063.06	3772867.78	44527.735	1.73009	1.32186	1.15054	1.25E-02	1.20E-06	7.38E-07	6.00E-07	1.2481E-02
465122.06	3772556.92	44381.60049	1.26779	9.43966	1.57178	1.24E-02	8.76E-07	5.27E-06	8.20E-07	1.2444E-02
465101.66	3772847.81	44132.80681	1.56112	1.43434	1.15244	1.24E-02	1.08E-06	8.01E-07	6.01E-07	1.2370E-02
465172.89	3772713.68	44103.54833	1.26732	2.63776	1.26673	1.24E-02	8.76E-07	1.47E-06	6.61E-07	1.2362E-02
465165.3	3772645.58	44092.06	1.23401	4.06438	1.36168	1.24E-02	8.53E-07	2.27E-06	7.10E-07	1.2360E-02
464925.28	3772393.86	43794.59073	1.88834	18.71205	3.25924	1.23E-02	1.31E-06	1.04E-05	1.70E-06	1.2286E-02
465123.13	3772832.64	43729.21637	1.4754	1.52528	1.15418	1.23E-02	1.02E-06	8.51E-07	6.02E-07	1.2257E-02
465160.79	3772778.77	43575.59335	1.33428	1.91597	1.19294	1.22E-02	9.22E-07	1.07E-06	6.22E-07	1.2214E-02
464669.44	3772277.96	43565.98028	2.31382	2.57612	33.28112	1.22E-02	1.60E-06	1.44E-06	1.74E-05	1.2229E-02
465166.26	3772765.69	43488.60393	1.3113	2.03545	1.20308	1.22E-02	9.06E-07	1.14E-06	6.27E-07	1.2190E-02
465155.32	3772791.84	43436.74176	1.35483	1.80184	1.17928	1.22E-02	9.37E-07	1.01E-06	6.15E-07	1.2175E-02
465151.18	3772601.4	43433.51706	1.22434	5.81761	1.43323	1.22E-02	8.46E-07	3.25E-06	7.47E-07	1.2176E-02
464604.77	3772306.04	43408.85015	2.99941	2.24182	59.80515	1.22E-02	2.07E-06	1.25E-06	3.12E-05	1.2199E-02
465079.06	3772865.7	43304.11995	1.64709	1.32857	1.13011	1.21E-02	1.14E-06	7.42E-07	5.89E-07	1.2138E-02
465174.41	3772673.89	43231.38324	1.22597	3.30911	1.30126	1.21E-02	8.48E-07	1.85E-06	6.79E-07	1.2118E-02
464841.83	3772342.53	43181.41158	2.18607	7.38962	4.98638	1.21E-02	1.51E-06	4.13E-06	2.60E-06	1.2109E-02

465171.72	3772752.62	43165.3275	1.28605	2.16083	1.20964	1.21E-02	8.89E-07	1.21E-06	6.31E-07	1.2099E-02
465149.85	3772804.91	43065.12826	1.37295	1.70063	1.1623	1.21E-02	9.49E-07	9.49E-07	6.06E-07	1.2071E-02
465136.77	3772571.85	42987.17078	1.22894	7.86173	1.49702	1.20E-02	8.50E-07	4.39E-06	7.81E-07	1.2052E-02
465165.59	3772630.96	42886.43968	1.20922	4.51575	1.3641	1.20E-02	8.36E-07	2.52E-06	7.11E-07	1.2022E-02
465178.42	3772700.47	42878.45148	1.23219	2.81835	1.26039	1.20E-02	8.52E-07	1.57E-06	6.57E-07	1.2019E-02
465078.24	3772497.51	42677.75429	1.31468	25.53678	1.78565	1.20E-02	9.09E-07	1.43E-05	9.31E-07	1.1976E-02
465177.19	3772739.55	42608.11337	1.25854	2.29419	1.21277	1.19E-02	8.70E-07	1.28E-06	6.32E-07	1.1943E-02
465092.95	3772512.44	42589.10184	1.28522	18.58822	1.70489	1.19E-02	8.88E-07	1.04E-05	8.89E-07	1.1947E-02
464708.44	3772276.23	42520.69891	2.12438	2.89686	15.99371	1.19E-02	1.47E-06	1.62E-06	8.34E-06	1.1927E-02
465144.38	3772817.98	42461.47191	1.389	1.60827	1.14254	1.19E-02	9.60E-07	8.98E-07	5.96E-07	1.1901E-02
465063.54	3772482.58	42377.15929	1.34194	38.51908	1.87056	1.19E-02	9.28E-07	2.15E-05	9.75E-07	1.1899E-02
465117.6	3772845.86	42376.75046	1.48542	1.43689	1.12374	1.19E-02	1.03E-06	8.02E-07	5.86E-07	1.1878E-02
465096.07	3772861.19	42245.42533	1.56709	1.34642	1.11397	1.18E-02	1.08E-06	7.52E-07	5.81E-07	1.1841E-02
465107.65	3772527.36	42155.21291	1.25398	14.2844	1.62779	1.18E-02	8.67E-07	7.97E-06	8.49E-07	1.1823E-02
464555.5	3772407.28	42119.0922	6.07002	2.30032	14.11547	1.18E-02	4.20E-06	1.28E-06	7.36E-06	1.1816E-02
464682.38	3772272.35	42088.93573	2.15499	2.59259	24.90141	1.18E-02	1.49E-06	1.45E-06	1.30E-05	1.1811E-02
465057.63	3772880.78	42065.73611	1.73165	1.2427	1.10402	1.18E-02	1.20E-06	6.94E-07	5.76E-07	1.1791E-02
464591.83	3772311.65	41989.07305	3.067	2.13072	34.52987	1.18E-02	2.12E-06	1.19E-06	1.80E-05	1.1788E-02
465182.66	3772726.47	41825.84672	1.22888	2.43863	1.21231	1.17E-02	8.50E-07	1.36E-06	6.32E-07	1.1724E-02
465048.83	3772467.66	41669.56135	1.36729	70.29163	1.96148	1.17E-02	9.45E-07	3.92E-05	1.02E-06	1.1718E-02
465138.92	3772831.06	41647.12174	1.40279	1.52172	1.12002	1.17E-02	9.70E-07	8.49E-07	5.84E-07	1.1673E-02
465183.94	3772687.25	41456.9298	1.19532	3.01842	1.25067	1.16E-02	8.26E-07	1.68E-06	6.52E-07	1.1621E-02
465151.47	3772586.77	41431.71725	1.18992	6.64601	1.42546	1.16E-02	8.23E-07	3.71E-06	7.43E-07	1.1616E-02
465165.89	3772616.33	41424.08047	1.18127	5.04412	1.36211	1.16E-02	8.17E-07	2.82E-06	7.10E-07	1.1613E-02
465122.36	3772542.29	41416.01736	1.22123	11.3536	1.55353	1.16E-02	8.44E-07	6.34E-06	8.10E-07	1.1614E-02
464910.29	3772380.13	41384.63135	1.89703	13.89366	3.46738	1.16E-02	1.31E-06	7.76E-06	1.81E-06	1.1608E-02
465180.01	3772660.51	41353.18105	1.18356	3.57518	1.28514	1.16E-02	8.18E-07	2.00E-06	6.70E-07	1.1592E-02
465073.68	3772878.55	41181.88621	1.65017	1.25231	1.0886	1.15E-02	1.14E-06	6.99E-07	5.68E-07	1.1543E-02
464644.49	3772273.6	40982.06773	2.26247	2.27149	79.82797	1.15E-02	1.56E-06	1.27E-06	4.16E-05	1.1529E-02
465188.13	3772713.4	40833.86806	1.19727	2.5955	1.20841	1.14E-02	8.28E-07	1.45E-06	6.30E-07	1.1446E-02
465176.28	3772777.88	40832.73235	1.26496	1.90019	1.14651	1.14E-02	8.74E-07	1.06E-06	5.98E-07	1.1445E-02
465170.87	3772790.82	40825.33637	1.2855	1.79281	1.13576	1.14E-02	8.89E-07	1.00E-06	5.92E-07	1.1443E-02
465112.07	3772859.08	40784.95124	1.49259	1.35095	1.08977	1.14E-02	1.03E-06	7.54E-07	5.68E-07	1.1432E-02
465181.69	3772764.94	40638.09888	1.24235	2.015	1.15426	1.14E-02	8.59E-07	1.12E-06	6.02E-07	1.1391E-02
465165.46	3772803.76	40616.11922	1.30391	1.69249	1.1219	1.14E-02	9.01E-07	9.45E-07	5.85E-07	1.1384E-02
465133.45	3772844.13	40571.43379	1.41387	1.43674	1.09392	1.14E-02	9.77E-07	8.02E-07	5.70E-07	1.1372E-02
465180.3	3772645.88	40520.01119	1.16275	3.97197	1.29245	1.14E-02	8.04E-07	2.22E-06	6.74E-07	1.1359E-02
464549.83	3772420.52	40490.58944	6.27695	2.25028	12.58738	1.13E-02	4.34E-06	1.26E-06	6.56E-06	1.1359E-02
465137.06	3772557.22	40439.80338	1.18763	9.25969	1.48264	1.13E-02	8.21E-07	5.17E-06	7.73E-07	1.1339E-02
465090.47	3772874.57	40382.83694	1.5723	1.26942	1.07587	1.13E-02	1.09E-06	7.09E-07	5.61E-07	1.1319E-02
464657.19	3772268.08	40368.0302	2.13443	2.30232	47.8262	1.13E-02	1.48E-06	1.29E-06	2.49E-05	1.1340E-02
464556.69	3772369.11	40360.37981	4.38449	2.08753	14.43018	1.13E-02	3.03E-06	1.17E-06	7.52E-06	1.1322E-02
465187.11	3772752	40237.23899	1.21771	2.13454	1.15883	1.13E-02	8.42E-07	1.19E-06	6.04E-07	1.1278E-02
465160.04	3772816.7	40208.2403	1.32021	1.60165	1.10522	1.13E-02	9.13E-07	8.94E-07	5.76E-07	1.1270E-02
464695.31	3772266.73	40184.28771	2.00119	2.59541	19.56139	1.13E-02	1.38E-06	1.45E-06	1.02E-05	1.1274E-02
464816.43	3772317.74	40070.57797	2.05634	5.32985	5.73276	1.12E-02	1.42E-06	2.98E-06	2.99E-06	1.1236E-02
465189.47	3772674.03	39865.49716	1.1569	3.24152	1.23776	1.12E-02	8.00E-07	1.81E-06	6.45E-07	1.1175E-02
464721.65	3772270.5	39796.09463	1.95271	2.86806	13.3093	1.12E-02	1.35E-06	1.60E-06	6.94E-06	1.1162E-02
465166.18	3772601.7	39770.83794	1.15109	5.69123	1.35722	1.11E-02	7.96E-07	3.18E-06	7.08E-07	1.1150E-02
465193.6	3772700.33	39665.76719	1.16412	2.76992	1.20162	1.11E-02	8.05E-07	1.55E-06	6.27E-07	1.1119E-02
465192.52	3772739.05	39643.73706	1.19123	2.26401	1.16051	1.11E-02	8.23E-07	1.26E-06	6.05E-07	1.1112E-02
465154.63	3772829.64	39609.06231	1.3345	1.51695	1.08589	1.11E-02	9.23E-07	8.47E-07	5.66E-07	1.1102E-02
464551.14	3772382.07	39561.92532	4.67319	2.0736	12.99107	1.11E-02	3.23E-06	1.16E-06	6.77E-06	1.1098E-02
465180.59	3772631.26	39391.42501	1.13911	4.41114	1.29426	1.10E-02	7.87E-07	2.46E-06	6.75E-07	1.1043E-02
464790.2	3772298.36	39360.82067	1.97821	4.20424	6.84187	1.10E-02	1.37E-06	2.35E-06	3.57E-06	1.1037E-02
465127.98	3772857.2	39271.18862	1.42233	1.35415	1.0644	1.10E-02	9.83E-07	7.56E-07	5.55E-07	1.1007E-02
464669.9	3772262.57	39269.26209	2.00538	2.32601	33.02191	1.10E-02	1.39E-06	1.30E-06	1.72E-05	1.1024E-02
465151.76	3772572.15	39266.91471	1.15337	7.69318	1.41456	1.10E-02	7.97E-07	4.29E-06	7.38E-07	1.1010E-02
465106.54	3772872.3	39108.4691	1.4981	1.27217	1.05435	1.10E-02	1.04E-06	7.10E-07	5.50E-07	1.0962E-02
465068.31	3772891.39	38997.49352	1.65159	1.18024	1.04597	1.09E-02	1.14E-06	6.59E-07	5.45E-07	1.0931E-02
465197.93	3772726.11	38855.3543	1.16287	2.40313	1.15888	1.09E-02	8.04E-07	1.34E-06	6.04E-07	1.0891E-02
465093.24	3772497.81	38829.09722	1.22706	25.32684	1.67786	1.09E-02	8.48E-07	1.41E-05	8.75E-07	1.0897E-02
465107.94	3772512.74	38779.88432	1.20133	18.40216	1.60456	1.09E-02	8.30E-07	1.03E-05	8.37E-07	1.0879E-02
465149.22	3772842.58	38769.42192	1.34642	1.43507	1.06353	1.09E-02	9.31E-07	8.01E-07	5.55E-07	1.0867E-02
464544.16	3772433.76	38641.22773	6.36169	2.18741	11.22558	1.08E-02	4.40E-06	1.22E-06	5.85E-06	1.0840E-02

465078.53	3772482.88	38552.98026	1.25082	38.18372	1.75474	1.08E-02	8.65E-07	2.13E-05	9.15E-07	1.0827E-02
464891.4	3772361.99	38511.37065	1.88464	10.04314	3.75876	1.08E-02	1.30E-06	5.61E-06	1.96E-06	1.0801E-02
464545.59	3772395.03	38470.06114	4.91237	2.0481	11.73642	1.08E-02	3.40E-06	1.14E-06	6.12E-06	1.0791E-02
465084.87	3772887.94	38425.8944	1.57568	1.19662	1.03625	1.08E-02	1.09E-06	6.68E-07	5.40E-07	1.0770E-02
464735.17	3772270.07	38420.3173	1.87705	2.94936	11.27933	1.08E-02	1.30E-06	1.65E-06	5.88E-06	1.0775E-02
465122.65	3772527.66	38414.46238	1.17355	14.06021	1.53336	1.08E-02	8.11E-07	7.85E-06	8.00E-07	1.0774E-02
465183.93	3772795.74	38359.5452	1.22909	1.72969	1.08859	1.07E-02	8.50E-07	9.66E-07	5.68E-07	1.0752E-02
465199.06	3772687.26	38345.50483	1.12966	2.96505	1.19224	1.07E-02	7.81E-07	1.66E-06	6.22E-07	1.0749E-02
465189.54	3772782.34	38333.56478	1.20852	1.83006	1.09841	1.07E-02	8.35E-07	1.02E-06	5.73E-07	1.0745E-02
465007.71	3772428.28	38312.32562	1.42978	62.24276	2.24472	1.07E-02	9.88E-07	3.47E-05	1.17E-06	1.0773E-02
465054.29	3772899.53	38217.40009	1.70711	1.13644	1.03059	1.07E-02	1.18E-06	6.34E-07	5.37E-07	1.0712E-02
465178.33	3772809.14	38186.72207	1.24746	1.63507	1.07557	1.07E-02	8.62E-07	9.13E-07	5.61E-07	1.0703E-02
465195	3772660.81	38157.46399	1.11765	3.49864	1.22282	1.07E-02	7.73E-07	1.95E-06	6.38E-07	1.0696E-02
465195.14	3772768.93	38115.33693	1.18625	1.94627	1.10571	1.07E-02	8.20E-07	1.09E-06	5.77E-07	1.0684E-02
464840.91	3772327.35	38049.34203	1.95658	6.09557	4.89276	1.07E-02	1.35E-06	3.40E-06	2.55E-06	1.0670E-02
465180.88	3772616.63	38046.69877	1.11278	4.92663	1.2922	1.07E-02	7.69E-07	2.75E-06	6.74E-07	1.0666E-02
464708.24	3772261.12	38035.65103	1.85552	2.5827	15.92563	1.07E-02	1.28E-06	1.44E-06	8.30E-06	1.0670E-02
465166.47	3772587.07	37952.48453	1.11886	6.49719	1.3496	1.06E-02	7.73E-07	3.63E-06	7.04E-07	1.0641E-02
465063.83	3772467.95	37928.1056	1.27232	68.83043	1.83598	1.06E-02	8.80E-07	3.84E-05	9.57E-07	1.0669E-02
465122.51	3772870.27	37916.58939	1.42953	1.27978	1.03419	1.06E-02	9.88E-07	7.14E-07	5.39E-07	1.0628E-02
465203.35	3772713.17	37896.16208	1.13291	2.55561	1.15447	1.06E-02	7.83E-07	1.43E-06	6.02E-07	1.0623E-02
464682.6	3772257.05	37831.636	1.87764	2.33577	24.74543	1.06E-02	1.30E-06	1.30E-06	1.29E-05	1.0617E-02
465172.72	3772822.54	37822.74378	1.26373	1.54674	1.05973	1.06E-02	8.74E-07	8.63E-07	5.53E-07	1.0601E-02
465137.35	3772542.59	37802.57757	1.14475	11.13908	1.46563	1.06E-02	7.91E-07	6.22E-06	7.64E-07	1.0601E-02
465200.75	3772755.53	37708.36113	1.16197	2.06834	1.10999	1.06E-02	8.03E-07	1.15E-06	5.79E-07	1.0570E-02
465143.8	3772855.52	37680.82352	1.35562	1.35356	1.03752	1.06E-02	9.37E-07	7.56E-07	5.41E-07	1.0562E-02
464607.67	3772274.38	37610.37412	2.25173	1.93829	67.04184	1.05E-02	1.56E-06	1.08E-06	3.50E-05	1.0577E-02
465101.01	3772885.52	37461.91633	1.503	1.20287	1.01966	1.05E-02	1.04E-06	6.71E-07	5.32E-07	1.0500E-02
464645.19	3772258.1	37360.92351	1.97033	2.076	77.20413	1.05E-02	1.36E-06	1.16E-06	4.03E-05	1.0512E-02
465195.29	3772646.18	37343.06485	1.09751	3.87762	1.22863	1.05E-02	7.59E-07	2.16E-06	6.41E-07	1.0468E-02
464557.36	3772332.14	37294.71457	3.20585	1.85862	14.40594	1.05E-02	2.22E-06	1.04E-06	7.51E-06	1.0462E-02
465167.11	3772835.95	37266.37885	1.27788	1.46297	1.04104	1.04E-02	8.83E-07	8.17E-07	5.43E-07	1.0445E-02
464551.91	3772344.87	37198.60456	3.45079	1.86596	13.03519	1.04E-02	2.39E-06	1.04E-06	6.80E-06	1.0434E-02
464540.03	3772407.99	37122.85376	5.08766	2.01433	10.63133	1.04E-02	3.52E-06	1.12E-06	5.54E-06	1.0413E-02
465206.36	3772742.13	37116.95357	1.1359	2.19622	1.11133	1.04E-02	7.85E-07	1.23E-06	5.80E-07	1.0404E-02
464999.67	3772419.82	37090.11285	1.43358	42.23731	2.30383	1.04E-02	9.91E-07	2.36E-05	1.20E-06	1.0420E-02
464931.42	3772381.16	37002.24935	1.69112	14.23132	3.08471	1.04E-02	1.17E-06	7.94E-06	1.61E-06	1.0380E-02
465152.06	3772557.52	36980.17939	1.11501	9.05666	1.40087	1.04E-02	7.71E-07	5.06E-06	7.30E-07	1.0370E-02
465204.53	3772674.18	36880.40086	1.09386	3.18125	1.17998	1.03E-02	7.56E-07	1.78E-06	6.15E-07	1.0338E-02
464546.46	3772357.6	36815.76921	3.6858	1.86414	11.85406	1.03E-02	2.55E-06	1.04E-06	6.18E-06	1.0327E-02
464979.73	3772407.36	36812.39624	1.49828	27.11023	2.49526	1.03E-02	1.04E-06	1.51E-05	1.30E-06	1.0333E-02
464748.69	3772269.65	36811.78714	1.79947	3.02318	9.70345	1.03E-02	1.24E-06	1.69E-06	5.06E-06	1.0324E-02
465208.76	3772700.23	36791.04263	1.10165	2.72465	1.14752	1.03E-02	7.62E-07	1.52E-06	5.98E-07	1.0313E-02
464657.7	3772252.67	36568.4901	1.86465	2.10163	46.66865	1.02E-02	1.29E-06	1.17E-06	2.43E-05	1.0274E-02
465138.39	3772868.46	36533.78166	1.36355	1.28057	1.01049	1.02E-02	9.43E-07	7.15E-07	5.27E-07	1.0240E-02
465181.17	3772602	36528.9822	1.08431	5.55138	1.2871	1.02E-02	7.50E-07	3.10E-06	6.71E-07	1.0241E-02
465117.04	3772883.35	36437.59753	1.4348	1.20922	1.00204	1.02E-02	9.92E-07	6.75E-07	5.23E-07	1.0213E-02
465161.51	3772849.35	36423.38778	1.28921	1.37962	1.01859	1.02E-02	8.91E-07	7.70E-07	5.31E-07	1.0209E-02
465079.28	3772901.32	36379.10777	1.57706	1.12658	0.99514	1.02E-02	1.09E-06	6.29E-07	5.19E-07	1.0197E-02
465211.96	3772728.72	36344.58202	1.10805	2.33433	1.10957	1.02E-02	7.66E-07	1.30E-06	5.79E-07	1.0188E-02
465195.59	3772631.56	36286.6268	1.07499	4.30318	1.22991	1.02E-02	7.43E-07	2.40E-06	6.41E-07	1.0172E-02
464541	3772370.33	36152.83833	3.90004	1.85453	10.82997	1.01E-02	2.70E-06	1.04E-06	5.65E-06	1.0141E-02
465199.52	3772794.63	36105.487	1.16784	1.71465	1.04897	1.01E-02	8.07E-07	9.57E-07	5.47E-07	1.0120E-02
465193.97	3772807.89	36054.7419	1.18614	1.62289	1.03833	1.01E-02	8.20E-07	9.06E-07	5.41E-07	1.0106E-02
464695.3	3772251.54	36040.68797	1.75435	2.33725	19.36081	1.01E-02	1.21E-06	1.30E-06	1.01E-05	1.0112E-02
465166.76	3772572.45	35998.02232	1.08479	7.51596	1.33916	1.01E-02	7.50E-07	4.20E-06	6.98E-07	1.0093E-02
465205.07	3772781.37	35985.89511	1.14785	1.82055	1.05711	1.01E-02	7.94E-07	1.02E-06	5.51E-07	1.0087E-02
465188.42	3772821.16	35831.3747	1.20262	1.53784	1.02522	1.00E-02	8.31E-07	8.58E-07	5.35E-07	1.0043E-02
465095.48	3772898.73	35736.91909	1.50621	1.13709	0.98379	1.00E-02	1.04E-06	6.35E-07	5.13E-07	1.0017E-02
465210.61	3772768.11	35702.59282	1.12609	1.92991	1.06257	1.00E-02	7.78E-07	1.08E-06	5.54E-07	1.0007E-02
464721.18	3772255.5	35661.37158	1.71941	2.55887	13.23035	9.99E-03	1.19E-06	1.43E-06	6.90E-06	1.0003E-02
464534.48	3772420.96	35590.68172	5.19207	1.97061	9.62592	9.97E-03	3.59E-06	1.10E-06	5.02E-06	9.9833E-03
464815.83	3772302.7	35559.08071	1.83153	4.5369	5.61999	9.96E-03	1.27E-06	2.53E-06	2.93E-06	9.9715E-03
465214.17	3772687.29	35544.94941	1.0691	2.9096	1.13787	9.96E-03	7.39E-07	1.62E-06	5.93E-07	9.9638E-03
465108.24	3772498.11	35469.55238	1.14832	25.09241	1.57935	9.94E-03	7.94E-07	1.40E-05	8.24E-07	9.9553E-03

465155.9	3772862.75	35437.61084	1.2986	1.30194	0.99381	9.93E-03	8.98E-07	7.27E-07	5.18E-07	9.9329E-03
465182.88	3772834.42	35437.5188	1.21709	1.4569	1.00941	9.93E-03	8.41E-07	8.13E-07	5.26E-07	9.9329E-03
465122.94	3772513.04	35435.359	1.12545	18.13409	1.51195	9.93E-03	7.78E-07	1.01E-05	7.88E-07	9.9418E-03
465217.57	3772715.32	35405.7128	1.07858	2.48446	1.10487	9.92E-03	7.46E-07	1.39E-06	5.76E-07	9.9245E-03
464670.21	3772247.24	35402.59076	1.75824	2.11911	32.1748	9.92E-03	1.22E-06	1.18E-06	1.68E-05	9.9401E-03
465132.98	3772881.4	35326.93723	1.37026	1.21402	0.98279	9.90E-03	9.47E-07	6.78E-07	5.12E-07	9.9019E-03
465210	3772661.11	35300.31081	1.05708	3.42206	1.16519	9.89E-03	7.31E-07	1.91E-06	6.08E-07	9.8955E-03
464535.55	3772383.06	35250.84744	4.08308	1.83624	9.91251	9.88E-03	2.82E-06	1.03E-06	5.17E-06	9.8874E-03
465216.16	3772754.85	35250.01455	1.10258	2.04314	1.06527	9.88E-03	7.62E-07	1.14E-06	5.55E-07	9.8806E-03
465093.53	3772483.18	35217.01492	1.16919	37.86826	1.6493	9.87E-03	8.08E-07	2.11E-05	8.60E-07	9.8917E-03
465137.64	3772527.96	35129.37992	1.1008	13.77823	1.44643	9.84E-03	7.61E-07	7.69E-06	7.54E-07	9.8536E-03
465195.88	3772616.93	35045.07551	1.05013	4.80193	1.22769	9.82E-03	7.26E-07	2.68E-06	6.40E-07	9.8248E-03
464789.73	3772283.37	35009.80458	1.7547	3.64721	6.71694	9.81E-03	1.21E-06	2.04E-06	3.50E-06	9.8176E-03
464919.29	3772368.38	34981.33441	1.6776	11.23349	3.23083	9.80E-03	1.16E-06	6.27E-06	1.68E-06	9.8120E-03
465111.58	3772896.42	34920.91175	1.43882	1.1444	0.96935	9.79E-03	9.95E-07	6.39E-07	5.05E-07	9.7881E-03
464613.45	3772256.68	34898.42315	1.95031	1.82337	94.80784	9.78E-03	1.35E-06	1.02E-06	4.94E-05	9.8314E-03
465181.47	3772587.37	34864.28446	1.05394	6.3233	1.27922	9.77E-03	7.29E-07	3.53E-06	6.67E-07	9.7750E-03
465177.33	3772847.68	34790.38041	1.22913	1.37693	0.99024	9.75E-03	8.50E-07	7.69E-07	5.16E-07	9.7515E-03
464600.16	3772262.45	34724.37515	2.02448	1.76718	45.6647	9.73E-03	1.40E-06	9.86E-07	2.38E-05	9.7571E-03
465152.35	3772542.89	34623.35556	1.07539	10.89111	1.38484	9.70E-03	7.43E-07	6.08E-06	7.22E-07	9.7101E-03
465210.29	3772646.48	34503.48871	1.03756	3.78036	1.16948	9.67E-03	7.17E-07	2.11E-06	6.10E-07	9.6724E-03
464734.7	3772255.08	34423.19526	1.65872	2.6258	11.16365	9.65E-03	1.15E-06	1.47E-06	5.82E-06	9.6549E-03
465150.3	3772876.15	34400.71144	1.30684	1.23254	0.96843	9.64E-03	9.03E-07	6.88E-07	5.05E-07	9.6423E-03
464640.03	3772245.14	34323.01275	1.7741	1.89931	101.66038	9.62E-03	1.23E-06	1.06E-06	5.30E-05	9.6737E-03
464586.87	3772268.22	34177.55454	2.08499	1.70608	28.0607	9.58E-03	1.44E-06	9.52E-07	1.46E-05	9.5947E-03
464530.1	3772395.79	34138.32795	4.22655	1.81074	9.08313	9.57E-03	2.92E-06	1.01E-06	4.74E-06	9.5753E-03
464546.9	3772321.17	34125.24376	2.79081	1.67401	11.76605	9.56E-03	1.93E-06	9.34E-07	6.14E-06	9.5720E-03
464708.01	3772246.02	34101.99043	1.63697	2.32333	15.72722	9.56E-03	1.13E-06	1.30E-06	8.20E-06	9.5671E-03
464541.53	3772333.71	34034.02555	2.97887	1.68058	10.80684	9.54E-03	2.06E-06	9.38E-07	5.64E-06	9.5460E-03
464682.72	3772241.81	34001.91797	1.65346	2.12215	24.14899	9.53E-03	1.14E-06	1.18E-06	1.26E-05	9.5433E-03
465127.57	3772894.34	33997.86764	1.37505	1.14972	0.9531	9.53E-03	9.51E-07	6.42E-07	4.97E-07	9.5294E-03
465171.78	3772860.94	33993.55005	1.23922	1.30152	0.9687	9.53E-03	8.57E-07	7.27E-07	5.05E-07	9.5282E-03
464552.27	3772308.64	33980.23946	2.60069	1.66074	12.86977	9.52E-03	1.80E-06	9.27E-07	6.71E-06	9.5318E-03
465167.05	3772557.82	33942.98776	1.04921	8.84173	1.3262	9.51E-03	7.25E-07	4.94E-06	6.92E-07	9.5182E-03
464528.93	3772433.92	33932.27141	5.22078	1.91225	8.67675	9.51E-03	3.61E-06	1.07E-06	4.52E-06	9.5181E-03
464889.86	3772346.58	33890.13621	1.72054	7.99264	3.69515	9.50E-03	1.19E-06	4.46E-06	1.93E-06	9.5047E-03
464840.07	3772312.22	33855.93415	1.75904	5.13105	4.79607	9.49E-03	1.22E-06	2.86E-06	2.50E-06	9.4941E-03
464536.16	3772346.24	33711.35169	3.15816	1.67927	9.94785	9.45E-03	2.18E-06	9.37E-07	5.19E-06	9.4553E-03
465196.17	3772602.3	33654.19453	1.02336	5.40441	1.22267	9.43E-03	7.07E-07	3.02E-06	6.38E-07	9.4353E-03
465210.58	3772631.86	33514.34493	1.01613	4.18831	1.17024	9.39E-03	7.02E-07	2.34E-06	6.10E-07	9.3954E-03
464653.32	3772239.37	33487.50995	1.67874	1.92116	53.31065	9.38E-03	1.16E-06	1.07E-06	2.78E-05	9.4143E-03
465106.11	3772909.49	33329.70853	1.44122	1.08245	0.93551	9.34E-03	9.96E-07	6.04E-07	4.88E-07	9.3421E-03
464573.58	3772273.98	33324.98816	2.12868	1.63957	19.60663	9.34E-03	1.47E-06	9.15E-07	1.02E-05	9.3513E-03
465144.69	3772889.56	33248.53451	1.31332	1.16679	0.94132	9.32E-03	9.08E-07	6.51E-07	4.91E-07	9.3193E-03
464530.79	3772358.77	33165.48423	3.32203	1.67072	9.17343	9.29E-03	2.30E-06	9.33E-07	4.78E-06	9.3020E-03
465166.23	3772874.2	33128.75663	1.24811	1.23336	0.94618	9.28E-03	8.63E-07	6.88E-07	4.93E-07	9.2858E-03
465181.76	3772572.75	33094.18046	1.02215	7.30378	1.26923	9.27E-03	7.07E-07	4.08E-06	6.62E-07	9.2795E-03
464748.22	3772254.66	32996.78879	1.59632	2.68674	9.56546	9.25E-03	1.10E-06	1.50E-06	4.99E-06	9.2543E-03
464524.64	3772408.52	32856.91608	4.32423	1.77715	8.31541	9.21E-03	2.99E-06	9.92E-07	4.34E-06	9.2159E-03
465122.15	3772907.28	32604.93527	1.37841	1.08919	0.9225	9.14E-03	9.53E-07	6.08E-07	4.81E-07	9.1390E-03
465123.23	3772498.41	32509.87784	1.077	24.71128	1.48847	9.11E-03	7.45E-07	1.38E-05	7.76E-07	9.1256E-03
465137.94	3772513.34	32482.96786	1.05655	17.76489	1.42636	9.10E-03	7.30E-07	9.92E-06	7.44E-07	9.1141E-03
464695.22	3772236.38	32436.30617	1.55258	2.11617	19.0495	9.09E-03	1.07E-06	1.18E-06	9.93E-06	9.1019E-03
464525.42	3772371.31	32412.13337	3.46495	1.65647	8.48027	9.08E-03	2.40E-06	9.25E-07	4.42E-06	9.0906E-03
464666.61	3772233.6	32398.5826	1.58285	1.9323	34.81539	9.08E-03	1.09E-06	1.08E-06	1.82E-05	9.0994E-03
465210.88	3772617.23	32361.53048	0.99254	4.66505	1.16764	9.07E-03	6.86E-07	2.60E-06	6.09E-07	9.0726E-03
465108.53	3772483.48	32284.71164	1.09553	37.39993	1.55256	9.05E-03	7.57E-07	2.09E-05	8.10E-07	9.0696E-03
465152.64	3772528.26	32240.80008	1.03492	13.47658	1.36691	9.03E-03	7.15E-07	7.52E-06	7.13E-07	9.0438E-03
464614.77	3772240.91	32238.81598	1.72354	1.69784	102.71565	9.03E-03	1.19E-06	9.48E-07	5.36E-05	9.0900E-03
464601.7	3772246.58	32226.60418	1.79091	1.65854	50.02964	9.03E-03	1.24E-06	9.26E-07	2.61E-05	9.0592E-03
465160.69	3772887.47	32172.05887	1.25548	1.16984	0.92234	9.02E-03	8.68E-07	6.53E-07	4.81E-07	9.0176E-03
465196.46	3772587.67	32134.2605	0.99484	6.14239	1.21487	9.01E-03	6.88E-07	3.43E-06	6.33E-07	9.0098E-03
464720.71	3772240.51	32060.45692	1.5272	2.30121	13.06546	8.98E-03	1.06E-06	1.28E-06	6.81E-06	8.9935E-03
464588.64	3772252.25	31986.04624	1.84907	1.60981	30.08132	8.96E-03	1.28E-06	8.99E-07	1.57E-05	8.9814E-03
465139.08	3772902.96	31980.76443	1.31787	1.10346	0.91229	8.96E-03	9.11E-07	6.16E-07	4.76E-07	8.9640E-03

465167.35	3772543.19	31826.69618	1.01249	10.62662	1.31111	8.92E-03	7.00E-07	5.93E-06	6.84E-07	8.9262E-03
464815.26	3772287.67	31817.32926	1.64056	3.91685	5.50144	8.92E-03	1.13E-06	2.19E-06	2.87E-06	8.9224E-03
465093.82	3772468.55	31799.37723	1.11188	66.75898	1.61908	8.91E-03	7.69E-07	3.73E-05	8.44E-07	8.9501E-03
464575.57	3772257.93	31496.24872	1.89512	1.55219	20.35783	8.83E-03	1.31E-06	8.66E-07	1.06E-05	8.8390E-03
464520.05	3772383.84	31476.88106	3.5817	1.637	7.84757	8.82E-03	2.48E-06	9.14E-07	4.09E-06	8.8283E-03
465009.99	3772408.61	31473.7251	1.29386	28.29324	2.15614	8.82E-03	8.94E-07	1.58E-05	1.12E-06	8.8377E-03
464519.19	3772421.25	31449.94287	4.37734	1.7378	7.60518	8.81E-03	3.03E-06	9.70E-07	3.97E-06	8.8212E-03
464640.9	3772229.56	31413.9709	1.5708	1.75141	96.01251	8.80E-03	1.09E-06	9.78E-07	5.01E-05	8.8553E-03
464789.26	3772268.38	31382.18259	1.56723	3.19998	6.58213	8.79E-03	1.08E-06	1.79E-06	3.43E-06	8.8006E-03
464535.59	3772312.16	31349.61258	2.48168	1.51995	9.72104	8.79E-03	1.72E-06	8.48E-07	5.07E-06	8.7928E-03
464990.08	3772396.2	31255.84882	1.34633	20.00181	2.32851	8.76E-03	9.31E-07	1.12E-05	1.21E-06	8.7722E-03
465182.05	3772558.12	31240.83459	0.98907	8.57909	1.25691	8.75E-03	6.84E-07	4.79E-06	6.55E-07	8.7608E-03
464529.89	3772325.47	31224.36246	2.63954	1.52346	8.9609	8.75E-03	1.82E-06	8.50E-07	4.67E-06	8.7574E-03
465155.14	3772900.73	31120.18598	1.26127	1.10964	0.89715	8.72E-03	8.72E-07	6.19E-07	4.68E-07	8.7228E-03
464679.9	3772227.83	31109.67689	1.48895	1.93425	25.29627	8.72E-03	1.03E-06	1.08E-06	1.32E-05	8.7332E-03
465211.17	3772602.6	31085.98601	0.96738	5.24093	1.16273	8.71E-03	6.69E-07	2.93E-06	6.06E-07	8.7155E-03
464734.23	3772240.09	30993.42918	1.47778	2.35654	11.003	8.69E-03	1.02E-06	1.32E-06	5.74E-06	8.6934E-03
464524.18	3772338.79	30872.66329	2.78789	1.52036	8.2814	8.65E-03	1.93E-06	8.49E-07	4.32E-06	8.6586E-03
464970.09	3772383.6	30852.56418	1.39777	15.01925	2.5228	8.65E-03	9.66E-07	8.38E-06	1.32E-06	8.6565E-03
464707.73	3772230.95	30783.05485	1.45707	2.10275	15.51713	8.63E-03	1.01E-06	1.17E-06	8.09E-06	8.6367E-03
464562.5	3772263.6	30728.37589	1.92695	1.49172	15.0722	8.61E-03	1.33E-06	8.33E-07	7.86E-06	8.6211E-03
464653.97	3772223.89	30553.90829	1.49007	1.76577	51.65554	8.56E-03	1.03E-06	9.86E-07	2.69E-05	8.5911E-03
465196.76	3772573.05	30523.28665	0.96506	7.07728	1.20504	8.55E-03	6.67E-07	3.95E-06	6.28E-07	8.5588E-03
464514.68	3772396.38	30394.14551	3.66933	1.6124	7.25909	8.52E-03	2.54E-06	9.00E-07	3.79E-06	8.5246E-03
464839.3	3772297.11	30383.12731	1.58808	4.38843	4.69411	8.51E-03	1.10E-06	2.45E-06	2.45E-06	8.5203E-03
464518.48	3772352.11	30307.63471	2.92194	1.51186	7.67329	8.49E-03	2.02E-06	8.44E-07	4.00E-06	8.5000E-03
464888.54	3772331.25	30197.36835	1.5739	6.54969	3.62541	8.46E-03	1.09E-06	3.66E-06	1.89E-06	8.4689E-03
464929.79	3772357.59	30095.15172	1.49193	9.45691	2.99143	8.43E-03	1.03E-06	5.28E-06	1.56E-06	8.4415E-03
465149.59	3772913.99	29965.81763	1.26524	1.05151	0.87013	8.40E-03	8.75E-07	5.87E-07	4.54E-07	8.3993E-03
464513.74	3772433.98	29964.47258	4.38378	1.68828	6.92324	8.40E-03	3.03E-06	9.42E-07	3.61E-06	8.4046E-03
464602.98	3772230.83	29947.34783	1.59517	1.55043	52.8362	8.39E-03	1.10E-06	8.65E-07	2.76E-05	8.4217E-03
465138.23	3772498.71	29887.66726	1.01219	24.20615	1.40453	8.38E-03	7.00E-07	1.35E-05	7.32E-07	8.3904E-03
465152.93	3772513.64	29884.54901	0.99429	17.38197	1.34821	8.37E-03	6.87E-07	9.70E-06	7.03E-07	8.3857E-03
464590.1	3772236.42	29847.51658	1.64905	1.51395	31.64293	8.36E-03	1.14E-06	8.45E-07	1.65E-05	8.3827E-03
464747.75	3772239.66	29765.23125	1.42693	2.40704	9.40177	8.34E-03	9.86E-07	1.34E-06	4.90E-06	8.3484E-03
464549.44	3772269.27	29750.81622	1.94344	1.42815	11.77937	8.34E-03	1.34E-06	7.97E-07	6.14E-06	8.3454E-03
465211.46	3772587.97	29704.73057	0.94079	5.94751	1.15548	8.32E-03	6.50E-07	3.32E-06	6.03E-07	8.3288E-03
465167.64	3772528.56	29692.94609	0.97516	13.14593	1.29425	8.32E-03	6.74E-07	7.34E-06	6.75E-07	8.3296E-03
465123.52	3772483.78	29688.91585	1.02872	36.74097	1.46323	8.32E-03	7.11E-07	2.05E-05	7.63E-07	8.3418E-03
464577.23	3772242.01	29552.16567	1.69479	1.47151	21.57355	8.28E-03	1.17E-06	8.21E-07	1.12E-05	8.2947E-03
464512.77	3772365.43	29543.02539	3.03736	1.49895	7.1244	8.28E-03	2.10E-06	8.37E-07	3.72E-06	8.2855E-03
464667.04	3772218.22	29528.55111	1.40993	1.7722	34.1544	8.27E-03	9.75E-07	9.89E-07	1.78E-05	8.2946E-03
465182.34	3772543.49	29340.22314	0.95511	10.29872	1.24268	8.22E-03	6.60E-07	5.75E-06	6.48E-07	8.2291E-03
464509.31	3772408.91	29197.58644	3.72594	1.58239	6.70372	8.18E-03	2.58E-06	8.83E-07	3.50E-06	8.1890E-03
464564.36	3772247.6	29048.86982	1.73029	1.42383	15.89194	8.14E-03	1.20E-06	7.95E-07	8.29E-06	8.1507E-03
464720.24	3772225.52	29043.4087	1.36726	2.08306	12.88993	8.14E-03	9.45E-07	1.16E-06	6.72E-06	8.1477E-03
465197.05	3772558.42	28845.98668	0.93427	8.2926	1.19328	8.08E-03	6.46E-07	4.63E-06	6.22E-07	8.0895E-03
464641.59	3772214.07	28838.56239	1.40238	1.61943	92.10992	8.08E-03	9.69E-07	9.04E-07	4.80E-05	8.1314E-03
464519.54	3772314.22	28807.84103	2.33078	1.38837	7.68263	8.07E-03	1.61E-06	7.75E-07	4.01E-06	8.0793E-03
464912.77	3772340.77	28681.68451	1.47724	7.43566	3.19646	8.04E-03	1.02E-06	4.15E-06	1.67E-06	8.0444E-03
464814.71	3772272.64	28673.46596	1.47729	3.42125	5.37419	8.04E-03	1.02E-06	1.91E-06	2.80E-06	8.0409E-03
464507.07	3772378.74	28616.7359	3.13014	1.48076	6.61019	8.02E-03	2.16E-06	8.27E-07	3.45E-06	8.0258E-03
465043.65	3772418.24	28528.79906	1.15217	39.55739	1.87452	7.99E-03	7.96E-07	2.21E-05	9.77E-07	8.0185E-03
464513.94	3772327.32	28508.20214	2.44962	1.38671	7.17313	7.99E-03	1.69E-06	7.74E-07	3.74E-06	7.9951E-03
465063.81	3772431.24	28457.94559	1.10835	73.03775	1.748	7.97E-03	7.66E-07	4.08E-05	9.11E-07	8.0173E-03
464551.49	3772253.18	28380.84975	1.75403	1.36932	12.25312	7.95E-03	1.21E-06	7.64E-07	6.39E-06	7.9616E-03
464788.79	3772253.39	28320.4294	1.40862	2.83459	6.4329	7.94E-03	9.74E-07	1.58E-06	3.35E-06	7.9422E-03
465211.75	3772573.35	28241.44443	0.91302	6.83328	1.14614	7.91E-03	6.31E-07	3.81E-06	5.98E-07	7.9192E-03
464733.76	3772225.09	28087.8868	1.3263	2.12923	10.81367	7.87E-03	9.17E-07	1.19E-06	5.64E-06	7.8789E-03
464706.48	3772216.29	28085.87664	1.31294	1.91516	15.5245	7.87E-03	9.08E-07	1.07E-06	8.10E-06	7.8806E-03
464508.33	3772340.41	28024.65052	2.55774	1.38108	6.71093	7.85E-03	1.77E-06	7.71E-07	3.50E-06	7.8594E-03
464654.47	3772208.48	28012.79529	1.33376	1.62885	50.6524	7.85E-03	9.22E-07	9.09E-07	2.64E-05	7.8783E-03
464503.94	3772421.44	27923.61579	3.75177	1.54644	6.17343	7.83E-03	2.59E-06	8.63E-07	3.22E-06	7.8318E-03
464591.33	3772220.69	27896.57602	1.4797	1.42207	32.81351	7.82E-03	1.02E-06	7.94E-07	1.71E-05	7.8364E-03
464604.03	3772215.18	27842.89484	1.43022	1.45051	55.37058	7.80E-03	9.89E-07	8.10E-07	2.89E-05	7.8331E-03

464578.62	3772226.21	27773.28936	1.52345	1.38833	22.19036	7.78E-03	1.05E-06	7.75E-07	1.16E-05	7.7964E-03
465167.93	3772513.94	27580.80704	0.93769	16.9407	1.27644	7.73E-03	6.48E-07	9.46E-06	6.66E-07	7.7398E-03
465153.23	3772499.01	27571.14094	0.95356	23.70816	1.32779	7.73E-03	6.59E-07	1.32E-05	6.92E-07	7.7409E-03
464538.61	3772258.77	27536.72859	1.7648	1.31021	9.77085	7.72E-03	1.22E-06	7.31E-07	5.09E-06	7.7237E-03
464838.58	3772282.02	27446.68926	1.43952	3.80267	4.58476	7.69E-03	9.95E-07	2.12E-06	2.39E-06	7.6969E-03
464565.92	3772231.72	27434.38492	1.55929	1.34979	16.32672	7.69E-03	1.08E-06	7.53E-07	8.51E-06	7.6983E-03
465182.64	3772528.86	27424.90008	0.92062	12.73196	1.22705	7.69E-03	6.36E-07	7.11E-06	6.40E-07	7.6937E-03
465138.52	3772484.08	27384.15702	0.9681	36.01073	1.38107	7.67E-03	6.69E-07	2.01E-05	7.20E-07	7.6954E-03
464502.72	3772353.5	27376.85811	2.65228	1.3716	6.28222	7.67E-03	1.83E-06	7.66E-07	3.28E-06	7.6777E-03
464887.37	3772315.98	27143.13117	1.44298	5.48556	3.54989	7.61E-03	9.98E-07	3.06E-06	1.85E-06	7.6123E-03
465197.34	3772543.79	27129.72825	0.90274	9.92733	1.17986	7.60E-03	6.24E-07	5.54E-06	6.15E-07	7.6094E-03
464667.34	3772202.89	27029.80974	1.26586	1.63195	33.5863	7.57E-03	8.75E-07	9.11E-07	1.75E-05	7.5939E-03
465123.82	3772469.15	27015.03576	0.98121	64.34181	1.43699	7.57E-03	6.78E-07	3.59E-05	7.49E-07	7.6078E-03
464747.28	3772224.67	27004.65738	1.28436	2.17174	9.20357	7.57E-03	8.88E-07	1.21E-06	4.80E-06	7.5745E-03
464553.22	3772237.24	26916.40188	1.58632	1.30718	12.67964	7.54E-03	1.10E-06	7.30E-07	6.61E-06	7.5513E-03
465000.46	3772385.11	26858.35891	1.21668	15.50079	2.17508	7.53E-03	8.41E-07	8.65E-06	1.13E-06	7.5372E-03
465212.05	3772558.72	26717.60644	0.88427	7.97529	1.13487	7.49E-03	6.11E-07	4.45E-06	5.92E-07	7.4928E-03
464980.49	3772372.58	26603.13771	1.25916	12.15196	2.3506	7.46E-03	8.70E-07	6.78E-06	1.23E-06	7.4639E-03
464498.57	3772433.98	26603.02175	3.74733	1.50319	5.6616	7.46E-03	2.59E-06	8.39E-07	2.95E-06	7.4614E-03
464497.11	3772366.6	26584.44196	2.73081	1.35854	5.87903	7.45E-03	1.89E-06	7.58E-07	3.07E-06	7.4555E-03
464642.14	3772198.63	26536.93781	1.26093	1.50164	88.92301	7.44E-03	8.72E-07	8.38E-07	4.64E-05	7.4846E-03
464719.77	3772210.52	26466.03541	1.23259	1.89642	12.68157	7.42E-03	8.52E-07	1.06E-06	6.61E-06	7.4251E-03
464503.64	3772315.96	26404.75384	2.17561	1.2725	6.28753	7.40E-03	1.50E-06	7.10E-07	3.28E-06	7.4049E-03
464540.51	3772242.75	26284.89701	1.60404	1.26111	10.1659	7.37E-03	1.11E-06	7.04E-07	5.30E-06	7.3730E-03
464940.29	3772346.83	26194.22066	1.337	8.09659	2.77179	7.34E-03	9.24E-07	4.52E-06	1.45E-06	7.3473E-03
465018.31	3772392.46	26160.22625	1.1588	18.23409	2.02274	7.33E-03	8.01E-07	1.02E-05	1.05E-06	7.3430E-03
464597.85	3772202.67	26014.28818	1.31583	1.34683	41.79496	7.29E-03	9.10E-07	7.52E-07	2.18E-05	7.3135E-03
464814.17	3772257.62	25999.24629	1.33696	3.01818	5.23575	7.29E-03	9.24E-07	1.68E-06	2.73E-06	7.2911E-03
464498.11	3772328.86	25985.82867	2.26417	1.26898	5.92998	7.28E-03	1.57E-06	7.08E-07	3.09E-06	7.2874E-03
464571.17	3772214.25	25957.72497	1.40088	1.28875	18.21054	7.27E-03	9.68E-07	7.19E-07	9.50E-06	7.2854E-03
464862.45	3772291.39	25957.30982	1.38696	4.21705	3.96395	7.27E-03	9.59E-07	2.35E-06	2.07E-06	7.2794E-03
464911.4	3772325.42	25790.37487	1.36366	6.14553	3.13245	7.23E-03	9.43E-07	3.43E-06	1.63E-06	7.2333E-03
464611.18	3772196.88	25779.27622	1.26644	1.368	81.61911	7.22E-03	8.75E-07	7.64E-07	4.26E-05	7.2684E-03
464654.85	3772193.12	25743.81154	1.20217	1.50757	49.5785	7.21E-03	8.31E-07	8.42E-07	2.59E-05	7.2418E-03
464788.32	3772238.39	25709.24408	1.27327	2.53139	6.26457	7.20E-03	8.80E-07	1.41E-06	3.27E-06	7.2101E-03
464557.83	3772220.04	25665.05171	1.43358	1.25263	13.61912	7.19E-03	9.91E-07	6.99E-07	7.10E-06	7.2009E-03
464706.23	3772201.2	25637.65347	1.18512	1.7522	15.22333	7.18E-03	8.19E-07	9.78E-07	7.94E-06	7.1942E-03
464733.29	3772210.1	25600.52839	1.1983	1.93545	10.58401	7.17E-03	8.28E-07	1.08E-06	5.52E-06	7.1815E-03
465182.93	3772514.24	25529.57951	0.88605	16.39371	1.21034	7.15E-03	6.13E-07	9.15E-06	6.31E-07	7.1646E-03
464527.81	3772248.27	25513.86746	1.61139	1.21194	8.37258	7.15E-03	1.11E-06	6.77E-07	4.37E-06	7.1559E-03
465168.22	3772499.31	25510.3637	0.9002	23.10505	1.25717	7.15E-03	6.22E-07	1.29E-05	6.56E-07	7.1630E-03
465197.63	3772529.16	25403.3906	0.8708	12.23284	1.16507	7.12E-03	6.02E-07	6.83E-06	6.08E-07	7.1269E-03
465153.52	3772484.38	25337.93082	0.91313	35.29554	1.30586	7.10E-03	6.31E-07	1.97E-05	6.81E-07	7.1215E-03
464544.49	3772225.83	25190.91237	1.4578	1.21258	10.69665	7.06E-03	1.01E-06	6.77E-07	5.58E-06	7.0666E-03
464489.95	3772418.7	25176.62865	3.25953	1.39581	5.2158	7.06E-03	2.25E-06	7.79E-07	2.72E-06	7.0610E-03
465212.34	3772544.09	25162.8138	0.85494	9.49983	1.12204	7.05E-03	5.91E-07	5.30E-06	5.85E-07	7.0579E-03
464837.9	3772266.94	24935.07603	1.30989	3.33108	4.46578	6.99E-03	9.06E-07	1.86E-06	2.33E-06	6.9927E-03
464667.55	3772187.61	24828.62137	1.14431	1.50846	32.95978	6.96E-03	7.91E-07	8.42E-07	1.72E-05	6.9766E-03
464509.65	3772266.51	24823.60039	1.69711	1.16557	6.56798	6.96E-03	1.17E-06	6.51E-07	3.42E-06	6.9616E-03
465073.93	3772419.53	24648.86449	1.01502	41.5775	1.64675	6.91E-03	7.02E-07	2.32E-05	8.59E-07	6.9322E-03
465053.79	3772406.57	24634.86829	1.05145	26.44646	1.76157	6.90E-03	7.27E-07	1.48E-05	9.19E-07	6.9199E-03
464746.81	3772209.68	24631.24876	1.16318	1.97137	8.9643	6.90E-03	8.04E-07	1.10E-06	4.67E-06	6.9090E-03
464886.31	3772300.76	24589.02935	1.32611	4.6728	3.46819	6.89E-03	9.17E-07	2.61E-06	1.81E-06	6.8960E-03
464531.15	3772231.62	24557.12003	1.47276	1.16939	8.69821	6.88E-03	1.02E-06	6.53E-07	4.54E-06	6.8879E-03
465093.98	3772432.3	24500.95419	0.97878	77.36594	1.54314	6.87E-03	6.77E-07	4.32E-05	8.05E-07	6.9106E-03
464572.75	3772198.36	24424.26551	1.27093	1.22004	18.70458	6.84E-03	8.79E-07	6.81E-07	9.75E-06	6.8558E-03
464599.06	3772186.94	24276.74624	1.19203	1.26589	43.6866	6.80E-03	8.24E-07	7.07E-07	2.28E-05	6.8274E-03
464559.6	3772204.07	24276.26646	1.30335	1.19084	13.92541	6.80E-03	9.01E-07	6.65E-07	7.26E-06	6.8118E-03
464719.3	3772195.53	24211.81277	1.11796	1.73539	12.38207	6.78E-03	7.73E-07	9.69E-07	6.46E-06	6.7931E-03
464651.2	3772179.51	23983.36611	1.10624	1.39914	56.79242	6.72E-03	7.65E-07	7.81E-07	2.96E-05	6.7521E-03
464546.45	3772209.78	23979.03882	1.32951	1.15791	10.87218	6.72E-03	9.19E-07	6.46E-07	5.67E-06	6.7269E-03
464612.21	3772181.23	23966.4221	1.14765	1.28199	86.73835	6.72E-03	7.93E-07	7.16E-07	4.52E-05	6.7629E-03
464484.25	3772432.01	23925.81719	3.25255	1.3547	4.78287	6.70E-03	2.25E-06	7.56E-07	2.49E-06	6.7103E-03
464517.81	3772237.41	23802.08143	1.47818	1.12385	7.23865	6.67E-03	1.02E-06	6.27E-07	3.77E-06	6.6755E-03
464813.64	3772242.61	23694.60679	1.21557	2.68524	5.08356	6.64E-03	8.40E-07	1.50E-06	2.65E-06	6.6450E-03

465197.93	3772514.53	23691.94049	0.83873	15.68549	1.14897	6.64E-03	5.80E-07	8.76E-06	5.99E-07	6.6492E-03
465183.22	3772499.61	23666.67161	0.8514	22.32022	1.19188	6.63E-03	5.89E-07	1.25E-05	6.22E-07	6.6458E-03
464861.62	3772276.26	23661.22393	1.27004	3.66861	3.86179	6.63E-03	8.78E-07	2.05E-06	2.01E-06	6.6356E-03
465212.63	3772529.46	23598.03496	0.82521	11.62446	1.10776	6.61E-03	5.70E-07	6.49E-06	5.78E-07	6.6206E-03
465168.52	3772484.68	23508.50979	0.86299	34.41224	1.23653	6.59E-03	5.97E-07	1.92E-05	6.45E-07	6.6083E-03
464705.96	3772186.13	23503.4932	1.07634	1.61048	14.82625	6.59E-03	7.44E-07	8.99E-07	7.73E-06	6.5958E-03
464787.85	3772223.4	23462.63519	1.15707	2.27684	6.0732	6.57E-03	8.00E-07	1.27E-06	3.17E-06	6.5802E-03
464732.82	3772195.11	23441.03056	1.089	1.76854	10.29205	6.57E-03	7.53E-07	9.87E-07	5.37E-06	6.5760E-03
464910.18	3772310.14	23377.73241	1.26113	5.1819	3.06273	6.55E-03	8.72E-07	2.89E-06	1.60E-06	6.5565E-03
465153.81	3772469.75	23212.90776	0.87339	61.66583	1.28298	6.50E-03	6.04E-07	3.44E-05	6.69E-07	6.5407E-03
464990.92	3772361.61	23201.65697	1.14095	10.07825	2.19119	6.50E-03	7.89E-07	5.63E-06	1.14E-06	6.5094E-03
464493.02	3772269.93	23150.43503	1.63162	1.08435	5.42044	6.49E-03	1.13E-06	6.05E-07	2.83E-06	6.4920E-03
464498.75	3772256.56	23125.8725	1.5538	1.08109	5.74702	6.48E-03	1.07E-06	6.03E-07	3.00E-06	6.4853E-03
464664.54	3772173.72	23100.30934	1.05294	1.39951	35.3427	6.47E-03	7.28E-07	7.81E-07	1.84E-05	6.4934E-03
464970.91	3772348.96	23089.36941	1.17493	8.34465	2.36872	6.47E-03	8.12E-07	4.66E-06	1.24E-06	6.4771E-03
464574.11	3772182.58	22983.30923	1.15818	1.1551	19.03398	6.44E-03	8.01E-07	6.45E-07	9.93E-06	6.4520E-03
464561.13	3772188.21	22939.84224	1.1893	1.13145	14.11635	6.43E-03	8.22E-07	6.32E-07	7.36E-06	6.4373E-03
464520.15	3772221.2	22930.26913	1.35924	1.08318	7.34827	6.43E-03	9.40E-07	6.05E-07	3.83E-06	6.4312E-03
464548.14	3772193.85	22776.93022	1.21593	1.1044	10.96734	6.38E-03	8.41E-07	6.16E-07	5.72E-06	6.3900E-03
464837.25	3772251.88	22771.09894	1.19645	2.9453	4.33555	6.38E-03	8.27E-07	1.64E-06	2.26E-06	6.3859E-03
464600.08	3772171.3	22680.8398	1.08553	1.1912	45.18989	6.36E-03	7.50E-07	6.65E-07	2.36E-05	6.3809E-03
464746.34	3772194.69	22578.21743	1.05932	1.79905	8.67697	6.33E-03	7.32E-07	1.00E-06	4.52E-06	6.3334E-03
464474.67	3772418.97	22554.1033	2.86365	1.25764	4.38247	6.32E-03	1.98E-06	7.02E-07	2.29E-06	6.3253E-03
464471.48	3772355.62	22447.96497	2.18963	1.13949	4.43216	6.29E-03	1.51E-06	6.36E-07	2.31E-06	6.2951E-03
465008.14	3772367.39	22426.24996	1.08632	11.06167	2.03666	6.28E-03	7.51E-07	6.17E-06	1.06E-06	6.2925E-03
464613.07	3772165.67	22314.33945	1.04565	1.20338	91.12849	6.25E-03	7.23E-07	6.72E-07	4.75E-05	6.3021E-03
464801.37	3772222.98	22260.68741	1.11503	2.30442	5.37564	6.24E-03	7.71E-07	1.29E-06	2.80E-06	6.2430E-03
464934.05	3772319.51	22242.52842	1.19469	5.75842	2.72525	6.23E-03	8.26E-07	3.21E-06	1.42E-06	6.2385E-03
464718.83	3772180.54	22241.4638	1.01955	1.59518	11.98637	6.23E-03	7.05E-07	8.90E-07	6.25E-06	6.2406E-03
464507	3772226.91	22237.98642	1.36229	1.04269	6.23261	6.23E-03	9.42E-07	5.82E-07	3.25E-06	6.2366E-03
464470.48	3772393.36	22212.74717	2.52594	1.19435	4.31414	6.22E-03	1.75E-06	6.67E-07	2.25E-06	6.2294E-03
464651.66	3772164.11	22159.70865	1.00744	1.30324	54.90176	6.21E-03	6.96E-07	7.27E-07	2.86E-05	6.2399E-03
465212.92	3772514.83	22044.32799	0.79534	14.77124	1.09217	6.18E-03	5.50E-07	8.25E-06	5.70E-07	6.1869E-03
464522.17	3772205.13	22015.06209	1.25121	1.04163	7.39993	6.17E-03	8.65E-07	5.81E-07	3.86E-06	6.1746E-03
465198.22	3772499.91	22010.47296	0.80663	21.27104	1.13137	6.17E-03	5.58E-07	1.19E-05	5.90E-07	6.1811E-03
464470.12	3772323.4	21956.38624	1.89538	1.07289	4.373	6.15E-03	1.31E-06	5.99E-07	2.28E-06	6.1571E-03
465183.51	3772484.98	21866.91259	0.81709	33.23329	1.1724	6.13E-03	5.65E-07	1.86E-05	6.11E-07	6.1475E-03
464466.03	3772368.35	21712.52218	2.22503	1.12262	4.1659	6.08E-03	1.54E-06	6.27E-07	2.17E-06	6.0889E-03
464860.85	3772261.15	21668.6923	1.16626	3.22381	3.75063	6.07E-03	8.06E-07	1.80E-06	1.96E-06	6.0768E-03
464562.44	3772172.45	21661.12367	1.08918	1.07486	14.18651	6.07E-03	7.53E-07	6.00E-07	7.40E-06	6.0789E-03
464813.96	3772227.92	21658.51997	1.10951	2.41373	4.88643	6.07E-03	7.67E-07	1.35E-06	2.55E-06	6.0741E-03
464482.55	3772258.98	21622.50453	1.49078	1.00762	4.80776	6.06E-03	1.03E-06	5.62E-07	2.51E-06	6.0634E-03
464705.66	3772171.06	21620.48388	0.98274	1.48606	14.30126	6.06E-03	6.79E-07	8.30E-07	7.46E-06	6.0677E-03
464575.28	3772166.87	21620.416	1.05961	1.09394	19.20847	6.06E-03	7.33E-07	6.11E-07	1.00E-05	6.0701E-03
464549.6	3772178.02	21600.61156	1.11535	1.05267	10.98028	6.05E-03	7.71E-07	5.88E-07	5.73E-06	6.0603E-03
464488.2	3772245.8	21577.18234	1.425	1.00726	5.09895	6.05E-03	9.85E-07	5.62E-07	2.66E-06	6.0508E-03
464732.35	3772180.12	21555.57912	0.99489	1.62351	9.9243	6.04E-03	6.88E-07	9.06E-07	5.18E-06	6.0473E-03
464476.91	3772272.15	21521.52863	1.55356	1.00829	4.57488	6.03E-03	1.07E-06	5.63E-07	2.39E-06	6.0350E-03
465084.09	3772407.93	21519.85883	0.93278	27.39395	1.55173	6.03E-03	6.45E-07	1.53E-05	8.09E-07	6.0473E-03
464787.38	3772208.41	21517.90886	1.05661	2.06054	5.85615	6.03E-03	7.30E-07	1.15E-06	3.05E-06	6.0349E-03
464588.11	3772161.3	21474.71792	1.02746	1.10982	28.00132	6.02E-03	7.10E-07	6.20E-07	1.46E-05	6.0338E-03
465063.98	3772395.02	21468.94727	0.96348	19.22077	1.65616	6.02E-03	6.66E-07	1.07E-05	8.64E-07	6.0285E-03
464509.18	3772210.76	21463.6761	1.25909	1.00687	6.28519	6.01E-03	8.70E-07	5.62E-07	3.28E-06	6.0195E-03
465104.14	3772420.67	21456.11903	0.90201	43.32111	1.45688	6.01E-03	6.24E-07	2.42E-05	7.60E-07	6.0382E-03
464469.06	3772432.06	21448.26164	2.85341	1.22219	4.04584	6.01E-03	1.97E-06	6.82E-07	2.11E-06	6.0152E-03
464464.39	3772336.76	21392.57393	1.94253	1.06112	4.12116	5.99E-03	1.34E-06	5.92E-07	2.15E-06	5.9990E-03
464664.82	3772158.4	21333.15006	0.96132	1.30208	34.1623	5.98E-03	6.65E-07	7.27E-07	1.78E-05	5.9974E-03
465043.78	3772381.9	21317.22093	0.99377	14.38489	1.77173	5.97E-03	6.87E-07	8.03E-06	9.24E-07	5.9834E-03
465124.13	3772433.26	21277.88821	0.87152	81.32183	1.37061	5.96E-03	6.02E-07	4.54E-05	7.15E-07	6.0094E-03
464464.95	3772406.26	21271.71306	2.53823	1.16691	4.01148	5.96E-03	1.75E-06	6.51E-07	2.09E-06	5.9655E-03
464600.95	3772155.73	21208.91318	0.99318	1.12236	46.28662	5.94E-03	6.87E-07	6.27E-07	2.41E-05	5.9689E-03
465023.48	3772368.53	21104.05132	1.02313	11.24237	1.89972	5.91E-03	7.07E-07	6.28E-06	9.91E-07	5.9220E-03
464523.93	3772189.17	21080.37038	1.15355	1.00006	7.39404	5.91E-03	7.97E-07	5.58E-07	3.86E-06	5.9126E-03
464460.57	3772381.08	20916.85893	2.2499	1.1037	3.91157	5.86E-03	1.56E-06	6.16E-07	2.04E-06	5.8658E-03
465003.05	3772354.86	20892.16318	1.05107	9.05664	2.04212	5.85E-03	7.27E-07	5.06E-06	1.06E-06	5.8615E-03

464496.2	3772216.4	20825.94727	1.26041	0.97068	5.41798	5.84E-03	8.71E-07	5.42E-07	2.83E-06	5.8403E-03
464839.14	3772237.81	20800.75397	1.09479	2.64903	4.12652	5.83E-03	7.57E-07	1.48E-06	2.15E-06	5.8334E-03
464745.87	3772179.69	20782.4875	0.96952	1.64945	8.32733	5.82E-03	6.70E-07	9.21E-07	4.34E-06	5.8298E-03
464458.67	3772350.13	20742.01745	1.98082	1.04763	3.88482	5.81E-03	1.37E-06	5.85E-07	2.03E-06	5.8165E-03
464511.09	3772194.74	20657.49224	1.16478	0.97037	6.28423	5.79E-03	8.05E-07	5.42E-07	3.28E-06	5.7935E-03
464884.46	3772270.42	20609.63092	1.12823	3.52362	3.28494	5.78E-03	7.80E-07	1.97E-06	1.71E-06	5.7799E-03
464459.97	3772311.69	20585.973	1.71373	0.9956	3.93694	5.77E-03	1.18E-06	5.56E-07	2.05E-06	5.7726E-03
464652.03	3772148.75	20537.77921	0.9223	1.21711	52.94014	5.76E-03	6.38E-07	6.79E-07	2.76E-05	5.7843E-03
465213.21	3772500.21	20521.46348	0.76557	19.86731	1.07541	5.75E-03	5.29E-07	1.11E-05	5.61E-07	5.7629E-03
464718.36	3772165.55	20499.48556	0.93429	1.47211	11.46652	5.74E-03	6.46E-07	8.22E-07	5.98E-06	5.7521E-03
464555.55	3772160.24	20472.97568	1.01727	1.01012	11.91959	5.74E-03	7.03E-07	5.64E-07	6.22E-06	5.7447E-03
464568.92	3772154.44	20416.53579	0.98961	1.02809	15.93497	5.72E-03	6.84E-07	5.74E-07	8.31E-06	5.7309E-03
464981.38	3772338.11	20411.89749	1.06835	7.19451	2.20281	5.72E-03	7.39E-07	4.02E-06	1.15E-06	5.7260E-03
464542.18	3772166.05	20403.31528	1.0414	0.98914	9.38706	5.72E-03	7.20E-07	5.52E-07	4.89E-06	5.7238E-03
465198.51	3772485.28	20386.55517	0.77494	31.6143	1.11297	5.71E-03	5.36E-07	1.76E-05	5.80E-07	5.7317E-03
464932.8	3772304.21	20307.98761	1.11271	4.88395	2.6605	5.69E-03	7.69E-07	2.73E-06	1.39E-06	5.6958E-03
464459.43	3772419.16	20301.8778	2.53815	1.1383	3.73021	5.69E-03	1.75E-06	6.35E-07	1.95E-06	5.6936E-03
464851.73	3772242.75	20294.08997	1.08316	2.77251	3.81661	5.69E-03	7.49E-07	1.55E-06	1.99E-06	5.6913E-03
464472.06	3772248.06	20223.25936	1.36901	0.94151	4.31288	5.67E-03	9.46E-07	5.26E-07	2.25E-06	5.6709E-03
464477.64	3772235.05	20211.97939	1.3129	0.93912	4.51737	5.66E-03	9.08E-07	5.24E-07	2.36E-06	5.6678E-03
464466.49	3772261.07	20160.17543	1.42248	0.9392	4.09077	5.65E-03	9.83E-07	5.24E-07	2.13E-06	5.6532E-03
464498.25	3772200.31	20148.55814	1.17046	0.93902	5.42012	5.65E-03	8.09E-07	5.24E-07	2.83E-06	5.6504E-03
464454.32	3772324.87	20090.0661	1.75467	0.98644	3.73478	5.63E-03	1.21E-06	5.51E-07	1.95E-06	5.6336E-03
464455.12	3772393.81	20081.91812	2.26504	1.08304	3.66887	5.63E-03	1.57E-06	6.05E-07	1.91E-06	5.6317E-03
464704.55	3772156.34	20034.5178	0.90447	1.37699	13.8589	5.61E-03	6.25E-07	7.69E-07	7.23E-06	5.6229E-03
464452.94	3772363.5	20020.70658	2.01009	1.0326	3.66058	5.61E-03	1.39E-06	5.76E-07	1.91E-06	5.6143E-03
464595.67	3772142.83	20014.69433	0.92758	1.05474	35.90924	5.61E-03	6.41E-07	5.89E-07	1.87E-05	5.6287E-03
464460.91	3772274.09	19969.40566	1.4726	0.93795	3.91625	5.60E-03	1.02E-06	5.24E-07	2.04E-06	5.5996E-03
464759.4	3772179.27	19946.26863	0.9437	1.67317	7.07494	5.59E-03	6.52E-07	9.34E-07	3.69E-06	5.5948E-03
464813.39	3772212.89	19938.72304	1.0176	2.17645	4.70391	5.59E-03	7.03E-07	1.21E-06	2.45E-06	5.5918E-03
464515.44	3772177.66	19904.07054	1.07643	0.93929	6.44104	5.58E-03	7.44E-07	5.24E-07	3.36E-06	5.5824E-03
464731.88	3772165.12	19894.2508	0.91318	1.49643	9.46072	5.57E-03	6.31E-07	8.35E-07	4.93E-06	5.5814E-03
464786.91	3772193.42	19823.33267	0.96921	1.87494	5.61082	5.56E-03	6.70E-07	1.05E-06	2.93E-06	5.5598E-03
464864.32	3772247.7	19765.62366	1.06917	2.90051	3.54281	5.54E-03	7.39E-07	1.62E-06	1.85E-06	5.5432E-03
464665.01	3772143.12	19764.67288	0.88214	1.21482	32.71086	5.54E-03	6.10E-07	6.78E-07	1.71E-05	5.5570E-03
464609.04	3772137.02	19631.54399	0.89405	1.06308	69.42395	5.50E-03	6.18E-07	5.93E-07	3.62E-05	5.5388E-03
464908.06	3772279.69	19593.89952	1.08459	3.8479	2.90532	5.49E-03	7.50E-07	2.15E-06	1.51E-06	5.4952E-03
464485.42	3772205.88	19554.65019	1.17041	0.90648	4.74175	5.48E-03	8.09E-07	5.06E-07	2.47E-06	5.4836E-03
464448.68	3772338.05	19520.62377	1.78858	0.97541	3.54043	5.47E-03	1.24E-06	5.44E-07	1.85E-06	5.4739E-03
464502.06	3772183.46	19500.87106	1.08651	0.91112	5.5056	5.46E-03	7.51E-07	5.09E-07	2.87E-06	5.4689E-03
464543.8	3772150.15	19376.23378	0.96118	0.94498	9.25723	5.43E-03	6.64E-07	5.28E-07	4.83E-06	5.4359E-03
464557.01	3772144.41	19368.91086	0.93779	0.96218	11.76477	5.43E-03	6.48E-07	5.37E-07	6.13E-06	5.4351E-03
464453.9	3772432.05	19323.90968	2.52625	1.10748	3.4643	5.42E-03	1.75E-06	6.18E-07	1.81E-06	5.4193E-03
464876.91	3772252.64	19260.924	1.05328	3.03295	3.30058	5.40E-03	7.28E-07	1.69E-06	1.72E-06	5.4017E-03
464570.22	3772138.68	19255.765	0.91178	0.97668	15.74637	5.40E-03	6.30E-07	5.45E-07	8.21E-06	5.4055E-03
464447.22	3772376.86	19251.85352	2.03043	1.01539	3.44296	5.39E-03	1.40E-06	5.67E-07	1.80E-06	5.3987E-03
464449.67	3772406.54	19222.4942	2.27089	1.06065	3.43801	5.39E-03	1.57E-06	5.92E-07	1.79E-06	5.3907E-03
464745.41	3772164.7	19207.85155	0.89145	1.51876	7.91153	5.38E-03	6.16E-07	8.48E-07	4.13E-06	5.3882E-03
464838.35	3772222.69	19188.82965	1.00766	2.37458	3.97898	5.38E-03	6.97E-07	1.33E-06	2.07E-06	5.3814E-03
464652.3	3772133.44	19087.25037	0.84841	1.13946	50.57945	5.35E-03	5.87E-07	6.36E-07	2.64E-05	5.3764E-03
464517.37	3772161.62	19062.05608	0.99752	0.90318	6.37191	5.34E-03	6.90E-07	5.04E-07	3.32E-06	5.3463E-03
465213.51	3772485.58	19048.49073	0.73615	29.3125	1.05783	5.34E-03	5.09E-07	1.64E-05	5.52E-07	5.3554E-03
464488.69	3772189.26	19006.34835	1.09126	0.8814	4.78024	5.33E-03	7.54E-07	4.92E-07	2.49E-06	5.3299E-03
464467.07	3772224.32	18982.83643	1.21472	0.87791	4.01991	5.32E-03	8.40E-07	4.90E-07	2.10E-06	5.3230E-03
464461.56	3772237.18	18980.74776	1.26292	0.8804	3.86225	5.32E-03	8.73E-07	4.91E-07	2.01E-06	5.3224E-03
464717.89	3772150.55	18971.9437	0.86006	1.36339	10.84184	5.32E-03	5.95E-07	7.61E-07	5.65E-06	5.3235E-03
465094.3	3772396.43	18932.47308	0.86013	19.68697	1.46223	5.31E-03	5.95E-07	1.10E-05	7.62E-07	5.3178E-03
465114.34	3772409.14	18913.7754	0.83385	28.13188	1.37598	5.30E-03	5.76E-07	1.57E-05	7.18E-07	5.3172E-03
464456.05	3772250.05	18909.60231	1.30901	0.87983	3.69873	5.30E-03	9.05E-07	4.91E-07	1.93E-06	5.3024E-03
464444.19	3772313.13	18899.20513	1.59515	0.92049	3.40048	5.30E-03	1.10E-06	5.14E-07	1.77E-06	5.2995E-03
464443.03	3772351.23	18890.2266	1.81515	0.96245	3.34998	5.29E-03	1.25E-06	5.37E-07	1.75E-06	5.2972E-03
465074.2	3772383.56	18873.30058	0.88635	14.72579	1.55739	5.29E-03	6.13E-07	8.22E-06	8.12E-07	5.2985E-03
465198.8	3772470.65	18832.52158	0.74378	55.61849	1.0936	5.28E-03	5.14E-07	3.10E-05	5.70E-07	5.3096E-03
465134.31	3772421.71	18813.39173	0.80772	44.74002	1.297	5.27E-03	5.58E-07	2.50E-05	6.76E-07	5.2983E-03
464596.64	3772127.21	18778.20026	0.8549	0.99746	35.79776	5.26E-03	5.91E-07	5.57E-07	1.87E-05	5.2821E-03

464450.54	3772262.91	18763.5859	1.35198	0.87591	3.52659	5.26E-03	9.35E-07	4.89E-07	1.84E-06	5.2614E-03
464504.16	3772167.35	18763.44213	1.00972	0.87916	5.45711	5.26E-03	6.98E-07	4.91E-07	2.85E-06	5.2621E-03
465054.03	3772370.5	18758.94851	0.91216	11.5226	1.66194	5.26E-03	6.31E-07	6.43E-06	8.67E-07	5.2648E-03
464704.27	3772141.27	18559.48989	0.83333	1.27941	13.02039	5.20E-03	5.76E-07	7.14E-07	6.79E-06	5.2090E-03
464445.03	3772275.77	18511.10567	1.39157	0.87353	3.39222	5.19E-03	9.62E-07	4.88E-07	1.77E-06	5.1906E-03
465153.55	3772432.45	18488.13018	0.77964	76.69576	1.22478	5.18E-03	5.39E-07	4.28E-05	6.39E-07	5.2249E-03
465013.39	3772343.67	18483.82544	0.9611	7.69135	1.9059	5.18E-03	6.64E-07	4.29E-06	9.94E-07	5.1857E-03
464758.93	3772164.28	18457.31044	0.86923	1.53901	6.69626	5.17E-03	6.01E-07	8.59E-07	3.49E-06	5.1773E-03
464441.49	3772390.23	18448.25047	2.04238	0.99664	3.23372	5.17E-03	1.41E-06	5.56E-07	1.69E-06	5.1734E-03
464475.32	3772195.07	18438.69171	1.09074	0.85054	4.19696	5.17E-03	7.54E-07	4.75E-07	2.19E-06	5.1705E-03
464812.82	3772197.86	18436.84037	0.93698	1.97372	4.50262	5.17E-03	6.48E-07	1.10E-06	2.35E-06	5.1707E-03
464731.41	3772150.13	18432.24525	0.84189	1.38447	8.90274	5.17E-03	5.82E-07	7.73E-07	4.64E-06	5.1713E-03
464992.88	3772329.79	18401.63633	0.98312	6.46284	2.04858	5.16E-03	6.80E-07	3.61E-06	1.07E-06	5.1621E-03
464438.62	3772326.14	18399.65031	1.62511	0.91095	3.23548	5.16E-03	1.12E-06	5.09E-07	1.69E-06	5.1595E-03
464545.21	3772134.34	18387.80349	0.88957	0.90261	9.00689	5.15E-03	6.15E-07	5.04E-07	4.70E-06	5.1587E-03
464609.85	3772121.47	18378.25249	0.82462	1.0035	70.82746	5.15E-03	5.70E-07	5.60E-07	3.69E-05	5.1882E-03
464490.95	3772173.09	18376.70279	1.0175	0.8535	4.74884	5.15E-03	7.03E-07	4.76E-07	2.48E-06	5.1534E-03
464665.14	3772127.87	18376.40829	0.81328	1.13645	30.76799	5.15E-03	5.62E-07	6.34E-07	1.60E-05	5.1669E-03
464444.22	3772419.27	18352.8613	2.26834	1.03716	3.21901	5.14E-03	1.57E-06	5.79E-07	1.68E-06	5.1469E-03
464786.44	3772178.42	18326.64135	0.89261	1.71418	5.33238	5.14E-03	6.17E-07	9.57E-07	2.78E-06	5.1401E-03
464558.28	3772128.66	18320.1668	0.8672	0.91667	11.42889	5.13E-03	5.99E-07	5.12E-07	5.96E-06	5.1410E-03
464902.09	3772262.53	18301.60603	1.0168	3.31294	2.89035	5.13E-03	7.03E-07	1.85E-06	1.51E-06	5.1327E-03
464863.32	3772232.5	18291.37578	0.98857	2.58535	3.42275	5.13E-03	6.83E-07	1.44E-06	1.78E-06	5.1297E-03
464971.84	3772314.61	18286.51013	0.99961	5.44211	2.20837	5.12E-03	6.91E-07	3.04E-06	1.15E-06	5.1293E-03
464519.08	3772145.68	18221.20418	0.926	0.86767	6.24852	5.11E-03	6.40E-07	4.84E-07	3.26E-06	5.1105E-03
464437.39	3772364.41	18212.18263	1.83497	0.94852	3.16902	5.10E-03	1.27E-06	5.29E-07	1.65E-06	5.1071E-03
464571.35	3772122.99	18168.88518	0.84295	0.92834	15.21649	5.09E-03	5.83E-07	5.18E-07	7.93E-06	5.1005E-03
464506.01	3772151.35	18012.47229	0.93948	0.84721	5.36202	5.05E-03	6.49E-07	4.73E-07	2.80E-06	5.0516E-03
464649.16	3772119.61	17958.07472	0.79213	1.06981	55.73255	5.03E-03	5.48E-07	5.97E-07	2.91E-05	5.0626E-03
464477.74	3772178.82	17915.5771	1.02071	0.82651	4.17893	5.02E-03	7.06E-07	4.61E-07	2.18E-06	5.0239E-03
464456.21	3772214.27	17870.60494	1.13036	0.82307	3.58679	5.01E-03	7.81E-07	4.59E-07	1.87E-06	5.0110E-03
464450.47	3772227.67	17858.43592	1.17419	0.82518	3.45345	5.00E-03	8.12E-07	4.61E-07	1.80E-06	5.0076E-03
464433.04	3772339.15	17842.37434	1.64924	0.90033	3.07757	5.00E-03	1.14E-06	5.03E-07	1.60E-06	5.0032E-03
464914.68	3772267.48	17831.05638	0.99663	3.46132	2.71473	5.00E-03	6.89E-07	1.93E-06	1.42E-06	5.0009E-03
464744.94	3772149.71	17813.84594	0.82307	1.40365	7.41975	4.99E-03	5.69E-07	7.84E-07	3.87E-06	4.9972E-03
464837.61	3772207.59	17791.84908	0.93066	2.14206	3.81958	4.99E-03	6.43E-07	1.20E-06	1.99E-06	4.9897E-03
464444.73	3772241.07	17768.90593	1.21579	0.82493	3.32092	4.98E-03	8.40E-07	4.60E-07	1.73E-06	4.9824E-03
464492.95	3772157.02	17718.80756	0.94928	0.82511	4.67838	4.97E-03	6.56E-07	4.61E-07	2.44E-06	4.9689E-03
464597.48	3772111.65	17637.37956	0.79087	0.9444	34.70564	4.94E-03	5.47E-07	5.27E-07	1.81E-05	4.9617E-03
464435.76	3772403.59	17628.18623	2.04623	0.97613	3.03326	4.94E-03	1.41E-06	5.45E-07	1.58E-06	4.9435E-03
464438.99	3772254.47	17615.31701	1.25456	0.82147	3.17883	4.94E-03	8.67E-07	4.59E-07	1.66E-06	4.9394E-03
464717.42	3772135.56	17614.11782	0.79497	1.26683	10.08697	4.94E-03	5.50E-07	7.07E-07	5.26E-06	4.9425E-03
464431.74	3772377.59	17500.46206	1.84797	0.93321	2.99443	4.90E-03	1.28E-06	5.21E-07	1.56E-06	4.9075E-03
464438.76	3772432	17488.39499	2.25606	1.0102	3.00499	4.90E-03	1.56E-06	5.64E-07	1.57E-06	4.9045E-03
464546.46	3772118.6	17446.80787	0.82556	0.86222	8.60826	4.89E-03	5.71E-07	4.81E-07	4.49E-06	4.8947E-03
464888.29	3772242.31	17422.80812	0.9625	2.80986	2.98595	4.88E-03	6.65E-07	1.57E-06	1.56E-06	4.8862E-03
464520.59	3772129.83	17398.66227	0.86133	0.83306	6.05158	4.88E-03	5.95E-07	4.65E-07	3.16E-06	4.8799E-03
464464.53	3772184.56	17392.60687	1.01945	0.7986	3.7098	4.87E-03	7.05E-07	4.46E-07	1.93E-06	4.8770E-03
464433.25	3772267.87	17377.13436	1.28984	0.81673	3.04089	4.87E-03	8.92E-07	4.56E-07	1.59E-06	4.8726E-03
464927.26	3772272.42	17374.19884	0.97561	3.61568	2.55554	4.87E-03	6.74E-07	2.02E-06	1.33E-06	4.8728E-03
464428.49	3772314.37	17365.90723	1.48471	0.85367	2.97029	4.87E-03	1.03E-06	4.77E-07	1.55E-06	4.8695E-03
465168.63	3772432.97	17357.42683	0.74048	78.69423	1.15985	4.86E-03	5.12E-07	4.39E-05	6.05E-07	4.9091E-03
464479.88	3772162.7	17351.98682	0.95526	0.80162	4.12887	4.86E-03	6.60E-07	4.47E-07	2.15E-06	4.8658E-03
464559.39	3772112.98	17329.90341	0.80433	0.87364	10.87204	4.86E-03	5.56E-07	4.88E-07	5.67E-06	4.8631E-03
464662.53	3772113.8	17273.12133	0.75928	1.06655	30.90876	4.84E-03	5.25E-07	5.95E-07	1.61E-05	4.8577E-03
464507.66	3772135.44	17261.88336	0.87543	0.81569	5.21802	4.84E-03	6.05E-07	4.55E-07	2.72E-06	4.8411E-03
464703.97	3772126.21	17252.26669	0.77097	1.1923	11.96663	4.83E-03	5.33E-07	6.66E-07	6.24E-06	4.8421E-03
464427.47	3772352.16	17243.59363	1.66775	0.88838	2.92408	4.83E-03	1.15E-06	4.96E-07	1.52E-06	4.8354E-03
464610.55	3772105.98	17227.88535	0.76346	0.94863	70.05079	4.83E-03	5.28E-07	5.30E-07	3.65E-05	4.8654E-03
464572.33	3772107.37	17143.66167	0.78175	0.88296	14.36084	4.80E-03	5.40E-07	4.93E-07	7.49E-06	4.8127E-03
464758.46	3772149.28	17137.57219	0.80376	1.42092	6.26477	4.80E-03	5.56E-07	7.93E-07	3.27E-06	4.8071E-03
464730.95	3772135.14	17129.63822	0.7792	1.28515	8.23348	4.80E-03	5.39E-07	7.17E-07	4.29E-06	4.8058E-03
464812.27	3772182.83	17102.76612	0.86576	1.7988	4.28212	4.79E-03	5.98E-07	1.00E-06	2.23E-06	4.7966E-03
464494.72	3772141.06	17047.91834	0.88654	0.7967	4.56833	4.78E-03	6.13E-07	4.45E-07	2.38E-06	4.7808E-03
464785.97	3772163.43	17011.95765	0.82532	1.57404	5.02678	4.77E-03	5.71E-07	8.79E-07	2.62E-06	4.7714E-03

464862.39	3772217.33	16987.28605	0.91637	2.32019	3.29211	4.76E-03	6.33E-07	1.30E-06	1.72E-06	4.7640E-03
464466.82	3772168.37	16923.7999	0.95733	0.77706	3.67473	4.74E-03	6.62E-07	4.34E-07	1.92E-06	4.7456E-03
464422.98	3772327.23	16875.34606	1.50644	0.84412	2.83317	4.73E-03	1.04E-06	4.71E-07	1.48E-06	4.7320E-03
464445.64	3772203.53	16861.58164	1.0532	0.77347	3.21714	4.73E-03	7.28E-07	4.32E-07	1.68E-06	4.7280E-03
464439.97	3772216.77	16839.03282	1.09125	0.77529	3.11555	4.72E-03	7.54E-07	4.33E-07	1.62E-06	4.7216E-03
464430.04	3772416.96	16803.32572	2.04315	0.95489	2.84442	4.71E-03	1.41E-06	5.33E-07	1.48E-06	4.7123E-03
465124.56	3772397.69	16780.46678	0.77318	19.94674	1.29958	4.70E-03	5.34E-07	1.11E-05	6.78E-07	4.7148E-03
465104.54	3772385.01	16777.93359	0.79584	14.91661	1.37814	4.70E-03	5.50E-07	8.33E-06	7.19E-07	4.7113E-03
464649.49	3772104.27	16776.28255	0.73402	1.00619	49.90276	4.70E-03	5.07E-07	5.62E-07	2.60E-05	4.7283E-03
464426.09	3772390.77	16771.40629	1.85445	0.91616	2.82367	4.70E-03	1.28E-06	5.11E-07	1.47E-06	4.7031E-03
464434.3	3772230.01	16759.01043	1.12747	0.77506	3.00633	4.70E-03	7.79E-07	4.33E-07	1.57E-06	4.6992E-03
464481.79	3772146.67	16758.96403	0.89434	0.7763	4.05152	4.70E-03	6.18E-07	4.33E-07	2.11E-06	4.6996E-03
465084.46	3772372.19	16727.20746	0.81848	11.68711	1.46461	4.69E-03	5.66E-07	6.52E-06	7.64E-07	4.6953E-03
465064.31	3772359.19	16645.99803	0.84076	9.4604	1.55942	4.66E-03	5.81E-07	5.28E-06	8.13E-07	4.6714E-03
464421.89	3772365.18	16612.69022	1.68072	0.87515	2.77362	4.66E-03	1.16E-06	4.89E-07	1.45E-06	4.6585E-03
464428.63	3772243.25	16610.65649	1.16124	0.77291	2.89735	4.65E-03	8.03E-07	4.31E-07	1.51E-06	4.6576E-03
464526.59	3772112.03	16604.54781	0.79696	0.80449	6.13051	4.65E-03	5.51E-07	4.49E-07	3.20E-06	4.6573E-03
464539.99	3772106.21	16583.19378	0.77897	0.81738	7.2943	4.65E-03	5.38E-07	4.56E-07	3.80E-06	4.6519E-03
464744.47	3772134.71	16572.41417	0.76278	1.3016	6.8534	4.64E-03	5.27E-07	7.27E-07	3.57E-06	4.6489E-03
464598.2	3772096.14	16568.94366	0.73396	0.89512	32.25632	4.64E-03	5.07E-07	5.00E-07	1.68E-05	4.6610E-03
464913.26	3772252.11	16567.56657	0.93066	3.04893	2.63253	4.64E-03	6.43E-07	1.70E-06	1.37E-06	4.6465E-03
464513.19	3772117.84	16554.11817	0.81277	0.78969	5.24534	4.64E-03	5.62E-07	4.41E-07	2.74E-06	4.6427E-03
465044.08	3772345.99	16553.93598	0.86237	7.8433	1.66389	4.64E-03	5.96E-07	4.38E-06	8.68E-07	4.6448E-03
464836.9	3772192.51	16530.14821	0.86203	1.94299	3.64389	4.63E-03	5.96E-07	1.08E-06	1.90E-06	4.6359E-03
465143.38	3772407.39	16507.93102	0.7468	26.03082	1.22761	4.63E-03	5.16E-07	1.45E-05	6.40E-07	4.6417E-03
464982.71	3772304.73	16505.60323	0.91894	4.88421	2.04796	4.63E-03	6.35E-07	2.73E-06	1.07E-06	4.6298E-03
465003.3	3772318.82	16477.84561	0.9022	5.65885	1.90637	4.62E-03	6.24E-07	3.16E-06	9.94E-07	4.6224E-03
464453.75	3772174.04	16440.88062	0.9555	0.75168	3.29398	4.61E-03	6.61E-07	4.20E-07	1.72E-06	4.6101E-03
464499.8	3772123.66	16425.68599	0.82601	0.77317	4.56537	4.60E-03	5.71E-07	4.32E-07	2.38E-06	4.6064E-03
464468.85	3772152.29	16417.39343	0.89895	0.75474	3.61361	4.60E-03	6.21E-07	4.21E-07	1.88E-06	4.6036E-03
464716.95	3772120.57	16404.51187	0.73756	1.18058	9.18583	4.60E-03	5.10E-07	6.59E-07	4.79E-06	4.6030E-03
464422.96	3772256.49	16404.17316	1.19212	0.76837	2.78262	4.60E-03	8.24E-07	4.29E-07	1.45E-06	4.5997E-03
464417.47	3772340.09	16344.55543	1.52351	0.83356	2.70031	4.58E-03	1.05E-06	4.65E-07	1.41E-06	4.5832E-03
464566.78	3772094.58	16297.91652	0.73775	0.83698	11.39156	4.57E-03	5.10E-07	4.67E-07	5.94E-06	4.5741E-03
464416.02	3772308.07	16238.61848	1.37188	0.79842	2.68123	4.55E-03	9.48E-07	4.46E-07	1.40E-06	4.5534E-03
464486.4	3772129.47	16211.82554	0.8362	0.75502	4.03967	4.54E-03	5.78E-07	4.21E-07	2.11E-06	4.5462E-03
464887.18	3772227.06	16208.06879	0.89595	2.5086	2.87813	4.54E-03	6.19E-07	1.40E-06	1.50E-06	4.5455E-03
464611.13	3772090.52	16176.54433	0.70931	0.89793	62.7981	4.53E-03	4.90E-07	5.01E-07	3.27E-05	4.5669E-03
464662.7	3772098.53	16138.81623	0.70496	1.00239	26.37849	4.52E-03	4.87E-07	5.60E-07	1.38E-05	4.5374E-03
464417.29	3772269.73	16126.19614	1.21977	0.76333	2.67316	4.52E-03	8.43E-07	4.26E-07	1.39E-06	4.5217E-03
464703.65	3772111.15	16091.51488	0.716	1.11417	10.68992	4.51E-03	4.95E-07	6.22E-07	5.57E-06	4.5160E-03
464580.17	3772088.77	16056.47707	0.71556	0.84369	15.18944	4.50E-03	4.95E-07	4.71E-07	7.92E-06	4.5084E-03
464420.45	3772403.95	16037.59668	1.85492	0.89762	2.65833	4.49E-03	1.28E-06	5.01E-07	1.39E-06	4.4974E-03
464455.92	3772157.9	16018.38594	0.9001	0.73228	3.24859	4.49E-03	6.22E-07	4.09E-07	1.69E-06	4.4916E-03
464424.31	3772430.33	15988.43828	2.0321	0.93083	2.65989	4.48E-03	1.40E-06	5.20E-07	1.39E-06	4.4838E-03
464730.48	3772120.15	15967.2957	0.72379	1.19653	7.47276	4.47E-03	5.00E-07	6.68E-07	3.90E-06	4.4796E-03
464757.99	3772134.29	15964.85105	0.74598	1.31648	5.78652	4.47E-03	5.16E-07	7.35E-07	3.02E-06	4.4781E-03
464416.32	3772378.19	15962.40397	1.68854	0.86102	2.6287	4.47E-03	1.17E-06	4.81E-07	1.37E-06	4.4762E-03
464473	3772135.29	15938.28915	0.84344	0.73556	3.59948	4.47E-03	5.83E-07	4.11E-07	1.88E-06	4.4693E-03
464429.46	3772205.9	15919.42056	1.01775	0.73008	2.81427	4.46E-03	7.04E-07	4.08E-07	1.47E-06	4.4637E-03
464811.73	3772167.81	15918.50392	0.80268	1.64683	4.04377	4.46E-03	5.55E-07	9.19E-07	2.11E-06	4.4645E-03
464423.86	3772218.99	15842.7392	1.04943	0.72978	2.72728	4.44E-03	7.25E-07	4.07E-07	1.42E-06	4.4422E-03
464785.5	3772148.44	15840.18403	0.76577	1.45092	4.69248	4.44E-03	5.29E-07	8.10E-07	2.45E-06	4.4427E-03
464861.52	3772202.18	15839.41247	0.85169	2.09466	3.15224	4.44E-03	5.89E-07	1.17E-06	1.64E-06	4.4421E-03
464528.09	3772096.18	15807.70093	0.74352	0.77172	5.80606	4.43E-03	5.14E-07	4.31E-07	3.03E-06	4.4338E-03
464514.83	3772101.93	15804.26313	0.75905	0.75933	5.02427	4.43E-03	5.25E-07	4.24E-07	2.62E-06	4.4324E-03
464411.96	3772352.96	15781.03725	1.53614	0.82259	2.57331	4.42E-03	1.06E-06	4.59E-07	1.34E-06	4.4252E-03
464410.28	3772321.47	15759.41429	1.39065	0.78952	2.5614	4.42E-03	9.61E-07	4.41E-07	1.34E-06	4.4190E-03
464938.23	3772261.92	15755.10747	0.89515	3.3054	2.34176	4.42E-03	6.19E-07	1.85E-06	1.22E-06	4.4188E-03
464541.34	3772090.43	15750.22795	0.72635	0.78237	6.79448	4.41E-03	5.02E-07	4.37E-07	3.54E-06	4.4182E-03
464593.57	3772082.95	15742.08161	0.69262	0.84826	21.92366	4.41E-03	4.79E-07	4.74E-07	1.14E-05	4.4238E-03
464501.58	3772107.69	15737.70105	0.77261	0.74535	4.39885	4.41E-03	5.34E-07	4.16E-07	2.29E-06	4.4134E-03
464649.74	3772088.96	15706.34961	0.68262	0.94813	39.80525	4.40E-03	4.72E-07	5.29E-07	2.08E-05	4.4232E-03
464418.25	3772232.09	15703.06593	1.07899	0.72811	2.64105	4.40E-03	7.46E-07	4.06E-07	1.38E-06	4.4030E-03
464554.6	3772084.67	15623.93684	0.70772	0.7912	8.11549	4.38E-03	4.89E-07	4.42E-07	4.23E-06	4.3835E-03

464459.61	3772141.1	15608.14287	0.84751	0.71499	3.22805	4.37E-03	5.86E-07	3.99E-07	1.68E-06	4.3766E-03
464488.32	3772113.44	15597.56046	0.7837	0.7298	3.90309	4.37E-03	5.42E-07	4.07E-07	2.04E-06	4.3739E-03
465158.52	3772408.04	15573.61782	0.71047	26.11782	1.16175	4.36E-03	4.91E-07	1.46E-05	6.06E-07	4.3799E-03
464442.99	3772163.52	15567.90142	0.89788	0.70918	2.94132	4.36E-03	6.21E-07	3.96E-07	1.53E-06	4.3652E-03
464412.64	3772245.18	15506.13607	1.10609	0.72518	2.55382	4.35E-03	7.65E-07	4.05E-07	1.33E-06	4.3478E-03
465178.68	3772421.07	15505.49996	0.69068	41.74744	1.10074	4.35E-03	4.77E-07	2.33E-05	5.74E-07	4.3695E-03
464744	3772119.72	15464.3024	0.70941	1.21073	6.22717	4.33E-03	4.90E-07	6.76E-07	3.25E-06	4.3380E-03
464911.97	3772236.8	15440.03874	0.87024	2.70786	2.5431	4.33E-03	6.02E-07	1.51E-06	1.33E-06	4.3302E-03
464567.86	3772078.92	15429.54747	0.688	0.79818	9.95367	4.32E-03	4.76E-07	4.46E-07	5.19E-06	4.3300E-03
464836.21	3772177.43	15394.70724	0.80068	1.77087	3.45446	4.31E-03	5.54E-07	9.89E-07	1.80E-06	4.3174E-03
464475.07	3772119.2	15392.68371	0.79224	0.71295	3.49666	4.31E-03	5.48E-07	3.98E-07	1.82E-06	4.3163E-03
465198.78	3772433.94	15372.7866	0.67094	81.03462	1.04418	4.31E-03	4.64E-07	4.52E-05	5.44E-07	4.3542E-03
464606.97	3772077.14	15364.79053	0.66938	0.8508	34.87346	4.31E-03	4.63E-07	4.75E-07	1.82E-05	4.3248E-03
464716.48	3772105.58	15330.71516	0.68676	1.10325	8.15637	4.30E-03	4.75E-07	6.16E-07	4.25E-06	4.3015E-03
464414.8	3772417.13	15304.12432	1.84973	0.87836	2.50219	4.29E-03	1.28E-06	4.90E-07	1.30E-06	4.2918E-03
464407.03	3772258.27	15269.71847	1.13049	0.71949	2.45475	4.28E-03	7.82E-07	4.02E-07	1.28E-06	4.2815E-03
464446.21	3772146.92	15220.90077	0.84831	0.69354	2.91606	4.27E-03	5.86E-07	3.87E-07	1.52E-06	4.2679E-03
464581.11	3772073.16	15170.65303	0.66749	0.80324	12.57118	4.25E-03	4.61E-07	4.48E-07	6.56E-06	4.2588E-03
464461.81	3772124.95	15131.02513	0.79804	0.69493	3.15132	4.24E-03	5.52E-07	3.88E-07	1.64E-06	4.2428E-03
464662.81	3772083.29	15122.26796	0.65692	0.94407	20.32381	4.24E-03	4.54E-07	5.27E-07	1.06E-05	4.2493E-03
464886.14	3772211.85	15121.31726	0.83563	2.25423	2.76224	4.24E-03	5.78E-07	1.26E-06	1.44E-06	4.2407E-03
464424.5	3772182.09	15107.93214	0.92291	0.68798	2.61196	4.23E-03	6.38E-07	3.84E-07	1.36E-06	4.2361E-03
464702.64	3772096.39	15090.38448	0.66868	1.0443	9.38053	4.23E-03	4.62E-07	5.83E-07	4.89E-06	4.2347E-03
464418.95	3772195.05	15085.77574	0.95225	0.68884	2.54568	4.23E-03	6.58E-07	3.85E-07	1.33E-06	4.2299E-03
464413.39	3772208.02	15005.95883	0.98004	0.68858	2.4797	4.21E-03	6.77E-07	3.84E-07	1.29E-06	4.2075E-03
464963.2	3772271.72	14990.9999	0.85767	3.58206	2.09867	4.20E-03	5.93E-07	2.00E-06	1.09E-06	4.2046E-03
465114.82	3772373.67	14969.43605	0.7388	11.7036	1.29929	4.19E-03	5.11E-07	6.53E-06	6.78E-07	4.2026E-03
464401.42	3772271.37	14968.25177	1.15199	0.71441	2.36714	4.19E-03	7.96E-07	3.99E-07	1.23E-06	4.1970E-03
464730.01	3772105.15	14933.26573	0.67462	1.11708	6.65326	4.18E-03	4.66E-07	6.24E-07	3.47E-06	4.1893E-03
465094.75	3772360.89	14930.71372	0.75851	9.50413	1.37785	4.18E-03	5.24E-07	5.31E-06	7.18E-07	4.1906E-03
464757.52	3772119.3	14915.06241	0.69467	1.22349	5.27136	4.18E-03	4.80E-07	6.83E-07	2.75E-06	4.1836E-03
465074.63	3772347.95	14879.884	0.77789	7.90705	1.46351	4.17E-03	5.38E-07	4.41E-06	7.63E-07	4.1755E-03
464407.84	3772220.98	14871.96819	1.00601	0.68741	2.41318	4.17E-03	6.95E-07	3.84E-07	1.26E-06	4.1699E-03
464811.2	3772152.8	14861.85713	0.74657	1.51385	3.78997	4.16E-03	5.16E-07	8.45E-07	1.98E-06	4.1681E-03
465013.74	3772307.87	14851.08709	0.83153	4.99111	1.77407	4.16E-03	5.75E-07	2.79E-06	9.25E-07	4.1660E-03
464448.55	3772130.71	14816.20366	0.80106	0.67597	2.8574	4.15E-03	5.54E-07	3.77E-07	1.49E-06	4.1544E-03
464860.69	3772187.04	14812.89003	0.79351	1.9009	3.0031	4.15E-03	5.49E-07	1.06E-06	1.57E-06	4.1542E-03
464785.03	3772133.44	14786.69801	0.71275	1.342	4.33435	4.14E-03	4.93E-07	7.49E-07	2.26E-06	4.1472E-03
464649.94	3772073.68	14741.56165	0.63701	0.89511	25.42976	4.13E-03	4.40E-07	5.00E-07	1.33E-05	4.1453E-03
465133.2	3772382.32	14706.7579	0.71382	13.65811	1.22747	4.12E-03	4.93E-07	7.62E-06	6.40E-07	4.1301E-03
464402.29	3772233.94	14691.75094	1.02993	0.68493	2.34229	4.12E-03	7.12E-07	3.82E-07	1.22E-06	4.1194E-03
464936.75	3772246.53	14677.74434	0.84043	2.91859	2.26682	4.11E-03	5.81E-07	1.63E-06	1.18E-06	4.1166E-03
464409.16	3772430.3	14586.58091	1.83864	0.85678	2.34929	4.09E-03	1.27E-06	4.78E-07	1.23E-06	4.0906E-03
464743.53	3772104.73	14477.68252	0.66198	1.12938	5.56835	4.06E-03	4.58E-07	6.30E-07	2.90E-06	4.0611E-03
464396.74	3772246.9	14469.5304	1.05158	0.681	2.26682	4.05E-03	7.27E-07	3.80E-07	1.18E-06	4.0571E-03
464910.77	3772221.52	14419.17225	0.81476	2.42162	2.44682	4.04E-03	5.63E-07	1.35E-06	1.28E-06	4.0439E-03
464835.55	3772162.36	14380.61718	0.74578	1.62105	3.25567	4.03E-03	5.16E-07	9.05E-07	1.70E-06	4.0330E-03
464716.02	3772090.58	14366.84081	0.64148	1.03353	7.05297	4.03E-03	4.43E-07	5.77E-07	3.68E-06	4.0307E-03
464413.67	3772171.97	14338.60273	0.86868	0.65098	2.36351	4.02E-03	6.01E-07	3.63E-07	1.23E-06	4.0203E-03
464407.92	3772185.4	14302.41344	0.89566	0.65182	2.31335	4.01E-03	6.19E-07	3.64E-07	1.21E-06	4.0102E-03
464391.18	3772259.86	14213.92248	1.07072	0.67477	2.1814	3.98E-03	7.40E-07	3.77E-07	1.14E-06	3.9854E-03
464402.17	3772198.82	14213.4977	0.92112	0.65157	2.26056	3.98E-03	6.37E-07	3.64E-07	1.18E-06	3.9853E-03
464885.17	3772196.66	14166.70081	0.78106	2.03708	2.64016	3.97E-03	5.40E-07	1.14E-06	1.38E-06	3.9730E-03
464702.33	3772081.33	14153.82715	0.62506	0.9806	7.83382	3.97E-03	4.32E-07	5.47E-07	4.08E-06	3.9714E-03
464422.04	3772142.22	14051.14569	0.79861	0.63607	2.38316	3.94E-03	5.52E-07	3.55E-07	1.24E-06	3.9397E-03
464961.54	3772256.26	14003.6495	0.80884	3.14312	2.03599	3.92E-03	5.59E-07	1.75E-06	1.06E-06	3.9276E-03
464729.54	3772090.16	13997.37332	0.63069	1.04553	5.80608	3.92E-03	4.36E-07	5.84E-07	3.03E-06	3.9266E-03
464399.59	3772417.23	13993.01448	1.6833	0.81166	2.22097	3.92E-03	1.16E-06	4.53E-07	1.16E-06	3.9241E-03
464757.05	3772104.31	13974.59847	0.64892	1.14031	4.73775	3.92E-03	4.49E-07	6.37E-07	2.47E-06	3.9197E-03
465168.62	3772396.27	13950.00645	0.66304	18.01393	1.10041	3.91E-03	4.58E-07	1.01E-05	5.74E-07	3.9203E-03
465148.4	3772383.12	13940.16487	0.68037	13.57093	1.16097	3.91E-03	4.70E-07	7.58E-06	6.05E-07	3.9151E-03
465188.76	3772409.27	13915.30554	0.64574	25.5309	1.04458	3.90E-03	4.46E-07	1.43E-05	5.45E-07	3.9148E-03
464810.67	3772137.78	13913.8413	0.69642	1.39657	3.52459	3.90E-03	4.81E-07	7.80E-07	1.84E-06	3.9022E-03
464385.63	3772272.82	13902.87838	1.08729	0.66962	2.10937	3.90E-03	7.52E-07	3.74E-07	1.10E-06	3.8983E-03
464390.66	3772225.67	13898.97319	0.96663	0.64757	2.13939	3.89E-03	6.68E-07	3.61E-07	1.12E-06	3.8971E-03

464859.9	3772171.92	13866.87021	0.74088	1.7333	2.8435	3.89E-03	5.12E-07	9.68E-07	1.48E-06	3.8889E-03
464784.56	3772118.45	13848.37287	0.66552	1.24525	3.96629	3.88E-03	4.60E-07	6.95E-07	2.07E-06	3.8840E-03
465208.86	3772422.12	13830.66979	0.62844	40.11327	0.99271	3.88E-03	4.34E-07	2.24E-05	5.18E-07	3.8991E-03
464935.39	3772231.19	13723.76109	0.78994	2.59668	2.18725	3.85E-03	5.46E-07	1.45E-06	1.14E-06	3.8490E-03
464384.91	3772239.1	13679.54492	0.98627	0.64366	2.07248	3.83E-03	6.82E-07	3.59E-07	1.08E-06	3.8356E-03
464403.1	3772161.25	13622.82099	0.8183	0.6172	2.15342	3.82E-03	5.66E-07	3.45E-07	1.12E-06	3.8196E-03
464743.06	3772089.74	13579.61245	0.61946	1.05614	4.89871	3.81E-03	4.28E-07	5.90E-07	2.55E-06	3.8090E-03
464383.26	3772349.16	13529.19102	1.31184	0.71472	2.06874	3.79E-03	9.07E-07	3.99E-07	1.08E-06	3.7937E-03
464909.65	3772206.27	13503.28658	0.76394	2.17868	2.34529	3.78E-03	5.28E-07	1.22E-06	1.22E-06	3.7870E-03
464715.55	3772075.59	13498.537	0.60099	0.97044	5.9638	3.78E-03	4.15E-07	5.42E-07	3.11E-06	3.7868E-03
464834.91	3772147.3	13468.66534	0.6965	1.48973	3.05034	3.77E-03	4.81E-07	8.32E-07	1.59E-06	3.7772E-03
464379.16	3772252.52	13423.90036	1.00354	0.63822	2.00112	3.76E-03	6.94E-07	3.56E-07	1.04E-06	3.7639E-03
465044.53	3772310.45	13417.23227	0.75494	5.03791	1.55013	3.76E-03	5.22E-07	2.81E-06	8.08E-07	3.7641E-03
465105.07	3772349.65	13416.40295	0.70528	7.86227	1.29633	3.76E-03	4.88E-07	4.39E-06	6.76E-07	3.7653E-03
464378.98	3772323.74	13396.41157	1.20768	0.68492	2.01684	3.75E-03	8.35E-07	3.82E-07	1.05E-06	3.7564E-03
464394.02	3772430.24	13361.25019	1.67211	0.79127	2.08855	3.74E-03	1.16E-06	4.42E-07	1.09E-06	3.7469E-03
464986.32	3772266	13352.60066	0.77603	3.38353	1.84008	3.74E-03	5.36E-07	1.89E-06	9.60E-07	3.7452E-03
464884.25	3772181.49	13292.70046	0.73136	1.85014	2.51102	3.73E-03	5.06E-07	1.03E-06	1.31E-06	3.7279E-03
464729.07	3772075.17	13150.34101	0.59128	0.98079	4.98789	3.69E-03	4.09E-07	5.47E-07	2.60E-06	3.6887E-03
465123.03	3772357.26	13141.41078	0.68148	8.64704	1.22429	3.68E-03	4.71E-07	4.83E-06	6.38E-07	3.6886E-03
464373.41	3772265.94	13128.33681	1.01831	0.63198	1.92847	3.68E-03	7.04E-07	3.53E-07	1.01E-06	3.6810E-03
464756.58	3772089.31	13123.01459	0.60787	1.06546	4.20629	3.68E-03	4.20E-07	5.95E-07	2.19E-06	3.6807E-03
464960.01	3772240.86	13101.5266	0.76315	2.78134	1.96901	3.67E-03	5.28E-07	1.55E-06	1.03E-06	3.6746E-03
464810.15	3772122.77	13059.9719	0.65146	1.29269	3.25299	3.66E-03	4.50E-07	7.22E-07	1.70E-06	3.6627E-03
464377.59	3772362.4	13023.60596	1.31547	0.70301	1.9694	3.65E-03	9.09E-07	3.92E-07	1.03E-06	3.6520E-03
464381.58	3772388.47	13020.33593	1.42446	0.73042	1.99654	3.65E-03	9.85E-07	4.08E-07	1.04E-06	3.6511E-03
464374.64	3772227.67	13018.9568	0.92285	0.61046	1.91503	3.65E-03	6.38E-07	3.41E-07	9.99E-07	3.6503E-03
464784.09	3772103.46	13002.18715	0.62317	1.1588	3.59626	3.64E-03	4.31E-07	6.47E-07	1.88E-06	3.6466E-03
464859.14	3772156.82	12991.81227	0.69312	1.58705	2.67725	3.64E-03	4.79E-07	8.86E-07	1.40E-06	3.6435E-03
464373.37	3772336.83	12946.74658	1.21434	0.67548	1.92988	3.63E-03	8.39E-07	3.77E-07	1.01E-06	3.6303E-03
464934.13	3772215.88	12878.78163	0.74343	2.3256	2.1029	3.61E-03	5.14E-07	1.30E-06	1.10E-06	3.6119E-03
464384.41	3772417.28	12848.0697	1.53873	0.75144	1.98003	3.60E-03	1.06E-06	4.19E-07	1.03E-06	3.6030E-03
464368.97	3772311.71	12799.34033	1.12151	0.64866	1.8815	3.59E-03	7.75E-07	3.62E-07	9.81E-07	3.5889E-03
464368.95	3772240.95	12782.54225	0.93834	0.60615	1.85766	3.58E-03	6.49E-07	3.38E-07	9.69E-07	3.5840E-03
464742.59	3772074.74	12765.11235	0.58123	0.9899	4.26034	3.58E-03	4.02E-07	5.53E-07	2.22E-06	3.5804E-03
464908.6	3772191.05	12693.71685	0.71759	1.97087	2.23926	3.56E-03	4.96E-07	1.10E-06	1.17E-06	3.5599E-03
464834.28	3772132.24	12648.78718	0.65213	1.37388	2.84029	3.54E-03	4.51E-07	7.67E-07	1.48E-06	3.5473E-03
465178.75	3772384.59	12561.66334	0.6204	13.01537	1.04243	3.52E-03	4.29E-07	7.27E-06	5.44E-07	3.5284E-03
465158.55	3772371.48	12545.79236	0.63566	10.41032	1.0977	3.52E-03	4.39E-07	5.81E-06	5.72E-07	3.5226E-03
465198.89	3772397.56	12545.43368	0.60512	16.81919	0.99125	3.52E-03	4.18E-07	9.39E-06	5.17E-07	3.5260E-03
464797.61	3772103.04	12520.05168	0.61026	1.16621	3.18724	3.51E-03	4.22E-07	6.51E-07	1.66E-06	3.5112E-03
464363.26	3772254.24	12519.53507	0.95178	0.60039	1.79554	3.51E-03	6.58E-07	3.35E-07	9.36E-07	3.5103E-03
464984.64	3772250.53	12513.56548	0.73496	2.97601	1.78325	3.51E-03	5.08E-07	1.66E-06	9.30E-07	3.5098E-03
464371.92	3772375.64	12512.78209	1.31623	0.6911	1.87519	3.51E-03	9.10E-07	3.86E-07	9.78E-07	3.5088E-03
465138.29	3772358.2	12505.21241	0.65078	8.55316	1.15714	3.50E-03	4.50E-07	4.77E-06	6.03E-07	3.5102E-03
464883.38	3772166.33	12494.61835	0.68603	1.68783	2.37678	3.50E-03	4.74E-07	9.42E-07	1.24E-06	3.5040E-03
465218.97	3772410.39	12493.52759	0.58988	22.45353	0.94381	3.50E-03	4.08E-07	1.25E-05	4.92E-07	3.5145E-03
464367.76	3772349.93	12485.22971	1.21843	0.66586	1.8464	3.50E-03	8.42E-07	3.72E-07	9.63E-07	3.5009E-03
464375.84	3772401.87	12466.10012	1.42059	0.71545	1.89046	3.49E-03	9.82E-07	3.99E-07	9.86E-07	3.4958E-03
465014.24	3772272.45	12404.02848	0.72675	3.52876	1.63475	3.48E-03	5.02E-07	1.97E-06	8.52E-07	3.4793E-03
464363.42	3772324.67	12393.02652	1.12799	0.64024	1.80558	3.47E-03	7.80E-07	3.57E-07	9.42E-07	3.4750E-03
464958.61	3772225.5	12309.27063	0.72081	2.47913	1.89806	3.45E-03	4.98E-07	1.38E-06	9.90E-07	3.4523E-03
464378.9	3772430.14	12285.42775	1.52782	0.73351	1.86985	3.44E-03	1.06E-06	4.09E-07	9.75E-07	3.4452E-03
464810.2	3772107.98	12276.21834	0.61101	1.20172	2.9723	3.44E-03	4.22E-07	6.71E-07	1.55E-06	3.4428E-03
464783.62	3772088.47	12239.61974	0.58508	1.08121	3.23615	3.43E-03	4.04E-07	6.04E-07	1.69E-06	3.4326E-03
464357.57	3772267.52	12222.09613	0.96302	0.59446	1.73478	3.43E-03	6.66E-07	3.32E-07	9.05E-07	3.4269E-03
465054.95	3772299.47	12214.00101	0.70204	4.43794	1.44722	3.42E-03	4.85E-07	2.48E-06	7.55E-07	3.4265E-03
464858.41	3772141.72	12202.13251	0.64982	1.45838	2.51074	3.42E-03	4.49E-07	8.14E-07	1.31E-06	3.4220E-03
465075.17	3772312.64	12161.55413	0.68789	5.01886	1.36486	3.41E-03	4.76E-07	2.80E-06	7.12E-07	3.4120E-03
464932.95	3772200.61	12141.01565	0.70087	2.0956	2.01393	3.40E-03	4.85E-07	1.17E-06	1.05E-06	3.4050E-03
464356.16	3772306.22	12051.20749	1.04822	0.61257	1.72942	3.38E-03	7.25E-07	3.42E-07	9.02E-07	3.3791E-03
464822.79	3772112.92	12028.24679	0.61109	1.23761	2.78022	3.37E-03	4.22E-07	6.91E-07	1.45E-06	3.3733E-03
464362.16	3772363.02	12020.58408	1.22006	0.65566	1.76521	3.37E-03	8.43E-07	3.66E-07	9.20E-07	3.3707E-03
464366.24	3772388.88	12003.81535	1.31416	0.67873	1.7846	3.36E-03	9.08E-07	3.79E-07	9.31E-07	3.3661E-03
464357.87	3772337.63	11974.71908	1.13224	0.63166	1.73231	3.36E-03	7.83E-07	3.53E-07	9.03E-07	3.3577E-03

464907.61	3772175.85	11952.05758	0.67498	1.79129	2.1298	3.35E-03	4.67E-07	1.00E-06	1.11E-06	3.3519E-03
464370.1	3772415.27	11919.89315	1.41352	0.70018	1.79014	3.34E-03	9.77E-07	3.91E-07	9.33E-07	3.3426E-03
464983.09	3772235.11	11762.84304	0.69649	2.63858	1.72322	3.30E-03	4.81E-07	1.47E-06	8.99E-07	3.2992E-03
464882.54	3772151.2	11756.41891	0.64459	1.54591	2.24103	3.29E-03	4.46E-07	8.63E-07	1.17E-06	3.2970E-03
464847.97	3772122.81	11672.61267	0.61166	1.31489	2.45174	3.27E-03	4.23E-07	7.34E-07	1.28E-06	3.2735E-03
464350.41	3772319.64	11663.60786	1.05359	0.60386	1.65642	3.27E-03	7.28E-07	3.37E-07	8.64E-07	3.2704E-03
464957.3	3772210.17	11601.88876	0.68153	2.22378	1.8236	3.25E-03	4.71E-07	1.24E-06	9.51E-07	3.2539E-03
464809.66	3772092.96	11577.96305	0.57448	1.11863	2.70923	3.24E-03	3.97E-07	6.24E-07	1.41E-06	3.2469E-03
464356.55	3772376.12	11557.3117	1.2193	0.64473	1.68502	3.24E-03	8.43E-07	3.60E-07	8.79E-07	3.2408E-03
464352.32	3772350.59	11550.79485	1.13436	0.62271	1.66134	3.24E-03	7.84E-07	3.48E-07	8.66E-07	3.2389E-03
464783.15	3772073.47	11543.55681	0.55063	1.01121	2.89593	3.23E-03	3.81E-07	5.64E-07	1.51E-06	3.2373E-03
464360.57	3772402.12	11503.3436	1.30948	0.66584	1.69753	3.22E-03	9.05E-07	3.72E-07	8.85E-07	3.2258E-03
464860.56	3772127.76	11457.59622	0.61047	1.35401	2.31176	3.21E-03	4.22E-07	7.56E-07	1.21E-06	3.2132E-03
464931.84	3772185.37	11451.84504	0.66128	1.89767	1.92259	3.21E-03	4.57E-07	1.06E-06	1.00E-06	3.2117E-03
464364.36	3772428.67	11387.9669	1.403	0.68394	1.69339	3.19E-03	9.70E-07	3.82E-07	8.83E-07	3.1935E-03
465188.92	3772372.99	11368.48853	0.58194	9.6926	0.98758	3.19E-03	4.02E-07	5.41E-06	5.15E-07	3.1921E-03
465209.04	3772385.93	11363.19148	0.56838	11.61427	0.94083	3.18E-03	3.93E-07	6.48E-06	4.91E-07	3.1917E-03
465168.74	3772359.92	11352.53651	0.59549	8.15753	1.03788	3.18E-03	4.12E-07	4.55E-06	5.41E-07	3.1868E-03
465148.49	3772346.69	11323.46742	0.60895	6.95152	1.0919	3.17E-03	4.21E-07	3.88E-06	5.69E-07	3.1781E-03
464906.67	3772160.67	11286.31456	0.63601	1.63525	2.01756	3.16E-03	4.40E-07	9.13E-07	1.05E-06	3.1652E-03
464344.66	3772333.06	11261.17081	1.05693	0.59573	1.59077	3.16E-03	7.31E-07	3.33E-07	8.30E-07	3.1576E-03
465045.11	3772275.23	11241.0301	0.66628	3.53145	1.4316	3.15E-03	4.61E-07	1.97E-06	7.47E-07	3.1533E-03
465007.57	3772244.72	11238.24103	0.67125	2.80417	1.57254	3.15E-03	4.64E-07	1.57E-06	8.20E-07	3.1522E-03
464873.15	3772132.7	11237.32313	0.60849	1.3936	2.18471	3.15E-03	4.21E-07	7.78E-07	1.14E-06	3.1514E-03
464834.7	3772102.79	11226.08966	0.57609	1.18432	2.40282	3.15E-03	3.98E-07	6.61E-07	1.25E-06	3.1482E-03
464340.5	3772307.37	11191.71538	0.98458	0.57565	1.56192	3.14E-03	6.81E-07	3.21E-07	8.14E-07	3.1381E-03
465065.38	3772288.51	11155.49989	0.65475	3.92725	1.35179	3.13E-03	4.53E-07	2.19E-06	7.05E-07	3.1295E-03
464346.76	3772363.55	11126.18917	1.13441	0.6133	1.59138	3.12E-03	7.84E-07	3.42E-07	8.30E-07	3.1199E-03
465085.57	3772301.61	11100.63276	0.64235	4.38487	1.27807	3.11E-03	4.44E-07	2.45E-06	6.66E-07	3.1143E-03
464350.94	3772389.21	11099.59059	1.21618	0.63324	1.60724	3.11E-03	8.41E-07	3.53E-07	8.38E-07	3.1125E-03
464981.65	3772219.74	11092.60825	0.66059	2.35584	1.66033	3.11E-03	4.57E-07	1.32E-06	8.66E-07	3.1111E-03
464885.74	3772137.65	11021.56793	0.60589	1.43387	2.06886	3.09E-03	4.19E-07	8.00E-07	1.08E-06	3.0909E-03
464354.9	3772415.36	11014.3704	1.30217	0.65233	1.61355	3.09E-03	9.00E-07	3.64E-07	8.41E-07	3.0887E-03
464956.08	3772194.89	10963.25582	0.64508	2.00613	1.74643	3.07E-03	4.46E-07	1.12E-06	9.11E-07	3.0747E-03
464809.13	3772077.94	10944.01131	0.5414	1.04396	2.45846	3.07E-03	3.74E-07	5.83E-07	1.28E-06	3.0691E-03
464338.91	3772346.49	10855.39807	1.05833	0.58713	1.52555	3.04E-03	7.32E-07	3.28E-07	7.95E-07	3.0439E-03
464859.74	3772112.62	10833.86984	0.57515	1.252	2.15003	3.04E-03	3.98E-07	6.99E-07	1.12E-06	3.0382E-03
464334.81	3772320.65	10828.55493	0.988	0.56785	1.50062	3.03E-03	6.83E-07	3.17E-07	7.82E-07	3.0363E-03
464930.8	3772170.15	10827.7346	0.62474	1.72639	1.82882	3.03E-03	4.32E-07	9.64E-07	9.54E-07	3.0366E-03
465102.69	3772307.13	10766.48443	0.62049	4.54275	1.20658	3.02E-03	4.29E-07	2.54E-06	6.29E-07	3.0207E-03
464341.21	3772376.51	10706.44973	1.13253	0.60325	1.52265	3.00E-03	7.83E-07	3.37E-07	7.94E-07	3.0022E-03
464345.33	3772402.3	10649.393	1.21094	0.62167	1.53337	2.98E-03	8.37E-07	3.47E-07	8.00E-07	2.9863E-03
464834.03	3772087.72	10622.3501	0.54328	1.10183	2.20619	2.98E-03	3.76E-07	6.15E-07	1.15E-06	2.9789E-03
465006	3772229.3	10609.92369	0.63865	2.49122	1.51876	2.97E-03	4.41E-07	1.39E-06	7.92E-07	2.9759E-03
464910.92	3772147.53	10583.97654	0.59839	1.51531	1.86562	2.97E-03	4.14E-07	8.46E-07	9.73E-07	2.9682E-03
464349.23	3772428.6	10539.47001	1.29198	0.63788	1.53213	2.95E-03	8.93E-07	3.56E-07	7.99E-07	2.9555E-03
464980.31	3772204.4	10489.73076	0.62704	2.11616	1.59485	2.94E-03	4.33E-07	1.18E-06	8.32E-07	2.9420E-03
464333.16	3772359.91	10450.24376	1.05787	0.57824	1.46222	2.93E-03	7.31E-07	3.23E-07	7.62E-07	2.9303E-03
464884.77	3772122.46	10436.0327	0.57179	1.32153	1.93828	2.92E-03	3.95E-07	7.38E-07	1.01E-06	2.9266E-03
464954.93	3772179.63	10376.01697	0.61108	1.8185	1.66742	2.91E-03	4.22E-07	1.02E-06	8.69E-07	2.9100E-03
464923.51	3772152.48	10363.22401	0.59357	1.55641	1.77622	2.90E-03	4.10E-07	8.69E-07	9.26E-07	2.9063E-03
465055.59	3772264.39	10341.6685	0.62297	3.1683	1.33351	2.90E-03	4.31E-07	1.77E-06	6.95E-07	2.9010E-03
465199.12	3772361.47	10339.02269	0.5472	7.39512	0.93573	2.90E-03	3.78E-07	4.13E-06	4.88E-07	2.9023E-03
465219.23	3772374.37	10337.56893	0.53506	8.34838	0.89304	2.90E-03	3.70E-07	4.66E-06	4.66E-07	2.9024E-03
465178.95	3772348.43	10326.79789	0.55933	6.49766	0.98145	2.89E-03	3.87E-07	3.63E-06	5.12E-07	2.8984E-03
465097.6	3772294.59	10309.86766	0.60605	3.99967	1.19978	2.89E-03	4.19E-07	2.23E-06	6.26E-07	2.8924E-03
465158.72	3772335.25	10308.36343	0.57137	5.71668	1.0305	2.89E-03	3.95E-07	3.19E-06	5.37E-07	2.8929E-03
465118.06	3772308.35	10295.23968	0.59495	4.48283	1.13902	2.89E-03	4.11E-07	2.50E-06	5.94E-07	2.8886E-03
464335.66	3772389.47	10292.05044	1.12887	0.59324	1.45786	2.88E-03	7.80E-07	3.31E-07	7.60E-07	2.8860E-03
465138.43	3772321.89	10291.3312	0.58322	5.05012	1.08303	2.88E-03	4.03E-07	2.82E-06	5.65E-07	2.8877E-03
464858.94	3772097.5	10270.42673	0.54306	1.16132	1.9923	2.88E-03	3.75E-07	6.48E-07	1.04E-06	2.8802E-03
465075.82	3772277.58	10238.37781	0.61252	3.48691	1.26308	2.87E-03	4.23E-07	1.95E-06	6.59E-07	2.8721E-03
464339.72	3772415.4	10209.6244	1.20371	0.60994	1.46348	2.86E-03	8.32E-07	3.40E-07	7.63E-07	2.8630E-03
464936.1	3772157.42	10152.93059	0.58825	1.59782	1.69331	2.85E-03	4.07E-07	8.92E-07	8.83E-07	2.8474E-03
464833.38	3772072.66	10069.19636	0.51339	1.02773	2.02006	2.82E-03	3.55E-07	5.74E-07	1.05E-06	2.8237E-03

465004.55	3772213.92	10042.02904	0.60795	2.22794	1.4628	2.81E-03	4.20E-07	1.24E-06	7.63E-07	2.8165E-03
464909.81	3772132.29	10038.35237	0.56591	1.39219	1.75837	2.81E-03	3.91E-07	7.77E-07	9.17E-07	2.8151E-03
464979.06	3772189.1	9943.88854	0.59571	1.9113	1.52749	2.79E-03	4.12E-07	1.07E-06	7.97E-07	2.7889E-03
464330.11	3772402.43	9885.02474	1.12357	0.58346	1.39737	2.77E-03	7.77E-07	3.26E-07	7.29E-07	2.7719E-03
464334.11	3772428.49	9784.14299	1.19415	0.59733	1.39468	2.74E-03	8.26E-07	3.33E-07	7.27E-07	2.7437E-03
464858.17	3772082.39	9755.21466	0.51375	1.08022	1.84101	2.73E-03	3.55E-07	6.03E-07	9.60E-07	2.7356E-03
464961.28	3772167.31	9719.40946	0.57564	1.68027	1.54561	2.72E-03	3.98E-07	9.38E-07	8.06E-07	2.7258E-03
465045.8	3772240.26	9681.22088	0.59259	2.61669	1.30925	2.71E-03	4.10E-07	1.46E-06	6.83E-07	2.7155E-03
464934.84	3772142.12	9646.1693	0.55767	1.46335	1.60408	2.70E-03	3.86E-07	8.17E-07	8.36E-07	2.7052E-03
465066.07	3772253.56	9551.76401	0.58418	2.84912	1.24271	2.68E-03	4.04E-07	1.59E-06	6.48E-07	2.6793E-03
464908.75	3772117.07	9538.05515	0.53599	1.28346	1.65221	2.67E-03	3.71E-07	7.16E-07	8.62E-07	2.6748E-03
465003.19	3772198.58	9527.45795	0.57912	2.00431	1.40521	2.67E-03	4.00E-07	1.12E-06	7.33E-07	2.6721E-03
465087.43	3772269.53	9523.15841	0.57792	3.18182	1.1827	2.67E-03	4.00E-07	1.78E-06	6.17E-07	2.6715E-03
464973.87	3772172.26	9511.49966	0.56873	1.72157	1.47923	2.67E-03	3.93E-07	9.61E-07	7.71E-07	2.6675E-03
465107.94	3772283.43	9472.47825	0.56865	3.50846	1.12484	2.65E-03	3.93E-07	1.96E-06	5.87E-07	2.6574E-03
465128.37	3772297.1	9448.06226	0.55878	3.87479	1.0704	2.65E-03	3.86E-07	2.16E-06	5.58E-07	2.6508E-03
465209.34	3772350	9445.93769	0.51574	5.76928	0.88668	2.65E-03	3.57E-07	3.22E-06	4.62E-07	2.6511E-03
465189.19	3772337	9439.03151	0.52665	5.25029	0.92825	2.65E-03	3.64E-07	2.93E-06	4.84E-07	2.6489E-03
465168.98	3772323.87	9430.79339	0.53749	4.7484	0.9727	2.64E-03	3.72E-07	2.65E-06	5.07E-07	2.6463E-03
465148.71	3772310.57	9429.29117	0.54819	4.2878	1.02007	2.64E-03	3.79E-07	2.39E-06	5.32E-07	2.6457E-03
464986.46	3772177.2	9305.1683	0.5614	1.76254	1.4172	2.61E-03	3.88E-07	9.84E-07	7.39E-07	2.6097E-03
464959.88	3772151.95	9255.32596	0.54723	1.53415	1.47038	2.59E-03	3.78E-07	8.56E-07	7.67E-07	2.5956E-03
464933.66	3772126.85	9179.45374	0.5293	1.34512	1.51521	2.57E-03	3.66E-07	7.51E-07	7.90E-07	2.5743E-03
464999.05	3772182.14	9101.71565	0.55375	1.8032	1.35915	2.55E-03	3.83E-07	1.01E-06	7.09E-07	2.5527E-03
465056.32	3772229.54	8985.00341	0.55692	2.37734	1.21709	2.52E-03	3.85E-07	1.33E-06	6.35E-07	2.5202E-03
464882.1	3772076.98	8972.32422	0.48582	1.05416	1.56625	2.51E-03	3.36E-07	5.88E-07	8.17E-07	2.5161E-03
465077.25	3772244.46	8892.3515	0.55107	2.60084	1.16047	2.49E-03	3.81E-07	1.45E-06	6.05E-07	2.4944E-03
464984.91	3772161.79	8867.27374	0.53498	1.60386	1.35362	2.48E-03	3.70E-07	8.95E-07	7.06E-07	2.4869E-03
464958.56	3772136.63	8823.1865	0.52064	1.40617	1.39532	2.47E-03	3.60E-07	7.85E-07	7.28E-07	2.4744E-03
465097.83	3772258.51	8809.55105	0.54352	2.83425	1.10604	2.47E-03	3.76E-07	1.58E-06	5.77E-07	2.4712E-03
465118.3	3772272.31	8744.51481	0.53505	3.08873	1.05483	2.45E-03	3.70E-07	1.72E-06	5.50E-07	2.4531E-03
465138.7	3772285.9	8702.05437	0.526	3.36598	1.00648	2.44E-03	3.64E-07	1.88E-06	5.25E-07	2.4414E-03
465159.01	3772299.3	8678.70486	0.51657	3.66511	0.96103	2.43E-03	3.57E-07	2.05E-06	5.01E-07	2.4350E-03
465179.26	3772312.54	8667.56617	0.50684	3.98137	0.91838	2.43E-03	3.50E-07	2.22E-06	4.79E-07	2.4320E-03
465199.45	3772325.64	8666.95538	0.49705	4.30287	0.87818	2.43E-03	3.44E-07	2.40E-06	4.58E-07	2.4320E-03
465009.95	3772171.62	8494.20747	0.52152	1.67192	1.25046	2.38E-03	3.61E-07	9.33E-07	6.52E-07	2.3823E-03
464983.47	3772146.41	8465.70233	0.5102	1.46568	1.28957	2.37E-03	3.53E-07	8.18E-07	6.72E-07	2.3742E-03
464957.31	3772121.33	8423.83595	0.49583	1.29345	1.32109	2.36E-03	3.43E-07	7.22E-07	6.89E-07	2.3624E-03
465067.08	3772219.4	8372.1877	0.5252	2.17124	1.13307	2.35E-03	3.63E-07	1.21E-06	5.91E-07	2.3483E-03
465087.71	3772233.58	8264.78122	0.51926	2.34506	1.0829	2.32E-03	3.59E-07	1.31E-06	5.65E-07	2.3183E-03
465108.24	3772247.51	8173.76431	0.51231	2.53087	1.03508	2.29E-03	3.54E-07	1.41E-06	5.40E-07	2.2929E-03
465008.37	3772156.19	8118.02802	0.49853	1.52323	1.19564	2.27E-03	3.45E-07	8.50E-07	6.23E-07	2.2767E-03
465128.68	3772261.22	8105.51054	0.50469	2.72901	0.98954	2.27E-03	3.49E-07	1.52E-06	5.16E-07	2.2738E-03
464982.1	3772131.06	8096.69511	0.48701	1.34466	1.22598	2.27E-03	3.37E-07	7.51E-07	6.39E-07	2.2707E-03
465149.04	3772274.74	8054.64008	0.4965	2.93785	0.94648	2.26E-03	3.43E-07	1.64E-06	4.94E-07	2.2596E-03
465169.33	3772288.08	8021.10917	0.48792	3.1539	0.90575	2.25E-03	3.37E-07	1.76E-06	4.72E-07	2.2503E-03
465189.56	3772301.27	8000.14997	0.47906	3.37045	0.86736	2.24E-03	3.31E-07	1.88E-06	4.52E-07	2.2446E-03
464930.42	3772081.15	7993.73393	0.45608	1.06523	1.26151	2.24E-03	3.15E-07	5.95E-07	6.58E-07	2.2417E-03
465060.02	3772191.28	7783.97309	0.49214	1.79813	1.0772	2.18E-03	3.40E-07	1.00E-06	5.62E-07	2.1832E-03
465006.88	3772140.8	7772.77552	0.47691	1.3937	1.14091	2.18E-03	3.30E-07	7.78E-07	5.95E-07	2.1799E-03
464980.8	3772115.75	7749.97122	0.46517	1.23793	1.16357	2.17E-03	3.22E-07	6.91E-07	6.07E-07	2.1734E-03
465098.18	3772222.72	7704.66037	0.49041	2.11864	1.01131	2.16E-03	3.39E-07	1.18E-06	5.27E-07	2.1611E-03
465118.67	3772236.55	7611.67889	0.48408	2.26653	0.9692	2.13E-03	3.35E-07	1.27E-06	5.05E-07	2.1351E-03
465139.07	3772250.17	7538.02505	0.47713	2.42001	0.92889	2.11E-03	3.30E-07	1.35E-06	4.84E-07	2.1146E-03
465159.4	3772263.62	7482.84202	0.46971	2.57689	0.89047	2.10E-03	3.25E-07	1.44E-06	4.64E-07	2.0992E-03
465058.18	3772175.75	7452.75248	0.47262	1.62824	1.0363	2.09E-03	3.27E-07	9.09E-07	5.40E-07	2.0903E-03
465005.48	3772125.44	7451.55732	0.45649	1.28	1.08677	2.09E-03	3.16E-07	7.15E-07	5.67E-07	2.0898E-03
465179.67	3772276.9	7439.81711	0.46181	2.73234	0.85407	2.08E-03	3.19E-07	1.53E-06	4.45E-07	2.0872E-03
464953.92	3772075.57	7397.73377	0.43102	1.02618	1.11103	2.07E-03	2.98E-07	5.73E-07	5.79E-07	2.0745E-03
465088.12	3772197.93	7310.5824	0.46917	1.80346	0.98364	2.05E-03	3.24E-07	1.01E-06	5.13E-07	2.0505E-03
465056.45	3772160.26	7145.88816	0.45399	1.48156	0.99511	2.00E-03	3.14E-07	8.27E-07	5.19E-07	2.0042E-03
465129.1	3772225.61	7110.09241	0.4584	2.03555	0.90821	1.99E-03	3.17E-07	1.14E-06	4.74E-07	1.9944E-03
465149.47	3772239.15	7032.43134	0.45201	2.15409	0.87255	1.97E-03	3.12E-07	1.20E-06	4.55E-07	1.9727E-03
465169.78	3772252.53	6973.40567	0.44524	2.27168	0.83829	1.95E-03	3.08E-07	1.27E-06	4.37E-07	1.9562E-03
465054.83	3772144.82	6863.69994	0.43631	1.35428	0.95397	1.92E-03	3.02E-07	7.56E-07	4.97E-07	1.9250E-03

465098.64	3772187.2	6860.1286	0.44488	1.64772	0.91798	1.92E-03	3.08E-07	9.20E-07	4.79E-07	1.9241E-03
465081.24	3772170	6848.81528	0.44168	1.51833	0.93239	1.92E-03	3.05E-07	8.48E-07	4.86E-07	1.9209E-03
465053.29	3772129.41	6601.14954	0.41948	1.2429	0.91329	1.85E-03	2.90E-07	6.94E-07	4.76E-07	1.8513E-03
465159.89	3772228.16	6581.83779	0.42911	1.92525	0.82015	1.84E-03	2.97E-07	1.07E-06	4.28E-07	1.8462E-03
465079.5	3772154.51	6580.8611	0.42526	1.3847	0.89633	1.84E-03	2.94E-07	7.73E-07	4.67E-07	1.8457E-03
465051.83	3772114.03	6354.17528	0.40344	1.14481	0.87337	1.78E-03	2.79E-07	6.39E-07	4.55E-07	1.7820E-03
465129.62	3772190.23	6349.03686	0.41842	1.58328	0.82834	1.78E-03	2.89E-07	8.84E-07	4.32E-07	1.7808E-03
465077.87	3772139.06	6332.73416	0.40958	1.26834	0.86044	1.77E-03	2.83E-07	7.08E-07	4.49E-07	1.7761E-03
465076.31	3772123.64	6103.00872	0.39465	1.16644	0.82509	1.71E-03	2.73E-07	6.51E-07	4.30E-07	1.7116E-03
465102.44	3772148.71	6077.92117	0.39934	1.28887	0.81187	1.70E-03	2.76E-07	7.19E-07	4.23E-07	1.7046E-03
465140.11	3772179.42	5986.67373	0.39849	1.44421	0.77667	1.68E-03	2.75E-07	8.06E-07	4.05E-07	1.6791E-03
465100.79	3772133.25	5860.51622	0.38543	1.18363	0.78046	1.64E-03	2.66E-07	6.61E-07	4.07E-07	1.6436E-03
465130.22	3772155.05	5740.00293	0.38332	1.2706	0.75209	1.61E-03	2.65E-07	7.09E-07	3.92E-07	1.6099E-03
CONCUNIT ug/	m^3									
DEPUNIT g/m^	2									

Dedeaux Industrial Center Project

Construction Annual DPM Emissions (PM10 Exhaust)—Concentrations After Incorporation of Standard Conditions

		Maximum DPM (ug/m3)	UTM X	UTM Y
Annual Average Onsite Total DPM Emission Rate (grams/m2/sec):	1.98E-07	6.6566E-02	464753.85	3772434.57
Annual Average Offsite Total DPM Emission Rate - Road Segment 1 (grams/sec):	6.91E-07			
Annual Average Offsite Total DPM Emission Rate - Road Segment 2 (grams/sec):	5.58E-07			
Annual Average Offsite Total DPM Emission Rate - Road Segment 3 (grams/sec):	5.21E-07			

X	Y	Unit Emissions VALUES AVERAGED SITE AREA	Unit Emissions VALUES AVERAGED ROAD 1	Unit Emissions VALUES AVERAGED ROAD 2	Unit Emissions VALUES AVERAGED ROAD 3	Onsite Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 1 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 2 Annual DPM Exhaust w/Actual Emissions (ug/m3)	Offsite-Road Segment 3 Annual DPM Exhaust w/Actual Emissions (ug/m3)	**Total DPM (ug/m3)**
464753.85	3772434.57	336532.6338	21.05544	76.33752	12.42952	6.65E-02	1.46E-05	4.26E-05	6.48E-06	6.6566E-02
464740.33	3772434.99	328897.085	32.0559	75.1461	14.20431	6.50E-02	2.22E-05	4.19E-05	7.41E-06	6.5065E-02
464726.81	3772435.41	300904.1922	49.26451	66.31472	16.34522	5.95E-02	3.41E-05	3.70E-05	8.52E-06	5.9541E-02
464780.9	3772433.72	298490.3045	11.31052	74.69393	9.67725	5.90E-02	7.82E-06	4.17E-05	5.05E-06	5.9039E-02
464794.42	3772433.3	261198.1586	8.93885	73.25471	8.60375	5.16E-02	6.18E-06	4.09E-05	4.49E-06	5.1667E-02
464739.86	3772420	237219.5566	18.77165	34.47409	13.35369	4.69E-02	1.30E-05	1.92E-05	6.96E-06	4.6916E-02
464753.39	3772419.58	236668.0369	14.34238	36.04311	11.71273	4.68E-02	9.91E-06	2.01E-05	6.11E-06	4.6804E-02
464726.34	3772420.42	226208.0081	24.05002	30.85516	15.36407	4.47E-02	1.66E-05	1.72E-05	8.01E-06	4.4743E-02
464708.8	3772430.17	226114.5475	45.5711	30.91275	19.47486	4.47E-02	3.15E-05	1.73E-05	1.02E-05	4.4741E-02
464818.96	3772437.2	212856.2187	6.61122	90.8266	7.15594	4.21E-02	4.57E-06	5.07E-05	3.73E-06	4.2121E-02
464780.43	3772418.73	205331.7029	8.9125	36.59793	9.19778	4.06E-02	6.16E-06	2.04E-05	4.80E-06	4.0607E-02
464793.95	3772418.31	181307.1537	7.30546	36.33892	8.21603	3.58E-02	5.05E-06	2.03E-05	4.28E-06	3.5858E-02
464739.39	3772405.01	177590.3214	12.31451	20.38628	12.79765	3.51E-02	8.51E-06	1.14E-05	6.67E-06	3.5120E-02
464725.87	3772405.43	174829.9614	14.61729	18.59544	14.73764	3.45E-02	1.01E-05	1.04E-05	7.68E-06	3.4576E-02
464752.92	3772404.58	174195.8497	10.18872	21.44379	11.22703	3.44E-02	7.04E-06	1.20E-05	5.85E-06	3.4448E-02
464706.86	3772405.36	158509.912	17.00229	14.84249	18.43482	3.13E-02	1.18E-05	8.29E-06	9.61E-06	3.1353E-02
464779.96	3772403.74	150779.3095	7.05132	22.2603	8.84514	2.98E-02	4.87E-06	1.24E-05	4.61E-06	2.9817E-02
464818.49	3772422.21	148367.4061	5.64058	42.46842	6.87374	2.93E-02	3.90E-06	2.37E-05	3.58E-06	2.9350E-02
464845.87	3772432.64	146648.9468	4.64488	73.33617	5.76807	2.90E-02	3.21E-06	4.09E-05	3.01E-06	2.9026E-02
464712.7	3772395.95	144595.7284	12.55749	12.89911	16.78587	2.86E-02	8.68E-06	7.20E-06	8.75E-06	2.8598E-02
464725.4	3772390.44	138919.7376	9.98203	12.79095	14.32165	2.75E-02	6.90E-06	7.14E-06	7.47E-06	2.7473E-02
464738.92	3772390.01	138107.7448	8.75957	13.80843	12.41648	2.73E-02	6.06E-06	7.71E-06	6.47E-06	2.7312E-02
464793.48	3772403.31	134718.0108	5.9717	22.32032	7.91998	2.66E-02	4.13E-06	1.25E-05	4.13E-06	2.6642E-02
464752.45	3772389.59	133955.2851	7.58812	14.50739	10.88424	2.65E-02	5.25E-06	8.10E-06	5.68E-06	2.6490E-02
464658.31	3772430.44	122834.4628	46.89068	9.00933	47.7474	2.43E-02	3.24E-05	5.03E-06	2.49E-05	2.4336E-02
464700.54	3772386.03	120768.4116	10.4645	9.47051	19.38357	2.39E-02	7.23E-06	5.29E-06	1.01E-05	2.3888E-02
464661.72	3772417.25	117976.7886	26.68593	8.48983	42.52221	2.33E-02	1.84E-05	4.74E-06	2.22E-05	2.3359E-02
464779.49	3772388.74	116154.3044	5.66313	15.23585	8.57919	2.30E-02	3.91E-06	8.50E-06	4.47E-06	2.2970E-02
464724.93	3772375.44	112982.9415	7.31744	9.50906	14.0388	2.23E-02	5.06E-06	5.31E-06	7.32E-06	2.2344E-02
464818.02	3772407.22	112457.0576	4.79892	25.36719	6.6428	2.22E-02	3.32E-06	1.42E-05	3.46E-06	2.2243E-02
464850.48	3772421.79	112416.8813	4.03134	43.38792	5.44166	2.22E-02	2.79E-06	2.42E-05	2.84E-06	2.2244E-02
464738.46	3772375.02	110902.7023	6.5917	10.15441	12.14368	2.19E-02	4.56E-06	5.67E-06	6.33E-06	2.1932E-02
464840.05	3772415.87	110112.908	4.21855	34.37802	5.77415	2.18E-02	2.92E-06	1.92E-05	3.01E-06	2.1784E-02
464751.98	3772374.6	106777.0618	5.87868	10.62859	10.63168	2.11E-02	4.06E-06	5.93E-06	5.54E-06	2.1116E-02
464793.01	3772388.32	105095.2781	4.92748	15.37674	7.68827	2.08E-02	3.41E-06	8.58E-06	4.01E-06	2.0784E-02
464889.22	3772432.69	97716.37888	3.12767	75.40961	4.31472	1.93E-02	2.16E-06	4.21E-05	2.25E-06	1.9356E-02
464665.18	3772386.19	97543.22163	11.03451	6.44635	37.60517	1.93E-02	7.63E-06	3.60E-06	1.96E-05	1.9306E-02
465045.03	3772657.82	97517.23283	2.14633	4.20919	2.15627	1.93E-02	1.48E-06	2.35E-06	1.12E-06	1.9275E-02
465045.32	3772643.19	96983.6303	2.12385	4.6489	2.18468	1.92E-02	1.47E-06	2.60E-06	1.14E-06	1.9170E-02
465045.62	3772628.56	95443.5857	2.0935	5.16191	2.20331	1.89E-02	1.45E-06	2.88E-06	1.15E-06	1.8866E-02
464648.24	3772403.21	95124.21664	16.22338	6.13285	66.14774	1.88E-02	1.12E-05	3.42E-06	3.45E-05	1.8847E-02
465043.34	3772698	94826.08111	2.17536	3.29071	2.04175	1.87E-02	1.50E-06	1.84E-06	1.06E-06	1.8743E-02
464724.46	3772360.45	93640.55438	5.62993	7.44554	13.84458	1.85E-02	3.89E-06	4.16E-06	7.22E-06	1.8520E-02
465048.91	3772684.71	93205.9008	2.12102	3.5401	2.0445	1.84E-02	1.47E-06	1.98E-06	1.07E-06	1.8423E-02
465045.91	3772613.93	92986.06226	2.05514	5.77947	2.21325	1.84E-02	1.42E-06	3.23E-06	1.15E-06	1.8381E-02
464779.02	3772373.75	92889.05264	4.6294	11.21636	8.37117	1.84E-02	3.20E-06	6.26E-06	4.37E-06	1.8370E-02
464737.99	3772360.03	91022.44996	5.1629	7.88311	11.94683	1.80E-02	3.57E-06	4.40E-06	6.23E-06	1.8001E-02
465054.47	3772671.41	90704.78158	2.06033	3.81938	2.03756	1.79E-02	1.42E-06	2.13E-06	1.06E-06	1.7929E-02
465046.2	3772599.3	89649.21882	2.00909	6.53133	2.21433	1.77E-02	1.39E-06	3.65E-06	1.15E-06	1.7722E-02
464817.55	3772392.22	89315.98957	4.09347	17.16127	6.45142	1.76E-02	2.83E-06	9.58E-06	3.36E-06	1.7665E-02
464677.54	3772365.63	88341.19942	7.24451	5.81642	27.98627	1.75E-02	5.01E-06	3.25E-06	1.46E-05	1.7480E-02

465060.03	3772658.11	87414.69665	1.9938	4.13534	2.02123	1.73E-02	1.38E-06	2.31E-06	1.05E-06	1.7279E-02
464751.51	3772359.6	87333.55147	4.69757	8.21376	10.44003	1.73E-02	3.25E-06	4.59E-06	5.44E-06	1.7271E-02
465047.69	3772723.78	86999.52038	2.11346	2.82808	1.89965	1.72E-02	1.46E-06	1.58E-06	9.91E-07	1.7196E-02
465053.15	3772710.7	86842.07301	2.07351	3.02655	1.91694	1.72E-02	1.43E-06	1.69E-06	1.00E-06	1.7165E-02
464700.77	3772355.54	86776.7368	5.76149	6.09714	18.7011	1.71E-02	3.98E-06	3.40E-06	9.75E-06	1.7165E-02
465060.32	3772643.49	86698.38521	1.96986	4.57182	2.04446	1.71E-02	1.36E-06	2.55E-06	1.07E-06	1.7137E-02
464839.58	3772400.88	86250.52022	3.67701	21.66557	5.61121	1.70E-02	2.54E-06	1.21E-05	2.93E-06	1.7061E-02
465058.62	3772697.63	85892.17139	2.02725	3.24587	1.92492	1.70E-02	1.40E-06	1.81E-06	1.00E-06	1.6977E-02
465046.49	3772584.68	85528.31121	1.95557	7.46121	2.20677	1.69E-02	1.35E-06	4.16E-06	1.15E-06	1.6908E-02
465060.61	3772628.86	85121.3387	1.93932	5.07781	2.05936	1.68E-02	1.34E-06	2.83E-06	1.07E-06	1.6826E-02
464792.54	3772373.33	84895.83234	4.11604	11.36771	7.50134	1.68E-02	2.85E-06	6.35E-06	3.91E-06	1.6789E-02
465064.09	3772684.56	84183.93665	1.97505	3.49012	1.92424	1.66E-02	1.37E-06	1.95E-06	1.00E-06	1.6640E-02
464654.31	3772375.71	83853.79346	8.70285	5.18441	51.63863	1.66E-02	6.02E-06	2.89E-06	2.69E-05	1.6606E-02
465060.91	3772614.23	82778.55442	1.90145	5.6875	2.06647	1.64E-02	1.31E-06	3.17E-06	1.08E-06	1.6363E-02
465069.56	3772671.49	81755.83331	1.91766	3.76189	1.91534	1.62E-02	1.33E-06	2.10E-06	9.99E-07	1.6160E-02
465046.79	3772570.05	80721.7565	1.89464	8.62861	2.19093	1.60E-02	1.31E-06	4.82E-06	1.14E-06	1.5959E-02
465061.2	3772599.6	79718.82965	1.85705	6.42834	2.0659	1.58E-02	1.28E-06	3.59E-06	1.08E-06	1.5759E-02
465063.09	3772723.11	79642.38158	1.97684	2.79775	1.80121	1.57E-02	1.37E-06	1.56E-06	9.39E-07	1.5742E-02
465057.7	3772735.99	79445.52483	2.01119	2.61979	1.78148	1.57E-02	1.39E-06	1.46E-06	9.29E-07	1.5703E-02
465068.48	3772710.23	79156.09835	1.93712	2.99103	1.81301	1.56E-02	1.34E-06	1.67E-06	9.45E-07	1.5646E-02
464723.99	3772345.46	78920.49704	4.48485	6.04149	13.70866	1.56E-02	3.10E-06	3.37E-06	7.15E-06	1.5609E-02
465075.03	3772658.41	78707.49476	1.85549	4.06967	1.89861	1.56E-02	1.28E-06	2.27E-06	9.90E-07	1.5558E-02
465052.31	3772748.87	78593.05598	2.04016	2.45618	1.75395	1.55E-02	1.41E-06	1.37E-06	9.15E-07	1.5534E-02
464896.06	3772422.39	78133.83923	2.76019	45.38373	4.05421	1.54E-02	1.91E-06	2.53E-05	2.11E-06	1.5469E-02
465073.86	3772697.35	78020.15245	1.89231	3.2039	1.81729	1.54E-02	1.31E-06	1.79E-06	9.48E-07	1.5422E-02
465075.32	3772643.79	77917.49843	1.83078	4.51352	1.91914	1.54E-02	1.27E-06	2.52E-06	1.00E-06	1.5402E-02
464671.26	3772353.15	77367.03577	5.86796	4.84943	31.85064	1.53E-02	4.06E-06	2.71E-06	1.66E-05	1.5312E-02
465075.61	3772629.16	76346.9432	1.80067	5.01739	1.93138	1.51E-02	1.24E-06	2.80E-06	1.01E-06	1.5092E-02
464778.55	3772358.76	76326.80136	3.84803	8.67268	8.20192	1.51E-02	2.66E-06	4.84E-06	4.28E-06	1.5095E-02
464737.52	3772345.04	76282.30063	4.16784	6.35313	11.79614	1.51E-02	2.88E-06	3.55E-06	6.15E-06	1.5087E-02
465079.25	3772684.47	76260.92656	1.84257	3.44029	1.81398	1.51E-02	1.27E-06	1.92E-06	9.46E-07	1.5074E-02
465049.85	3772761.28	76147.43006	2.04047	2.30027	1.7063	1.50E-02	1.41E-06	1.28E-06	8.90E-07	1.5051E-02
464658.19	3772358.83	76110.16136	6.44033	4.61387	45.19173	1.50E-02	4.45E-06	2.58E-06	2.36E-05	1.5071E-02
465061.49	3772584.98	76023.32067	1.8064	7.34495	2.05814	1.50E-02	1.25E-06	4.10E-06	1.07E-06	1.5029E-02
465047.08	3772555.42	75413.0775	1.82787	10.14492	2.16858	1.49E-02	1.26E-06	5.66E-06	1.13E-06	1.4910E-02
464697.39	3772341.81	75214.89072	4.69689	5.08727	19.48839	1.49E-02	3.25E-06	2.84E-06	1.02E-05	1.4879E-02
464876.61	3772409.83	74485.07852	2.92526	28.55436	4.47086	1.47E-02	2.02E-06	1.59E-05	2.33E-06	1.4739E-02
465075.9	3772614.53	74107.64456	1.7642	5.61285	1.93577	1.46E-02	1.22E-06	3.13E-06	1.01E-06	1.4650E-02
465084.64	3772671.59	73933.11655	1.78846	3.70427	1.80365	1.46E-02	1.24E-06	2.07E-06	9.41E-07	1.4614E-02
464645.13	3772364.5	73449.76632	6.95394	4.32388	74.65167	1.45E-02	4.81E-06	2.41E-06	3.89E-05	1.4561E-02
464817.08	3772377.23	73256.95708	3.5145	12.53961	6.28913	1.45E-02	2.43E-06	7.00E-06	3.28E-06	1.4489E-02
465073.12	3772735.27	73137.51621	1.88594	2.59396	1.69443	1.45E-02	1.30E-06	1.45E-06	8.84E-07	1.4456E-02
464751.04	3772344.61	73031.12927	3.84832	6.59481	10.28723	1.44E-02	2.66E-06	3.68E-06	5.36E-06	1.4443E-02
465078.44	3772722.56	72981.33561	1.85155	2.76514	1.70886	1.44E-02	1.28E-06	1.54E-06	8.91E-07	1.4426E-02
465067.81	3772747.98	72719.78193	1.9156	2.43549	1.67319	1.44E-02	1.32E-06	1.36E-06	8.72E-07	1.4374E-02
465083.76	3772709.85	72263.94717	1.81263	2.95201	1.71665	1.43E-02	1.25E-06	1.65E-06	8.95E-07	1.4284E-02
464710.46	3772336.14	71997.87276	4.15479	5.0846	16.11885	1.42E-02	2.87E-06	2.84E-06	8.41E-06	1.4242E-02
465061.78	3772570.35	71777.76976	1.74984	8.49542	2.04327	1.42E-02	1.21E-06	4.74E-06	1.07E-06	1.4191E-02
465062.49	3772760.69	71750.2812	1.94069	2.28755	1.64523	1.42E-02	1.34E-06	1.28E-06	8.58E-07	1.4182E-02
465076.2	3772599.9	71284.17702	1.72186	6.34075	1.93372	1.41E-02	1.19E-06	3.54E-06	1.01E-06	1.4092E-02
465090.02	3772658.71	71123.34535	1.7305	4.00339	1.78699	1.41E-02	1.20E-06	2.23E-06	9.32E-07	1.4059E-02
465089.07	3772697.14	71015.91502	1.76945	3.15818	1.7178	1.40E-02	1.22E-06	1.76E-06	8.96E-07	1.4037E-02
464609.62	3772422.54	70611.98368	18.37985	4.19153	80.9402	1.40E-02	1.27E-05	2.34E-06	4.22E-05	1.4011E-02
465090.32	3772644.09	70263.18082	1.70571	4.44621	1.80463	1.39E-02	1.18E-06	2.48E-06	9.41E-07	1.3889E-02
465057.18	3772773.4	70260.2876	1.96122	2.14346	1.61093	1.39E-02	1.36E-06	1.20E-06	8.40E-07	1.3887E-02
464792.07	3772358.33	70224.90949	3.4804	8.81851	7.34587	1.39E-02	2.41E-06	4.92E-06	3.83E-06	1.3888E-02
464839.11	3772385.88	70199.26183	3.21264	15.19446	5.4698	1.39E-02	2.22E-06	8.48E-06	2.85E-06	1.3886E-02
465047.37	3772540.79	69758.38574	1.7563	12.18589	2.14115	1.38E-02	1.21E-06	6.80E-06	1.12E-06	1.3794E-02
465094.39	3772684.43	69265.78865	1.72213	3.38751	1.71254	1.37E-02	1.19E-06	1.89E-06	8.93E-07	1.3692E-02
465090.61	3772629.46	68727.45962	1.67618	4.94513	1.81449	1.36E-02	1.16E-06	2.76E-06	9.46E-07	1.3586E-02
464672.24	3772337.53	68363.08866	4.62289	4.20399	31.01649	1.35E-02	3.20E-06	2.35E-06	1.62E-05	1.3531E-02
465051.86	3772786.11	68328.40496	1.97755	2.00495	1.57081	1.35E-02	1.37E-06	1.12E-06	8.19E-07	1.3506E-02
464659.54	3772343.05	68211.35782	5.03294	4.05802	43.27409	1.35E-02	3.48E-06	2.27E-06	2.26E-05	1.3508E-02
464924.94	3772429.1	68176.21005	2.3425	61.94302	3.46415	1.35E-02	1.62E-06	3.46E-05	1.81E-06	1.3510E-02
465076.49	3772585.28	67957.78194	1.67425	7.24479	1.92576	1.34E-02	1.16E-06	4.04E-06	1.00E-06	1.3435E-02

464723.53	3772330.47	67416.23526	3.66808	5.03539	13.60989	1.33E-02	2.54E-06	2.81E-06	7.10E-06	1.3335E-02
465086.53	3772739.38	67371.91847	1.7821	2.50505	1.6067	1.33E-02	1.23E-06	1.40E-06	8.38E-07	1.3317E-02
465092.11	3772726.04	67112.1136	1.74739	2.67458	1.61959	1.33E-02	1.21E-06	1.49E-06	8.45E-07	1.3266E-02
465062.08	3772555.72	67108.96887	1.68817	9.97774	2.02224	1.33E-02	1.17E-06	5.57E-06	1.05E-06	1.3269E-02
465080.94	3772752.73	67080.13418	1.81225	2.34763	1.58686	1.33E-02	1.25E-06	1.31E-06	8.27E-07	1.3259E-02
465099.7	3772671.72	67071.09625	1.67123	3.64492	1.70148	1.33E-02	1.16E-06	2.03E-06	8.87E-07	1.3258E-02
464646.84	3772348.56	66889.0937	5.41079	3.86824	68.97362	1.32E-02	3.74E-06	2.16E-06	3.60E-05	1.3260E-02
465090.9	3772614.83	66623.31986	1.64093	5.53155	1.81711	1.32E-02	1.13E-06	3.09E-06	9.48E-07	1.3171E-02
465097.69	3772712.69	66337.86907	1.70836	2.86232	1.62622	1.31E-02	1.18E-06	1.60E-06	8.48E-07	1.3113E-02
465075.36	3772766.07	66253.55045	1.83778	2.20109	1.56057	1.31E-02	1.27E-06	1.23E-06	8.14E-07	1.3096E-02
464697.65	3772326.5	65189.78193	3.79571	4.33675	19.2545	1.29E-02	2.62E-06	2.42E-06	1.00E-05	1.2897E-02
465103.27	3772699.35	65075.30026	1.66522	3.07246	1.6264	1.29E-02	1.15E-06	1.72E-06	8.48E-07	1.2863E-02
464737.05	3772330.04	64980.3592	3.4433	5.26371	11.67563	1.28E-02	2.38E-06	2.94E-06	6.09E-06	1.2852E-02
465069.78	3772779.42	64930.13197	1.85893	2.0605	1.52806	1.28E-02	1.29E-06	1.15E-06	7.97E-07	1.2834E-02
465105.02	3772659.01	64486.3795	1.61705	3.9368	1.68482	1.27E-02	1.12E-06	2.20E-06	8.79E-07	1.2747E-02
464778.08	3772343.77	64211.71048	3.24753	6.95474	8.05683	1.27E-02	2.25E-06	3.88E-06	4.20E-06	1.2699E-02
465076.78	3772570.65	64191.31859	1.62172	8.38332	1.9118	1.27E-02	1.12E-06	4.68E-06	9.97E-07	1.2692E-02
465091.19	3772600.2	64045.1641	1.60083	6.25017	1.81434	1.27E-02	1.11E-06	3.49E-06	9.46E-07	1.2661E-02
465047.66	3772526.17	63910.50333	1.68068	15.02269	2.10879	1.26E-02	1.16E-06	8.39E-06	1.10E-06	1.2640E-02
465105.31	3772644.39	63593.69393	1.5926	4.37577	1.70006	1.26E-02	1.10E-06	2.44E-06	8.86E-07	1.2571E-02
464610.52	3772385.05	63485.75894	8.39669	3.5461	85.73634	1.25E-02	5.80E-06	1.98E-06	4.47E-05	1.2598E-02
465108.85	3772686	63339.68151	1.61812	3.30686	1.62041	1.25E-02	1.12E-06	1.85E-06	8.45E-07	1.2520E-02
464605.07	3772397.78	63316.16436	9.99405	3.56837	63.27847	1.25E-02	6.91E-06	1.99E-06	3.30E-05	1.2554E-02
464895.9	3772407.89	63267.16839	2.50064	27.03781	3.95387	1.25E-02	1.73E-06	1.51E-05	2.06E-06	1.2521E-02
465064.2	3772792.76	63162.05511	1.87587	1.92698	1.48995	1.25E-02	1.30E-06	1.08E-06	7.77E-07	1.2485E-02
464599.62	3772410.51	62379.09222	11.78184	3.55974	49.00209	1.23E-02	8.14E-06	1.99E-06	2.56E-05	1.2362E-02
465062.37	3772541.09	62198.81197	1.62276	11.99201	1.99759	1.23E-02	1.12E-06	6.69E-06	1.04E-06	1.2300E-02
464750.57	3772329.62	62197.45199	3.21581	5.44716	10.1593	1.23E-02	2.22E-06	3.04E-06	5.30E-06	1.2301E-02
465101.99	3772738.56	62167.51012	1.67469	2.47369	1.53042	1.23E-02	1.16E-06	1.38E-06	7.98E-07	1.2288E-02
465096.49	3772751.72	62157.62008	1.70472	2.31543	1.51511	1.23E-02	1.18E-06	1.29E-06	7.90E-07	1.2286E-02
465105.6	3772629.76	62110.18123	1.56383	4.86802	1.70789	1.23E-02	1.08E-06	2.72E-06	8.91E-07	1.2278E-02
464710.35	3772320.99	62019.81234	3.41267	4.33249	15.9744	1.23E-02	2.36E-06	2.42E-06	8.33E-06	1.2269E-02
465107.5	3772725.4	61720.78731	1.64068	2.64304	1.53979	1.22E-02	1.13E-06	1.48E-06	8.03E-07	1.2200E-02
465090.98	3772764.88	61715.18948	1.73102	2.175	1.49449	1.22E-02	1.20E-06	1.21E-06	7.79E-07	1.2199E-02
464816.61	3772362.24	61569.65617	3.0413	9.64928	6.14715	1.22E-02	2.10E-06	5.39E-06	3.21E-06	1.2177E-02
465114.44	3772672.66	61175.21406	1.56747	3.5696	1.60841	1.21E-02	1.08E-06	1.99E-06	8.39E-07	1.2093E-02
465091.48	3772585.58	61048.15338	1.55616	7.14163	1.80622	1.21E-02	1.08E-06	3.99E-06	9.42E-07	1.2070E-02
465058.62	3772806.11	61002.58494	1.88885	1.80307	1.44649	1.21E-02	1.31E-06	1.01E-06	7.54E-07	1.2058E-02
465113	3772712.25	60853.94942	1.6031	2.82902	1.54373	1.20E-02	1.11E-06	1.58E-06	8.05E-07	1.2029E-02
465085.48	3772778.04	60833.4489	1.75334	2.04224	1.4683	1.20E-02	1.21E-06	1.14E-06	7.66E-07	1.2024E-02
464594.16	3772423.24	60772.22283	13.47167	3.5148	39.34946	1.20E-02	9.31E-06	1.96E-06	2.05E-05	1.2041E-02
464648.06	3772332.83	60586.57726	4.34378	3.45878	65.65453	1.20E-02	3.00E-06	1.93E-06	3.42E-05	1.2012E-02
464672.9	3772322.05	60547.43648	3.75064	3.67631	30.49255	1.20E-02	2.59E-06	2.05E-06	1.59E-05	1.1985E-02
465105.9	3772615.13	60140.34926	1.52991	5.44516	1.70909	1.19E-02	1.06E-06	3.04E-06	8.91E-07	1.1889E-02
465077.07	3772556.02	60096.7294	1.56506	9.85837	1.89276	1.19E-02	1.08E-06	5.50E-06	9.87E-07	1.1883E-02
464887.16	3772399.16	59638.08965	2.50115	21.13918	4.10669	1.18E-02	1.73E-06	1.18E-05	2.14E-06	1.1801E-02
465118.5	3772699.09	59559.11651	1.56183	3.03304	1.54189	1.18E-02	1.08E-06	1.69E-06	8.04E-07	1.1773E-02
465079.98	3772791.19	59545.64245	1.7719	1.91829	1.43698	1.18E-02	1.22E-06	1.07E-06	7.49E-07	1.1770E-02
464791.6	3772343.34	59470.87113	2.97785	7.07979	7.20826	1.18E-02	2.06E-06	3.95E-06	3.76E-06	1.1762E-02
464838.64	3772370.89	58804.38383	2.82042	11.37868	5.34299	1.16E-02	1.95E-06	6.35E-06	2.79E-06	1.1631E-02
464764.09	3772329.2	58676.61215	2.99129	5.60194	8.93519	1.16E-02	2.07E-06	3.13E-06	4.66E-06	1.1605E-02
465120.02	3772659.31	58660.5114	1.5139	3.86933	1.59129	1.16E-02	1.05E-06	2.16E-06	8.30E-07	1.1596E-02
464588.71	3772435.97	58617.28476	14.58143	3.43519	32.46553	1.16E-02	1.01E-05	1.92E-06	1.69E-05	1.1612E-02
465053.03	3772819.45	58507.50392	1.89851	1.68938	1.39885	1.16E-02	1.31E-06	9.43E-07	7.29E-07	1.1565E-02
464723.06	3772315.47	58083.15411	3.06286	4.29109	13.52588	1.15E-02	2.12E-06	2.40E-06	7.05E-06	1.1489E-02
465047.96	3772511.54	58043.18368	1.60286	19.28365	2.07419	1.15E-02	1.11E-06	1.08E-05	1.08E-06	1.1483E-02
465074.47	3772804.35	57888.84874	1.78699	1.80238	1.40089	1.14E-02	1.24E-06	1.01E-06	7.30E-07	1.1442E-02
465124.01	3772685.93	57871.69503	1.51723	3.25955	1.53454	1.14E-02	1.05E-06	1.82E-06	8.00E-07	1.1440E-02
465106.19	3772600.5	57784.02852	1.49194	6.1534	1.70571	1.14E-02	1.03E-06	3.43E-06	8.89E-07	1.1424E-02
465120.31	3772644.69	57755.84687	1.49	4.30359	1.60451	1.14E-02	1.03E-06	2.40E-06	8.37E-07	1.1417E-02
465091.78	3772570.95	57697.83606	1.50733	8.27185	1.79314	1.14E-02	1.04E-06	4.62E-06	9.35E-07	1.1408E-02
465111.97	3772750.86	57666.8408	1.6058	2.30087	1.44786	1.14E-02	1.11E-06	1.28E-06	7.55E-07	1.1399E-02
465106.54	3772763.85	57483.5491	1.632	2.15413	1.43116	1.14E-02	1.13E-06	1.20E-06	7.46E-07	1.1362E-02
465117.41	3772737.86	57462.57543	1.57599	2.45264	1.45923	1.14E-02	1.09E-06	1.37E-06	7.61E-07	1.1358E-02
465062.66	3772526.47	57141.44933	1.55432	14.79695	1.96884	1.13E-02	1.07E-06	8.26E-06	1.03E-06	1.1302E-02

465101.1	3772776.84	56937.79458	1.65482	2.02126	1.4096	1.13E-02	1.14E-06	1.13E-06	7.35E-07	1.1254E-02
464697.74	3772311.26	56881.7152	3.14291	3.75611	19.08716	1.12E-02	2.17E-06	2.10E-06	9.95E-06	1.1255E-02
465122.84	3772724.87	56880.103	1.54288	2.61527	1.46566	1.12E-02	1.07E-06	1.46E-06	7.64E-07	1.1243E-02
465120.6	3772630.06	56333.94841	1.46209	4.78736	1.61058	1.11E-02	1.01E-06	2.67E-06	8.40E-07	1.1137E-02
464594.8	3772386.35	56186.98261	7.45957	3.06631	40.19292	1.11E-02	5.16E-06	1.71E-06	2.10E-05	1.1131E-02
464736.58	3772315.05	56073.72099	2.89818	4.45495	11.57209	1.11E-02	2.00E-06	2.49E-06	6.03E-06	1.1091E-02
465095.67	3772789.83	56025.92724	1.6743	1.90301	1.38359	1.11E-02	1.16E-06	1.06E-06	7.21E-07	1.1074E-02
465128.27	3772711.88	55922.9764	1.50651	2.79294	1.46688	1.11E-02	1.04E-06	1.56E-06	7.65E-07	1.1054E-02
465068.97	3772817.51	55908.89157	1.79865	1.69421	1.36055	1.10E-02	1.24E-06	9.46E-07	7.09E-07	1.1051E-02
464605.46	3772361.46	55842.62254	5.67326	2.99393	64.19392	1.10E-02	3.92E-06	1.67E-06	3.35E-05	1.1074E-02
465129.51	3772672.77	55833.02598	1.46977	3.51088	1.52207	1.10E-02	1.02E-06	1.96E-06	7.94E-07	1.1037E-02
465077.36	3772541.39	55791.41496	1.50511	11.84177	1.86986	1.10E-02	1.04E-06	6.61E-06	9.75E-07	1.1034E-02
465047.45	3772832.8	55616.60387	1.90475	1.581	1.34708	1.10E-02	1.32E-06	8.83E-07	7.02E-07	1.0993E-02
464589.47	3772398.8	55467.90008	8.45132	3.0702	33.28224	1.10E-02	5.84E-06	1.71E-06	1.74E-05	1.0986E-02
465106.48	3772585.88	55082.74599	1.45009	7.03265	1.69766	1.09E-02	1.00E-06	3.93E-06	8.85E-07	1.0891E-02
464777.61	3772328.77	55011.18023	2.7771	5.73155	7.92717	1.09E-02	1.92E-06	3.20E-06	4.13E-06	1.0880E-02
465090.23	3772802.82	54779.64638	1.69089	1.79448	1.35373	1.08E-02	1.17E-06	1.00E-06	7.06E-07	1.0828E-02
464661.14	3772311.96	54684.94354	3.34731	3.18251	41.42605	1.08E-02	2.31E-06	1.78E-06	2.16E-05	1.0832E-02
465133.71	3772698.89	54613.02698	1.46706	2.98847	1.46315	1.08E-02	1.01E-06	1.67E-06	7.63E-07	1.0795E-02
465120.89	3772615.43	54504.5899	1.42971	5.35457	1.61068	1.08E-02	9.88E-07	2.99E-06	8.40E-07	1.0775E-02
464584.14	3772411.24	54242.20386	9.38319	3.04413	28.11463	1.07E-02	6.49E-06	1.70E-06	1.47E-05	1.0742E-02
465092.07	3772556.32	54084.99463	1.45509	9.73666	1.7757	1.07E-02	1.01E-06	5.44E-06	9.26E-07	1.0695E-02
464710.17	3772305.87	54011.78946	2.86064	3.74548	15.86388	1.07E-02	1.98E-06	2.09E-06	8.27E-06	1.0686E-02
464750.1	3772314.63	53692.15847	2.73074	4.59716	10.04536	1.06E-02	1.89E-06	2.57E-06	5.24E-06	1.0620E-02
465063.47	3772830.67	53662.46209	1.8073	1.59136	1.31648	1.06E-02	1.25E-06	8.88E-07	6.86E-07	1.0607E-02
465122.03	3772762.96	53547.05543	1.54033	2.14099	1.37083	1.06E-02	1.06E-06	1.20E-06	7.15E-07	1.0584E-02
464959.16	3772429.97	53546.6219	1.88907	65.68363	2.87428	1.06E-02	1.31E-06	3.67E-05	1.50E-06	1.0621E-02
465135.01	3772659.61	53526.46954	1.41997	3.79963	1.50536	1.06E-02	9.82E-07	2.12E-06	7.85E-07	1.0581E-02
465127.4	3772750.12	53514.54008	1.51401	2.27717	1.38355	1.06E-02	1.05E-06	1.27E-06	7.21E-07	1.0578E-02
465116.66	3772775.8	53255.4414	1.5635	2.01042	1.35364	1.05E-02	1.08E-06	1.12E-06	7.06E-07	1.0527E-02
465084.8	3772815.82	53226.84759	1.70421	1.69128	1.31964	1.05E-02	1.18E-06	9.44E-07	6.88E-07	1.0521E-02
465132.78	3772737.27	53148.80897	1.48465	2.42307	1.3917	1.05E-02	1.03E-06	1.35E-06	7.26E-07	1.0506E-02
465139.14	3772685.9	52995.88936	1.42499	3.20647	1.455	1.05E-02	9.85E-07	1.79E-06	7.59E-07	1.0476E-02
465111.29	3772788.65	52643.89718	1.58361	1.89276	1.33204	1.04E-02	1.09E-06	1.06E-06	6.95E-07	1.0406E-02
465135.31	3772644.99	52622.60608	1.39666	4.227	1.51667	1.04E-02	9.66E-07	2.36E-06	7.91E-07	1.0403E-02
464578.8	3772423.69	52571.09639	10.10048	2.9903	24.09544	1.04E-02	6.98E-06	1.67E-06	1.26E-05	1.0410E-02
465138.15	3772724.43	52468.90143	1.45254	2.58106	1.39556	1.04E-02	1.00E-06	1.44E-06	7.28E-07	1.0372E-02
464817.71	3772347.86	52421.1714	2.64035	7.77872	5.95636	1.04E-02	1.83E-06	4.34E-06	3.11E-06	1.0368E-02
465121.19	3772600.8	52345.95367	1.39374	6.05054	1.60674	1.03E-02	9.63E-07	3.38E-06	8.38E-07	1.0349E-02
465048.25	3772496.91	52304.257	1.52402	26.24505	2.0377	1.03E-02	1.05E-06	1.47E-05	1.06E-06	1.0353E-02
465106.77	3772571.25	52109.55032	1.40492	8.15938	1.68583	1.03E-02	9.71E-07	4.55E-06	8.79E-07	1.0304E-02
465062.95	3772511.84	52076.02338	1.48398	18.98356	1.93769	1.03E-02	1.03E-06	1.06E-05	1.01E-06	1.0303E-02
465105.92	3772801.49	51729.75661	1.60083	1.78508	1.30666	1.02E-02	1.11E-06	9.96E-07	6.81E-07	1.0225E-02
465143.52	3772711.59	51467.91619	1.41754	2.75166	1.39487	1.02E-02	9.80E-07	1.54E-06	7.27E-07	1.0174E-02
464924.75	3772407.4	51438.98954	2.05635	26.79067	3.34322	1.02E-02	1.42E-06	1.50E-05	1.74E-06	1.0183E-02
465079.37	3772828.81	51414.85933	1.71473	1.5934	1.28211	1.02E-02	1.19E-06	8.89E-07	6.69E-07	1.0163E-02
465077.66	3772526.77	51380.09467	1.44268	14.61607	1.8437	1.02E-02	9.97E-07	8.16E-06	9.61E-07	1.0163E-02
465135.6	3772630.36	51272.63052	1.36976	4.70219	1.52137	1.01E-02	9.47E-07	2.62E-06	7.93E-07	1.0136E-02
464830.3	3772352.81	51263.80812	2.55049	8.46188	5.48946	1.01E-02	1.76E-06	4.72E-06	2.86E-06	1.0140E-02
464612.36	3772333.13	51260.07558	4.08552	2.71803	94.5196	1.01E-02	2.82E-06	1.52E-06	4.93E-05	1.0183E-02
464791.13	3772328.35	51212.30575	2.57492	5.83704	7.08248	1.01E-02	1.78E-06	3.26E-06	3.69E-06	1.0129E-02
465144.58	3772672.9	51099.13214	1.38049	3.45049	1.4424	1.01E-02	9.54E-07	1.93E-06	7.52E-07	1.0101E-02
465057.96	3772843.83	51090.6626	1.81306	1.49249	1.269	1.01E-02	1.25E-06	8.33E-07	6.62E-07	1.0099E-02
465100.54	3772814.33	50537.97724	1.61539	1.68491	1.2777	9.99E-03	1.12E-06	9.41E-07	6.66E-07	9.9895E-03
465092.36	3772541.69	50297.94988	1.4001	11.69896	1.75456	9.94E-03	9.68E-07	6.53E-06	9.15E-07	9.9478E-03
464584.46	3772375.09	50202.61415	5.86043	2.67351	28.27262	9.92E-03	4.05E-06	1.49E-06	1.47E-05	9.9408E-03
465148.89	3772698.74	50187.80492	1.38011	2.94114	1.39003	9.92E-03	9.54E-07	1.64E-06	7.25E-07	9.9209E-03
464594.93	3772350.65	49944.11742	4.6827	2.61056	39.83975	9.87E-03	3.24E-06	1.46E-06	2.08E-05	9.8949E-03
465121.48	3772586.17	49904.65852	1.35451	6.91588	1.59875	9.86E-03	9.36E-07	3.86E-06	8.34E-07	9.8673E-03
465135.24	3772767.54	49885.04081	1.465	2.06083	1.30745	9.86E-03	1.01E-06	1.15E-06	6.82E-07	9.8606E-03
465140.83	3772754.16	49797.38725	1.43874	2.19582	1.3192	9.84E-03	9.95E-07	1.23E-06	6.88E-07	9.8433E-03
465129.64	3772780.92	49658.51358	1.48832	1.93728	1.29131	9.81E-03	1.03E-06	1.08E-06	6.73E-07	9.8158E-03
464842.89	3772357.75	49591.10301	2.45279	9.19548	5.07775	9.80E-03	1.70E-06	5.13E-06	2.65E-06	9.8091E-03
465135.89	3772615.73	49574.28452	1.33889	5.25838	1.52063	9.80E-03	9.26E-07	2.94E-06	7.93E-07	9.8010E-03
464642.38	3772304.91	49521.412	3.09864	2.74825	87.71824	9.79E-03	2.14E-06	1.53E-06	4.57E-05	9.8353E-03

465146.43	3772740.78	49401.92093	1.40962	2.34513	1.3268	9.76E-03	9.74E-07	1.31E-06	6.92E-07	9.7653E-03
464655.59	3772299.17	49373.98995	2.90701	2.82052	49.59939	9.76E-03	2.01E-06	1.57E-06	2.59E-05	9.7862E-03
465073.93	3772841.8	49336.71149	1.72248	1.49958	1.24116	9.75E-03	1.19E-06	8.37E-07	6.47E-07	9.7521E-03
465124.05	3772794.3	49121.2192	1.5086	1.82449	1.27103	9.71E-03	1.04E-06	1.02E-06	6.63E-07	9.7095E-03
465095.17	3772827.17	49085.92679	1.62732	1.59096	1.24561	9.70E-03	1.12E-06	8.88E-07	6.50E-07	9.7025E-03
465150.01	3772659.91	48984.03291	1.33415	3.72822	1.42618	9.68E-03	9.22E-07	2.08E-06	7.44E-07	9.6834E-03
465107.07	3772556.62	48909.34805	1.35673	9.61862	1.66987	9.66E-03	9.38E-07	5.37E-06	8.71E-07	9.6721E-03
464891.47	3772385.05	48840.11635	2.20032	15.26485	3.90543	9.65E-03	1.52E-06	8.52E-06	2.04E-06	9.6633E-03
465152.03	3772727.4	48701.33492	1.37767	2.50418	1.3299	9.62E-03	9.52E-07	1.40E-06	6.93E-07	9.6269E-03
465154.26	3772685.9	48660.58091	1.34053	3.15335	1.38145	9.62E-03	9.27E-07	1.76E-06	7.20E-07	9.6192E-03
465052.46	3772856.98	48296.62877	1.81597	1.39719	1.21842	9.54E-03	1.26E-06	7.80E-07	6.35E-07	9.5465E-03
465118.45	3772807.67	48294.739	1.52595	1.71844	1.24677	9.54E-03	1.05E-06	9.59E-07	6.50E-07	9.5462E-03
465150.3	3772645.29	48099.71645	1.31168	4.14748	1.436	9.50E-03	9.07E-07	2.32E-06	7.49E-07	9.5089E-03
464855.48	3772362.7	48043.86863	2.35414	10.01056	4.71084	9.49E-03	1.63E-06	5.59E-06	2.46E-06	9.5036E-03
465157.62	3772714.03	47710.4482	1.34313	2.6754	1.3288	9.43E-03	9.28E-07	1.49E-06	6.93E-07	9.4311E-03
465136.18	3772601.1	47602.63892	1.30498	5.94044	1.51635	9.41E-03	9.02E-07	3.32E-06	7.91E-07	9.4117E-03
465089.8	3772840.02	47382.14781	1.63655	1.50094	1.21024	9.36E-03	1.13E-06	8.38E-07	6.31E-07	9.3658E-03
465121.77	3772571.55	47230.92565	1.31238	8.01217	1.58696	9.33E-03	9.07E-07	4.47E-06	8.28E-07	9.3395E-03
465112.85	3772821.05	47185.73205	1.54057	1.61951	1.2189	9.32E-03	1.06E-06	9.04E-07	6.36E-07	9.3269E-03
465063.24	3772497.21	47127.90682	1.41303	25.83305	1.90508	9.31E-03	9.77E-07	1.44E-05	9.93E-07	9.3293E-03
465077.95	3772512.14	46970.9212	1.37878	18.74117	1.81498	9.28E-03	9.53E-07	1.05E-05	9.46E-07	9.2942E-03
464977.17	3772429.22	46959.91435	1.69361	64.01433	2.61459	9.28E-03	1.17E-06	3.57E-05	1.36E-06	9.3180E-03
465068.5	3772854.79	46929.82228	1.72684	1.40587	1.19606	9.27E-03	1.19E-06	7.85E-07	6.24E-07	9.2764E-03
465159.64	3772673.06	46892.06388	1.2988	3.38726	1.36875	9.27E-03	8.98E-07	1.89E-06	7.14E-07	9.2698E-03
465150.6	3772630.66	46817.78375	1.28575	4.61139	1.4394	9.25E-03	8.89E-07	2.57E-06	7.51E-07	9.2558E-03
465048.54	3772482.28	46808.90822	1.44493	39.21113	1.99949	9.25E-03	9.99E-07	2.19E-05	1.04E-06	9.2738E-03
465150.77	3772766.55	46562.72438	1.38525	2.04507	1.25384	9.20E-03	9.58E-07	1.14E-06	6.54E-07	9.2040E-03
465145.24	3772779.77	46520.00339	1.40837	1.92165	1.24079	9.19E-03	9.74E-07	1.07E-06	6.47E-07	9.1955E-03
465163.22	3772700.65	46448.2777	1.30612	2.86468	1.32345	9.18E-03	9.03E-07	1.60E-06	6.90E-07	9.1818E-03
465092.65	3772527.06	46437.00388	1.34318	14.45885	1.73066	9.18E-03	9.29E-07	8.07E-06	9.02E-07	9.1863E-03
464602.74	3772322.11	46368.8635	3.51435	2.39966	54.48133	9.16E-03	2.43E-06	1.34E-06	2.84E-05	9.1951E-03
465156.3	3772753.34	46343.86448	1.35956	2.18242	1.26309	9.16E-03	9.40E-07	1.22E-06	6.59E-07	9.1608E-03
465139.71	3772792.99	46205.83923	1.42887	1.81135	1.22409	9.13E-03	9.88E-07	1.01E-06	6.38E-07	9.1333E-03
465161.83	3772740.12	45852.73691	1.33117	2.32242	1.26812	9.06E-03	9.20E-07	1.30E-06	6.61E-07	9.0638E-03
465107.26	3772834.43	45816.96189	1.55246	1.52656	1.18779	9.05E-03	1.07E-06	8.52E-07	6.19E-07	9.0564E-03
464563.52	3772423.97	45736.41923	7.85548	2.57186	16.57696	9.04E-03	5.43E-06	1.44E-06	8.64E-06	9.0534E-03
465134.19	3772806.21	45628.33817	1.44692	1.71014	1.20412	9.02E-03	1.00E-06	9.55E-07	6.28E-07	9.0192E-03
464817.05	3772332.79	45573.72024	2.32264	6.36962	5.84376	9.01E-03	1.61E-06	3.56E-06	3.05E-06	9.0140E-03
465107.36	3772541.99	45548.75734	1.30596	11.53888	1.64952	9.00E-03	9.03E-07	6.44E-06	8.60E-07	9.0091E-03
465046.95	3772870.14	45504.25247	1.81765	1.31042	1.16726	8.99E-03	1.26E-06	7.31E-07	6.09E-07	8.9947E-03
465136.48	3772586.47	45391.38526	1.26818	6.78934	1.50841	8.97E-03	8.77E-07	3.79E-06	7.87E-07	8.9752E-03
465084.43	3772852.86	45365.18997	1.64252	1.41046	1.17063	8.96E-03	1.14E-06	7.87E-07	6.10E-07	8.9671E-03
465150.89	3772616.03	45241.16946	1.25636	5.15389	1.43799	8.94E-03	8.69E-07	2.88E-06	7.50E-07	8.9446E-03
465167.36	3772726.9	45100.56335	1.30037	2.4729	1.26935	8.91E-03	8.99E-07	1.38E-06	6.62E-07	8.9152E-03
464583.86	3772341.09	44997.14839	3.98678	2.30823	27.36172	8.89E-03	2.76E-06	1.29E-06	1.43E-05	8.9102E-03
465165.01	3772660.21	44951.00988	1.25562	3.65404	1.35298	8.88E-03	8.68E-07	2.04E-06	7.06E-07	8.8863E-03
465168.81	3772687.27	44948.53367	1.26704	3.07536	1.31433	8.88E-03	8.76E-07	1.72E-06	6.85E-07	8.8855E-03
465128.66	3772819.43	44790.92353	1.46237	1.61474	1.18061	8.85E-03	1.01E-06	9.01E-07	6.16E-07	8.8536E-03
464790.66	3772313.36	44662.64164	2.24755	4.91309	6.9626	8.83E-03	1.55E-06	2.74E-06	3.63E-06	8.8337E-03
465063.06	3772867.78	44527.735	1.73009	1.32186	1.15054	8.80E-03	1.20E-06	7.38E-07	6.00E-07	8.8016E-03
465122.06	3772556.92	44381.60049	1.26779	9.43966	1.57178	8.77E-03	8.76E-07	5.27E-06	8.20E-07	8.7772E-03
465101.66	3772847.81	44132.80681	1.56112	1.43434	1.15244	8.72E-03	1.08E-06	8.01E-07	6.01E-07	8.7235E-03
465172.89	3772713.68	44103.54833	1.26732	2.63776	1.26673	8.72E-03	8.76E-07	1.47E-06	6.61E-07	8.7183E-03
465165.3	3772645.58	44092.06	1.23401	4.06438	1.36168	8.71E-03	8.53E-07	2.27E-06	7.10E-07	8.7168E-03
464925.28	3772393.86	43794.59073	1.88834	18.71205	3.25924	8.65E-03	1.31E-06	1.04E-05	1.70E-06	8.6677E-03
465123.13	3772832.64	43729.21637	1.4754	1.52528	1.15418	8.64E-03	1.02E-06	8.51E-07	6.02E-07	8.6438E-03
465160.79	3772778.77	43575.59335	1.33428	1.91597	1.19294	8.61E-03	9.22E-07	1.07E-06	6.22E-07	8.6136E-03
464669.44	3772277.96	43565.98028	2.31382	2.57612	33.28112	8.61E-03	1.60E-06	1.44E-06	1.74E-05	8.6294E-03
465166.26	3772765.69	43488.60393	1.3113	2.03545	1.20308	8.59E-03	9.06E-07	1.14E-06	6.27E-07	8.5964E-03
465155.32	3772791.84	43436.74176	1.35483	1.80184	1.17928	8.58E-03	9.37E-07	1.01E-06	6.15E-07	8.5861E-03
465151.18	3772601.4	43433.51706	1.22434	5.81761	1.43323	8.58E-03	8.46E-07	3.25E-06	7.47E-07	8.5877E-03
464604.77	3772306.04	43408.85015	2.99941	2.24182	59.80515	8.58E-03	2.07E-06	1.25E-06	3.12E-05	8.6125E-03
465079.06	3772865.7	43304.11995	1.64709	1.32857	1.13011	8.56E-03	1.14E-06	7.42E-07	5.89E-07	8.5598E-03
465174.41	3772673.89	43231.38324	1.22597	3.30911	1.30126	8.54E-03	8.48E-07	1.85E-06	6.79E-07	8.5463E-03
464841.83	3772342.53	43181.41158	2.18607	7.38962	4.98638	8.53E-03	1.51E-06	4.13E-06	2.60E-06	8.5413E-03

465171.72	3772752.62	43165.3275	1.28605	2.16083	1.20964	8.53E-03	8.89E-07	1.21E-06	6.31E-07	8.5326E-03
465149.85	3772804.91	43065.12826	1.37295	1.70063	1.1623	8.51E-03	9.49E-07	9.49E-07	6.06E-07	8.5126E-03
465136.77	3772571.85	42987.17078	1.22894	7.86173	1.49702	8.49E-03	8.50E-07	4.39E-06	7.81E-07	8.5007E-03
465165.59	3772630.96	42886.43968	1.20922	4.51575	1.3641	8.47E-03	8.36E-07	2.52E-06	7.11E-07	8.4788E-03
465178.42	3772700.47	42878.45148	1.23219	2.81835	1.26039	8.47E-03	8.52E-07	1.57E-06	6.57E-07	8.4763E-03
465078.24	3772497.51	42677.75429	1.31468	25.53678	1.78565	8.43E-03	9.09E-07	1.43E-05	9.31E-07	8.4496E-03
465177.19	3772739.55	42608.11337	1.25854	2.29419	1.21277	8.42E-03	8.70E-07	1.28E-06	6.32E-07	8.4225E-03
465092.95	3772512.44	42589.10184	1.28522	18.58822	1.70489	8.42E-03	8.88E-07	1.04E-05	8.89E-07	8.4282E-03
464708.44	3772276.23	42520.69891	2.12438	2.89686	15.99371	8.40E-03	1.47E-06	1.62E-06	8.34E-06	8.4139E-03
465144.38	3772817.98	42461.47191	1.389	1.60827	1.14254	8.39E-03	9.60E-07	8.98E-07	5.96E-07	8.3932E-03
465063.54	3772482.58	42377.15929	1.34194	38.51908	1.87056	8.37E-03	9.28E-07	2.15E-05	9.75E-07	8.3975E-03
465117.6	3772845.86	42376.75046	1.48542	1.43689	1.12374	8.37E-03	1.03E-06	8.02E-07	5.86E-07	8.3765E-03
465096.07	3772861.19	42245.42533	1.56709	1.34642	1.11397	8.35E-03	1.08E-06	7.52E-07	5.81E-07	8.3505E-03
465107.65	3772527.36	42155.21291	1.25398	14.2844	1.62779	8.33E-03	8.67E-07	7.97E-06	8.49E-07	8.3399E-03
464555.5	3772407.28	42119.0922	6.07002	2.30032	14.11547	8.32E-03	4.20E-06	1.28E-06	7.36E-06	8.3360E-03
464682.38	3772272.35	42088.93573	2.15499	2.59259	24.90141	8.32E-03	1.49E-06	1.45E-06	1.30E-05	8.3331E-03
465057.63	3772880.78	42065.73611	1.73165	1.2427	1.10402	8.31E-03	1.20E-06	6.94E-07	5.76E-07	8.3150E-03
464591.83	3772311.65	41989.07305	3.067	2.13072	34.52987	8.30E-03	2.12E-06	1.19E-06	1.80E-05	8.3187E-03
465182.66	3772726.47	41825.84672	1.22888	2.43863	1.21231	8.27E-03	8.50E-07	1.36E-06	6.32E-07	8.2680E-03
465048.83	3772467.66	41669.56135	1.36729	70.29163	1.96148	8.23E-03	9.45E-07	3.92E-05	1.02E-06	8.2755E-03
465138.92	3772831.06	41647.12174	1.40279	1.52172	1.12002	8.23E-03	9.70E-07	8.49E-07	5.84E-07	8.2323E-03
465183.94	3772687.25	41456.9298	1.19532	3.01842	1.25067	8.19E-03	8.26E-07	1.68E-06	6.52E-07	8.1954E-03
465151.47	3772586.77	41431.71725	1.18992	6.64601	1.42546	8.19E-03	8.23E-07	3.71E-06	7.43E-07	8.1926E-03
465165.89	3772616.33	41424.08047	1.18127	5.04412	1.36211	8.19E-03	8.17E-07	2.82E-06	7.10E-07	8.1901E-03
465122.36	3772542.29	41416.01736	1.22123	11.3536	1.55353	8.18E-03	8.44E-07	6.34E-06	8.10E-07	8.1922E-03
464910.29	3772380.13	41384.63135	1.89703	13.89366	3.46738	8.18E-03	1.31E-06	7.76E-06	1.81E-06	8.1889E-03
465180.01	3772660.51	41353.18105	1.18356	3.57518	1.28514	8.17E-03	8.18E-07	2.00E-06	6.70E-07	8.1753E-03
465073.68	3772878.55	41181.88621	1.65017	1.25231	1.0886	8.14E-03	1.14E-06	6.99E-07	5.68E-07	8.1403E-03
464644.49	3772273.6	40982.06773	2.26247	2.27149	79.82797	8.10E-03	1.56E-06	1.27E-06	4.16E-05	8.1429E-03
465188.13	3772713.4	40833.86806	1.19727	2.5955	1.20841	8.07E-03	8.28E-07	1.45E-06	6.30E-07	8.0721E-03
465176.28	3772777.88	40832.73235	1.26496	1.90019	1.14651	8.07E-03	8.74E-07	1.06E-06	5.98E-07	8.0715E-03
465170.87	3772790.82	40825.33637	1.2855	1.79281	1.13576	8.07E-03	8.89E-07	1.00E-06	5.92E-07	8.0699E-03
465112.07	3772859.08	40784.95124	1.49259	1.35095	1.08977	8.06E-03	1.03E-06	7.54E-07	5.68E-07	8.0618E-03
465181.69	3772764.94	40638.09888	1.24235	2.015	1.15426	8.03E-03	8.59E-07	1.12E-06	6.02E-07	8.0330E-03
465165.46	3772803.76	40616.11922	1.30391	1.69249	1.1219	8.03E-03	9.01E-07	9.45E-07	5.85E-07	8.0286E-03
465133.45	3772844.13	40571.43379	1.41387	1.43674	1.09392	8.02E-03	9.77E-07	8.02E-07	5.70E-07	8.0196E-03
465180.3	3772645.88	40520.01119	1.16275	3.97197	1.29245	8.01E-03	8.04E-07	2.22E-06	6.74E-07	8.0108E-03
464549.83	3772420.52	40490.58944	6.27695	2.25028	12.58738	8.00E-03	4.34E-06	1.26E-06	6.56E-06	8.0135E-03
465137.06	3772557.22	40439.80338	1.18763	9.25969	1.48264	7.99E-03	8.21E-07	5.17E-06	7.73E-07	7.9980E-03
465090.47	3772874.57	40382.83694	1.5723	1.26942	1.07587	7.98E-03	1.09E-06	7.09E-07	5.61E-07	7.9824E-03
464657.19	3772268.08	40368.0302	2.13443	2.30232	47.8262	7.98E-03	1.48E-06	1.29E-06	2.49E-05	8.0048E-03
464556.69	3772369.11	40360.37981	4.38449	2.08753	14.43018	7.98E-03	3.03E-06	1.17E-06	7.52E-06	7.9873E-03
465187.11	3772752	40237.23899	1.21771	2.13454	1.15883	7.95E-03	8.42E-07	1.19E-06	6.04E-07	7.9539E-03
465160.04	3772816.7	40208.2403	1.32021	1.60165	1.10522	7.95E-03	9.13E-07	8.94E-07	5.76E-07	7.9479E-03
464695.31	3772266.73	40184.28771	2.00119	2.59541	19.56139	7.94E-03	1.38E-06	1.45E-06	1.02E-05	7.9538E-03
464816.43	3772317.74	40070.57797	2.05634	5.32985	5.73276	7.92E-03	1.42E-06	2.98E-06	2.99E-06	7.9257E-03
465189.47	3772674.03	39865.49716	1.1569	3.24152	1.23776	7.88E-03	8.00E-07	1.81E-06	6.45E-07	7.8810E-03
464721.65	3772270.5	39796.09463	1.95271	2.86806	13.3093	7.86E-03	1.35E-06	1.60E-06	6.94E-06	7.8740E-03
465166.18	3772601.7	39770.83794	1.15109	5.69123	1.35722	7.86E-03	7.96E-07	3.18E-06	7.08E-07	7.8638E-03
465193.6	3772700.33	39665.76719	1.16412	2.76992	1.20162	7.84E-03	8.05E-07	1.55E-06	6.27E-07	7.8413E-03
465192.52	3772739.05	39643.73706	1.19123	2.26401	1.16051	7.83E-03	8.23E-07	1.26E-06	6.05E-07	7.8367E-03
465154.63	3772829.64	39609.06231	1.3345	1.51695	1.08589	7.83E-03	9.23E-07	8.47E-07	5.66E-07	7.8295E-03
464551.14	3772382.07	39561.92532	4.67319	2.0736	12.99107	7.82E-03	3.23E-06	1.16E-06	6.77E-06	7.8290E-03
465180.59	3772631.26	39391.42501	1.13911	4.41114	1.29426	7.78E-03	7.87E-07	2.46E-06	6.75E-07	7.7880E-03
464790.2	3772298.36	39360.82067	1.97821	4.20424	6.84187	7.78E-03	1.37E-06	2.35E-06	3.57E-06	7.7853E-03
465127.98	3772857.2	39271.18862	1.42233	1.35415	1.0644	7.76E-03	9.83E-07	7.56E-07	5.55E-07	7.7626E-03
464669.9	3772262.57	39269.26209	2.00538	2.32601	33.02191	7.76E-03	1.39E-06	1.30E-06	1.72E-05	7.7799E-03
465151.76	3772572.15	39266.91471	1.15337	7.69318	1.41456	7.76E-03	7.97E-07	4.29E-06	7.38E-07	7.7653E-03
465106.54	3772872.3	39108.4691	1.4981	1.27217	1.05435	7.73E-03	1.04E-06	7.10E-07	5.50E-07	7.7305E-03
465068.31	3772891.39	38997.49352	1.65159	1.18024	1.04597	7.71E-03	1.14E-06	6.59E-07	5.45E-07	7.7086E-03
465197.93	3772726.11	38855.3543	1.16287	2.40313	1.15888	7.68E-03	8.04E-07	1.34E-06	6.04E-07	7.6809E-03
465093.24	3772497.81	38829.09722	1.22706	25.32684	1.67786	7.67E-03	8.48E-07	1.41E-05	8.75E-07	7.6888E-03
465107.94	3772512.74	38779.88432	1.20133	18.40216	1.60456	7.66E-03	8.30E-07	1.03E-05	8.37E-07	7.6752E-03
465149.22	3772842.58	38769.42192	1.34642	1.43507	1.06353	7.66E-03	9.31E-07	8.01E-07	5.55E-07	7.6635E-03
464544.16	3772433.76	38641.22773	6.36169	2.18741	11.22558	7.64E-03	4.40E-06	1.22E-06	5.85E-06	7.6473E-03

465078.53	3772482.88	38552.98026	1.25082	38.18372	1.75474	7.62E-03	8.65E-07	2.13E-05	9.15E-07	7.6415E-03
464891.4	3772361.99	38511.37065	1.88464	10.04314	3.75876	7.61E-03	1.30E-06	5.61E-06	1.96E-06	7.6191E-03
464545.59	3772395.03	38470.06114	4.91237	2.0481	11.73642	7.60E-03	3.40E-06	1.14E-06	6.12E-06	7.6127E-03
465084.87	3772887.94	38425.8944	1.57568	1.19662	1.03625	7.59E-03	1.09E-06	6.68E-07	5.40E-07	7.5956E-03
464735.17	3772270.07	38420.3173	1.87705	2.94936	11.27933	7.59E-03	1.30E-06	1.65E-06	5.88E-06	7.6010E-03
465122.65	3772527.66	38414.46238	1.17355	14.06021	1.53336	7.59E-03	8.11E-07	7.85E-06	8.00E-07	7.6005E-03
465183.93	3772795.74	38359.5452	1.22909	1.72969	1.08859	7.58E-03	8.50E-07	9.66E-07	5.68E-07	7.5826E-03
465199.06	3772687.26	38345.50483	1.12966	2.96505	1.19224	7.58E-03	7.81E-07	1.66E-06	6.22E-07	7.5805E-03
465189.54	3772782.34	38333.56478	1.20852	1.83006	1.09841	7.58E-03	8.35E-07	1.02E-06	5.73E-07	7.5775E-03
465007.71	3772428.28	38312.32562	1.42978	62.24276	2.24472	7.57E-03	9.88E-07	3.47E-05	1.17E-06	7.6078E-03
465054.29	3772899.53	38217.40009	1.70711	1.13644	1.03059	7.55E-03	1.18E-06	6.34E-07	5.37E-07	7.5545E-03
465178.33	3772809.14	38186.72207	1.24746	1.63507	1.07557	7.55E-03	8.62E-07	9.13E-07	5.61E-07	7.5484E-03
465195	3772660.81	38157.46399	1.11765	3.49864	1.22282	7.54E-03	7.73E-07	1.95E-06	6.38E-07	7.5436E-03
465195.14	3772768.93	38115.33693	1.18625	1.94627	1.10571	7.53E-03	8.20E-07	1.09E-06	5.77E-07	7.5344E-03
464840.91	3772327.35	38049.34203	1.95658	6.09557	4.89276	7.52E-03	1.35E-06	3.40E-06	2.55E-06	7.5262E-03
465180.88	3772616.63	38046.69877	1.11278	4.92663	1.2922	7.52E-03	7.69E-07	2.75E-06	6.74E-07	7.5226E-03
464708.24	3772261.12	38035.65103	1.85552	2.5827	15.92563	7.52E-03	1.28E-06	1.44E-06	8.30E-06	7.5272E-03
465166.47	3772587.07	37952.48453	1.11886	6.49719	1.3496	7.50E-03	7.73E-07	3.63E-06	7.04E-07	7.5049E-03
465063.83	3772467.95	37928.1056	1.27232	68.83043	1.83598	7.49E-03	8.80E-07	3.84E-05	9.57E-07	7.5352E-03
465122.51	3772870.27	37916.58939	1.42953	1.27978	1.03419	7.49E-03	9.88E-07	7.14E-07	5.39E-07	7.4949E-03
465203.35	3772713.17	37896.16208	1.13291	2.55561	1.15447	7.49E-03	7.83E-07	1.43E-06	6.02E-07	7.4914E-03
464682.6	3772257.05	37831.636	1.87764	2.33577	24.74543	7.48E-03	1.30E-06	1.30E-06	1.29E-05	7.4914E-03
465172.72	3772822.54	37822.74378	1.26373	1.54674	1.05973	7.47E-03	8.74E-07	8.63E-07	5.53E-07	7.4764E-03
465137.35	3772542.59	37802.57757	1.14475	11.13908	1.46563	7.47E-03	7.91E-07	6.22E-06	7.64E-07	7.4779E-03
465200.75	3772755.53	37708.36113	1.16197	2.06834	1.10999	7.45E-03	8.03E-07	1.15E-06	5.79E-07	7.4541E-03
465143.8	3772855.52	37680.82352	1.35562	1.35356	1.03752	7.45E-03	9.37E-07	7.56E-07	5.41E-07	7.4483E-03
464607.67	3772274.38	37610.37412	2.25173	1.93829	67.04184	7.43E-03	1.56E-06	1.08E-06	3.50E-05	7.4698E-03
465101.01	3772885.52	37461.91633	1.503	1.20287	1.01966	7.40E-03	1.04E-06	6.71E-07	5.32E-07	7.4051E-03
464645.19	3772258.1	37360.92351	1.97033	2.076	77.20413	7.38E-03	1.36E-06	1.16E-06	4.03E-05	7.4256E-03
465195.29	3772646.18	37343.06485	1.09751	3.87762	1.22863	7.38E-03	7.59E-07	2.16E-06	6.41E-07	7.3829E-03
464557.36	3772332.14	37294.71457	3.20585	1.85862	14.40594	7.37E-03	2.22E-06	1.04E-06	7.51E-06	7.3805E-03
465167.11	3772835.95	37266.37885	1.27788	1.46297	1.04104	7.36E-03	8.83E-07	8.17E-07	5.43E-07	7.3664E-03
464551.91	3772344.87	37198.60456	3.45079	1.86596	13.03519	7.35E-03	2.39E-06	1.04E-06	6.80E-06	7.3610E-03
464540.03	3772407.99	37122.85376	5.08766	2.01433	10.63133	7.34E-03	3.52E-06	1.12E-06	5.54E-06	7.3460E-03
465206.36	3772742.13	37116.95357	1.1359	2.19622	1.11133	7.33E-03	7.85E-07	1.23E-06	5.80E-07	7.3372E-03
464999.67	3772419.82	37090.11285	1.43358	42.23731	2.30383	7.33E-03	9.91E-07	2.36E-05	1.20E-06	7.3551E-03
464931.42	3772381.16	37002.24935	1.69112	14.23132	3.08471	7.31E-03	1.17E-06	7.94E-06	1.61E-06	7.3227E-03
465152.06	3772557.52	36980.17939	1.11501	9.05666	1.40087	7.31E-03	7.71E-07	5.06E-06	7.30E-07	7.3142E-03
465204.53	3772674.18	36880.40086	1.09386	3.18125	1.17998	7.29E-03	7.56E-07	1.78E-06	6.15E-07	7.2911E-03
464546.46	3772357.6	36815.76921	3.6858	1.86414	11.85406	7.28E-03	2.55E-06	1.04E-06	6.18E-06	7.2849E-03
464979.73	3772407.36	36812.39624	1.49828	27.11023	2.49526	7.27E-03	1.04E-06	1.51E-05	1.30E-06	7.2919E-03
464748.69	3772269.65	36811.78714	1.79947	3.02318	9.70345	7.27E-03	1.24E-06	1.69E-06	5.06E-06	7.2823E-03
465208.76	3772700.23	36791.04263	1.10165	2.72465	1.14752	7.27E-03	7.62E-07	1.52E-06	5.98E-07	7.2731E-03
464657.7	3772252.67	36568.4901	1.86465	2.10163	46.66865	7.23E-03	1.29E-06	1.17E-06	2.43E-05	7.2531E-03
465138.39	3772868.46	36533.78166	1.36355	1.28057	1.01049	7.22E-03	9.43E-07	7.15E-07	5.27E-07	7.2216E-03
465181.17	3772602	36528.9822	1.08431	5.55138	1.2871	7.22E-03	7.50E-07	3.10E-06	6.71E-07	7.2230E-03
465117.04	3772883.35	36437.59753	1.4348	1.20922	1.00204	7.20E-03	9.92E-07	6.75E-07	5.23E-07	7.2026E-03
465161.51	3772849.35	36423.38778	1.28921	1.37962	1.01859	7.20E-03	8.91E-07	7.70E-07	5.31E-07	7.1998E-03
465079.28	3772901.32	36379.10777	1.57706	1.12658	0.99514	7.19E-03	1.09E-06	6.29E-07	5.19E-07	7.1911E-03
465211.96	3772728.72	36344.58202	1.10805	2.33433	1.10957	7.18E-03	7.66E-07	1.30E-06	5.79E-07	7.1847E-03
465195.59	3772631.56	36286.6268	1.07499	4.30318	1.22991	7.17E-03	7.43E-07	2.40E-06	6.41E-07	7.1744E-03
464541	3772370.33	36152.83833	3.90004	1.85453	10.82997	7.14E-03	2.70E-06	1.04E-06	5.65E-06	7.1535E-03
465199.52	3772794.63	36105.487	1.16784	1.71465	1.04897	7.13E-03	8.07E-07	9.57E-07	5.47E-07	7.1371E-03
465193.97	3772807.89	36054.7419	1.18614	1.62289	1.03833	7.12E-03	8.20E-07	9.06E-07	5.41E-07	7.1270E-03
464695.3	3772251.54	36040.68797	1.75435	2.33725	19.36081	7.12E-03	1.21E-06	1.30E-06	1.01E-05	7.1346E-03
465166.76	3772572.45	35998.02232	1.08479	7.51596	1.33916	7.11E-03	7.50E-07	4.20E-06	6.98E-07	7.1192E-03
465205.07	3772781.37	35985.89511	1.14785	1.82055	1.05711	7.11E-03	7.94E-07	1.02E-06	5.51E-07	7.1135E-03
465188.42	3772821.16	35831.3747	1.20262	1.53784	1.02522	7.08E-03	8.31E-07	8.58E-07	5.35E-07	7.0828E-03
465095.48	3772898.73	35736.91909	1.50621	1.13709	0.98379	7.06E-03	1.04E-06	6.35E-07	5.13E-07	7.0641E-03
465210.61	3772768.11	35702.59282	1.12609	1.92991	1.06257	7.06E-03	7.78E-07	1.08E-06	5.54E-07	7.0576E-03
464721.18	3772255.5	35661.37158	1.71941	2.55887	13.23035	7.05E-03	1.19E-06	1.43E-06	6.90E-06	7.0565E-03
464534.48	3772420.96	35590.68172	5.19207	1.97061	9.62592	7.03E-03	3.59E-06	1.10E-06	5.02E-06	7.0428E-03
464815.83	3772302.7	35559.08071	1.83153	4.5369	5.61999	7.03E-03	1.27E-06	2.53E-06	2.93E-06	7.0335E-03
465214.17	3772687.29	35544.94941	1.0691	2.9096	1.13787	7.02E-03	7.39E-07	1.62E-06	5.93E-07	7.0270E-03
465108.24	3772498.11	35469.55238	1.14832	25.09241	1.57935	7.01E-03	7.94E-07	1.40E-05	8.24E-07	7.0247E-03

465155.9	3772862.75	35437.61084	1.2986	1.30194	0.99381	7.00E-03	8.98E-07	7.27E-07	5.18E-07	7.0049E-03
465182.88	3772834.42	35437.5188	1.21709	1.4569	1.00941	7.00E-03	8.41E-07	8.13E-07	5.26E-07	7.0050E-03
465122.94	3772513.04	35435.359	1.12545	18.13409	1.51195	7.00E-03	7.78E-07	1.01E-05	7.88E-07	7.0140E-03
465217.57	3772715.32	35405.7128	1.07858	2.48446	1.10487	7.00E-03	7.46E-07	1.39E-06	5.76E-07	6.9992E-03
464670.21	3772247.24	35402.59076	1.75824	2.11911	32.1748	7.00E-03	1.22E-06	1.18E-06	1.68E-05	7.0151E-03
465132.98	3772881.4	35326.93723	1.37026	1.21402	0.98279	6.98E-03	9.47E-07	6.78E-07	5.12E-07	6.9831E-03
465210	3772661.11	35300.31081	1.05708	3.42206	1.16519	6.98E-03	7.31E-07	1.91E-06	6.08E-07	6.9789E-03
464535.55	3772383.06	35250.84744	4.08308	1.83624	9.91251	6.97E-03	2.82E-06	1.03E-06	5.17E-06	6.9749E-03
465216.16	3772754.85	35250.01455	1.10258	2.04314	1.06527	6.97E-03	7.62E-07	1.14E-06	5.55E-07	6.9682E-03
465093.53	3772483.18	35217.01492	1.16919	37.86826	1.6493	6.96E-03	8.08E-07	2.11E-05	8.60E-07	6.9820E-03
465137.64	3772527.96	35129.37992	1.1008	13.77823	1.44643	6.94E-03	7.61E-07	7.69E-06	7.54E-07	6.9511E-03
465195.88	3772616.93	35045.07551	1.05013	4.80193	1.22769	6.93E-03	7.26E-07	2.68E-06	6.40E-07	6.9293E-03
464789.73	3772283.37	35009.80458	1.7547	3.64721	6.71694	6.92E-03	1.21E-06	2.04E-06	3.50E-06	6.9250E-03
464919.29	3772368.38	34981.33441	1.6776	11.23349	3.23083	6.91E-03	1.16E-06	6.27E-06	1.68E-06	6.9218E-03
465111.58	3772896.42	34920.91175	1.43882	1.1444	0.96935	6.90E-03	9.95E-07	6.39E-07	5.05E-07	6.9028E-03
464613.45	3772256.68	34898.42315	1.95031	1.82337	94.80784	6.90E-03	1.35E-06	1.02E-06	4.94E-05	6.9481E-03
465181.47	3772587.37	34864.28446	1.05394	6.3233	1.27922	6.89E-03	7.29E-07	3.53E-06	6.67E-07	6.8944E-03
465177.33	3772847.68	34790.38041	1.22913	1.37693	0.99024	6.87E-03	8.50E-07	7.69E-07	5.16E-07	6.8770E-03
464600.16	3772262.45	34724.37515	2.02448	1.76718	45.6647	6.86E-03	1.40E-06	9.86E-07	2.38E-05	6.8881E-03
465152.35	3772542.89	34623.35556	1.07539	10.89111	1.38484	6.84E-03	7.43E-07	6.08E-06	7.22E-07	6.8494E-03
465210.29	3772646.48	34503.48871	1.03756	3.78036	1.16948	6.82E-03	7.17E-07	2.11E-06	6.10E-07	6.8216E-03
464734.7	3772255.08	34423.19526	1.65872	2.6258	11.16365	6.80E-03	1.15E-06	1.47E-06	5.82E-06	6.8108E-03
465150.3	3772876.15	34400.71144	1.30684	1.23254	0.96843	6.80E-03	9.03E-07	6.88E-07	5.05E-07	6.8000E-03
464640.03	3772245.14	34323.01275	1.7741	1.89931	101.66038	6.78E-03	1.23E-06	1.06E-06	5.30E-05	6.8378E-03
464586.87	3772268.22	34177.55454	2.08499	1.70608	28.0607	6.75E-03	1.44E-06	9.52E-07	1.46E-05	6.7708E-03
464530.1	3772395.79	34138.32795	4.22655	1.81074	9.08313	6.75E-03	2.92E-06	1.01E-06	4.74E-06	6.7547E-03
464546.9	3772321.17	34125.24376	2.79081	1.67401	11.76605	6.74E-03	1.93E-06	9.34E-07	6.14E-06	6.7525E-03
464708.01	3772246.02	34101.99043	1.63697	2.32333	15.72722	6.74E-03	1.13E-06	1.30E-06	8.20E-06	6.7495E-03
464541.53	3772333.71	34034.02555	2.97887	1.68058	10.80684	6.73E-03	2.06E-06	9.38E-07	5.64E-06	6.7341E-03
464682.72	3772241.81	34001.91797	1.65346	2.12215	24.14899	6.72E-03	1.14E-06	1.18E-06	1.26E-05	6.7340E-03
465127.57	3772894.34	33997.86764	1.37505	1.14972	0.9531	6.72E-03	9.51E-07	6.42E-07	4.97E-07	6.7204E-03
465171.78	3772860.94	33993.55005	1.23922	1.30152	0.9687	6.72E-03	8.57E-07	7.27E-07	5.05E-07	6.7195E-03
464552.27	3772308.64	33980.23946	2.60069	1.66074	12.86977	6.71E-03	1.80E-06	9.27E-07	6.71E-06	6.7242E-03
465167.05	3772557.82	33942.98776	1.04921	8.84173	1.3262	6.71E-03	7.25E-07	4.94E-06	6.92E-07	6.7138E-03
464528.93	3772433.92	33932.27141	5.22078	1.91225	8.67675	6.71E-03	3.61E-06	1.07E-06	4.52E-06	6.7145E-03
464889.86	3772346.58	33890.13621	1.72054	7.99264	3.69515	6.70E-03	1.19E-06	4.46E-06	1.93E-06	6.7046E-03
464840.07	3772312.22	33855.93415	1.75904	5.13105	4.79607	6.69E-03	1.22E-06	2.86E-06	2.50E-06	6.6968E-03
464536.16	3772346.24	33711.35169	3.15816	1.67927	9.94785	6.66E-03	2.18E-06	9.37E-07	5.19E-06	6.6700E-03
465196.17	3772602.3	33654.19453	1.02336	5.40441	1.22267	6.65E-03	7.07E-07	3.02E-06	6.38E-07	6.6547E-03
465210.58	3772631.86	33514.34493	1.01613	4.18831	1.17024	6.62E-03	7.02E-07	2.34E-06	6.10E-07	6.6264E-03
464653.32	3772239.37	33487.50995	1.67874	1.92116	53.31065	6.62E-03	1.16E-06	1.07E-06	2.78E-05	6.6475E-03
465106.11	3772909.49	33329.70853	1.44122	1.08245	0.93551	6.59E-03	9.96E-07	6.04E-07	4.88E-07	6.5883E-03
464573.58	3772273.98	33324.98816	2.12868	1.63957	19.60663	6.59E-03	1.47E-06	9.15E-07	1.02E-05	6.5979E-03
465144.69	3772889.56	33248.53451	1.31332	1.16679	0.94132	6.57E-03	9.08E-07	6.51E-07	4.91E-07	6.5723E-03
464530.79	3772358.77	33165.48423	3.32203	1.67072	9.17343	6.55E-03	2.30E-06	9.33E-07	4.78E-06	6.5618E-03
465166.23	3772874.2	33128.75663	1.24811	1.23336	0.94618	6.55E-03	8.63E-07	6.88E-07	4.93E-07	6.5486E-03
465181.76	3772572.75	33094.18046	1.02215	7.30378	1.26923	6.54E-03	7.07E-07	4.08E-06	6.62E-07	6.5452E-03
464748.22	3772254.66	32996.78879	1.59632	2.68674	9.56546	6.52E-03	1.10E-06	1.50E-06	4.99E-06	6.5281E-03
464524.64	3772408.52	32856.91608	4.32423	1.77715	8.31541	6.49E-03	2.99E-06	9.92E-07	4.34E-06	6.5011E-03
465122.15	3772907.28	32604.93527	1.37841	1.08919	0.9225	6.44E-03	9.53E-07	6.08E-07	4.81E-07	6.4451E-03
465123.23	3772498.41	32509.87784	1.077	24.71128	1.48847	6.42E-03	7.45E-07	1.38E-05	7.76E-07	6.4396E-03
465137.94	3772513.34	32482.96786	1.05655	17.76489	1.42636	6.42E-03	7.30E-07	9.92E-06	7.44E-07	6.4303E-03
464695.22	3772236.38	32436.30617	1.55258	2.11617	19.0495	6.41E-03	1.07E-06	1.18E-06	9.93E-06	6.4219E-03
464525.42	3772371.31	32412.13337	3.46495	1.65647	8.48027	6.40E-03	2.40E-06	9.25E-07	4.42E-06	6.4127E-03
464666.61	3772233.6	32398.5826	1.58285	1.9323	34.81539	6.40E-03	1.09E-06	1.08E-06	1.82E-05	6.4226E-03
465210.88	3772617.23	32361.53048	0.99254	4.66505	1.16764	6.39E-03	6.86E-07	2.60E-06	6.09E-07	6.3988E-03
465108.53	3772483.48	32284.71164	1.09553	37.39993	1.55256	6.38E-03	7.57E-07	2.09E-05	8.10E-07	6.4022E-03
465152.64	3772528.26	32240.80008	1.03492	13.47658	1.36691	6.37E-03	7.15E-07	7.52E-06	7.13E-07	6.3800E-03
464614.77	3772240.91	32238.81598	1.72354	1.69784	102.71565	6.37E-03	1.19E-06	9.48E-07	5.36E-05	6.4264E-03
464601.7	3772246.58	32226.60418	1.79091	1.65854	50.02964	6.37E-03	1.24E-06	9.26E-07	2.61E-05	6.3965E-03
465160.69	3772887.47	32172.05887	1.25548	1.16984	0.92234	6.36E-03	8.68E-07	6.53E-07	4.81E-07	6.3595E-03
465196.46	3772587.67	32134.2605	0.99484	6.14239	1.21487	6.35E-03	6.88E-07	3.43E-06	6.33E-07	6.3548E-03
464720.71	3772240.51	32060.45692	1.5272	2.30121	13.06546	6.34E-03	1.06E-06	1.28E-06	6.81E-06	6.3446E-03
464588.64	3772252.25	31986.04624	1.84907	1.60981	30.08132	6.32E-03	1.28E-06	8.99E-07	1.57E-05	6.3386E-03
465139.08	3772902.96	31980.76443	1.31787	1.10346	0.91229	6.32E-03	9.11E-07	6.16E-07	4.76E-07	6.3217E-03

465167.35	3772543.19	31826.69618	1.01249	10.62662	1.31111	6.29E-03	7.00E-07	5.93E-06	6.84E-07	6.2966E-03
464815.26	3772287.67	31817.32926	1.64056	3.91685	5.50144	6.29E-03	1.13E-06	2.19E-06	2.87E-06	6.2936E-03
465093.82	3772468.55	31799.37723	1.11188	66.75898	1.61908	6.28E-03	7.69E-07	3.73E-05	8.44E-07	6.3227E-03
464575.57	3772257.93	31496.24872	1.89512	1.55219	20.35783	6.22E-03	1.31E-06	8.66E-07	1.06E-05	6.2367E-03
464520.05	3772383.84	31476.88106	3.5817	1.637	7.84757	6.22E-03	2.48E-06	9.14E-07	4.09E-06	6.2276E-03
465009.99	3772408.61	31473.7251	1.29386	28.29324	2.15614	6.22E-03	8.94E-07	1.58E-05	1.12E-06	6.2373E-03
464519.19	3772421.25	31449.94287	4.37734	1.7378	7.60518	6.21E-03	3.03E-06	9.70E-07	3.97E-06	6.2228E-03
464640.9	3772229.56	31413.9709	1.5708	1.75141	96.01251	6.21E-03	1.09E-06	9.78E-07	5.01E-05	6.2598E-03
464789.26	3772268.38	31382.18259	1.56723	3.19998	6.58213	6.20E-03	1.08E-06	1.79E-06	3.43E-06	6.2077E-03
464535.59	3772312.16	31349.61258	2.48168	1.51995	9.72104	6.19E-03	1.72E-06	8.48E-07	5.07E-06	6.2026E-03
464990.08	3772396.2	31255.84882	1.34633	20.00181	2.32851	6.18E-03	9.31E-07	1.12E-05	1.21E-06	6.1898E-03
465182.05	3772558.12	31240.83459	0.98907	8.57909	1.25691	6.17E-03	6.84E-07	4.79E-06	6.55E-07	6.1796E-03
464529.89	3772325.47	31224.36246	2.63954	1.52346	8.9609	6.17E-03	1.82E-06	8.50E-07	4.67E-06	6.1776E-03
465155.14	3772900.73	31120.18598	1.26127	1.10964	0.89715	6.15E-03	8.72E-07	6.19E-07	4.68E-07	6.1516E-03
464679.9	3772227.83	31109.67689	1.48895	1.93425	25.29627	6.15E-03	1.03E-06	1.08E-06	1.32E-05	6.1629E-03
465211.17	3772602.6	31085.98601	0.96738	5.24093	1.16273	6.14E-03	6.69E-07	2.93E-06	6.06E-07	6.1471E-03
464734.23	3772240.09	30993.42918	1.47778	2.35654	11.003	6.12E-03	1.02E-06	1.32E-06	5.74E-06	6.1327E-03
464524.18	3772338.79	30872.66329	2.78789	1.52036	8.2814	6.10E-03	1.93E-06	8.49E-07	4.32E-06	6.1078E-03
464970.09	3772383.6	30852.56418	1.39777	15.01925	2.5228	6.10E-03	9.66E-07	8.38E-06	1.32E-06	6.1074E-03
464707.73	3772230.95	30783.05485	1.45707	2.10275	15.51713	6.08E-03	1.01E-06	1.17E-06	8.09E-06	6.0933E-03
464562.5	3772263.6	30728.37589	1.92695	1.49172	15.0722	6.07E-03	1.33E-06	8.33E-07	7.86E-06	6.0822E-03
464653.97	3772223.89	30553.90829	1.49007	1.76577	51.65554	6.04E-03	1.03E-06	9.86E-07	2.69E-05	6.0667E-03
465196.76	3772573.05	30523.28665	0.96506	7.07728	1.20504	6.03E-03	6.67E-07	3.95E-06	6.28E-07	6.0369E-03
464514.68	3772396.38	30394.14551	3.66933	1.6124	7.25909	6.01E-03	2.54E-06	9.00E-07	3.79E-06	6.0134E-03
464839.3	3772297.11	30383.12731	1.58808	4.38843	4.69411	6.00E-03	1.10E-06	2.45E-06	2.45E-06	6.0100E-03
464518.48	3772352.11	30307.63471	2.92194	1.51186	7.67329	5.99E-03	2.02E-06	8.44E-07	4.00E-06	5.9959E-03
464888.54	3772331.25	30197.36835	1.5739	6.54969	3.62541	5.97E-03	1.09E-06	3.66E-06	1.89E-06	5.9739E-03
464929.79	3772357.59	30095.15172	1.49193	9.45691	2.99143	5.95E-03	1.03E-06	5.28E-06	1.56E-06	5.9550E-03
465149.59	3772913.99	29965.81763	1.26524	1.05151	0.87013	5.92E-03	8.75E-07	5.87E-07	4.54E-07	5.9234E-03
464513.74	3772433.98	29964.47258	4.38378	1.68828	6.92324	5.92E-03	3.03E-06	9.42E-07	3.61E-06	5.9288E-03
464602.98	3772230.83	29947.34783	1.59517	1.55043	52.8362	5.92E-03	1.10E-06	8.65E-07	2.76E-05	5.9474E-03
465138.23	3772498.71	29887.66726	1.01219	24.20615	1.40453	5.91E-03	7.00E-07	1.35E-05	7.32E-07	5.9210E-03
465152.93	3772513.64	29884.54901	0.99429	17.38197	1.34821	5.91E-03	6.87E-07	9.70E-06	7.03E-07	5.9166E-03
464590.1	3772236.42	29847.51658	1.64905	1.51395	31.64293	5.90E-03	1.14E-06	8.45E-07	1.65E-05	5.9166E-03
464747.75	3772239.66	29765.23125	1.42693	2.40704	9.40177	5.88E-03	9.86E-07	1.34E-06	4.90E-06	5.8891E-03
464549.44	3772269.27	29750.81622	1.94344	1.42815	11.77937	5.88E-03	1.34E-06	7.97E-07	6.14E-06	5.8873E-03
465211.46	3772587.97	29704.73057	0.94079	5.94751	1.15548	5.87E-03	6.50E-07	3.32E-06	6.03E-07	5.8745E-03
465167.64	3772528.56	29692.94609	0.97516	13.14593	1.29425	5.87E-03	6.74E-07	7.34E-06	6.75E-07	5.8763E-03
465123.52	3772483.78	29688.91585	1.02872	36.74097	1.46323	5.87E-03	7.11E-07	2.05E-05	7.63E-07	5.8888E-03
464577.23	3772242.01	29552.16567	1.69479	1.47151	21.57355	5.84E-03	1.17E-06	8.21E-07	1.12E-05	5.8530E-03
464512.77	3772365.43	29543.02539	3.03736	1.49895	7.1244	5.84E-03	2.10E-06	8.37E-07	3.72E-06	5.8446E-03
464667.04	3772218.22	29528.55111	1.40993	1.7722	34.1544	5.84E-03	9.75E-07	9.89E-07	1.78E-05	5.8549E-03
465182.34	3772543.49	29340.22314	0.95511	10.29872	1.24268	5.80E-03	6.60E-07	5.75E-06	6.48E-07	5.8050E-03
464509.31	3772408.91	29197.58644	3.72594	1.58239	6.70372	5.77E-03	2.58E-06	8.83E-07	3.50E-06	5.7767E-03
464564.36	3772247.6	29048.86982	1.73029	1.42383	15.89194	5.74E-03	1.20E-06	7.95E-07	8.29E-06	5.7506E-03
464720.24	3772225.52	29043.4087	1.36726	2.08306	12.88993	5.74E-03	9.45E-07	1.16E-06	6.72E-06	5.7481E-03
465197.05	3772558.42	28845.98668	0.93427	8.2926	1.19328	5.70E-03	6.46E-07	4.63E-06	6.22E-07	5.7061E-03
464641.59	3772214.07	28838.56239	1.40238	1.61943	92.10992	5.70E-03	9.69E-07	9.04E-07	4.80E-05	5.7487E-03
464519.54	3772314.22	28807.84103	2.33078	1.38837	7.68263	5.69E-03	1.61E-06	7.75E-07	4.01E-06	5.6991E-03
464912.77	3772340.77	28681.68451	1.47724	7.43566	3.19646	5.67E-03	1.02E-06	4.15E-06	1.67E-06	5.6746E-03
464814.71	3772272.64	28673.46596	1.47729	3.42125	5.37419	5.67E-03	1.02E-06	1.91E-06	2.80E-06	5.6719E-03
464507.07	3772378.74	28616.7359	3.13014	1.48076	6.61019	5.65E-03	2.16E-06	8.27E-07	3.45E-06	5.6614E-03
465043.65	3772418.24	28528.79906	1.15217	39.55739	1.87452	5.64E-03	7.96E-07	2.21E-05	9.77E-07	5.6614E-03
464513.94	3772327.32	28508.20214	2.44962	1.38671	7.17313	5.63E-03	1.69E-06	7.74E-07	3.74E-06	5.6397E-03
465063.81	3772431.24	28457.94559	1.10835	73.03775	1.748	5.62E-03	7.66E-07	4.08E-05	9.11E-07	5.6660E-03
464551.49	3772253.18	28380.84975	1.75403	1.36932	12.25312	5.61E-03	1.21E-06	7.64E-07	6.39E-06	5.6167E-03
464788.79	3772253.39	28320.4294	1.40862	2.83459	6.4329	5.60E-03	9.74E-07	1.58E-06	3.35E-06	5.6023E-03
465211.75	3772573.35	28241.44443	0.91302	6.83328	1.14614	5.58E-03	6.31E-07	3.81E-06	5.98E-07	5.5858E-03
464733.76	3772225.09	28087.8868	1.3263	2.12923	10.81367	5.55E-03	9.17E-07	1.19E-06	5.64E-06	5.5582E-03
464706.48	3772216.29	28085.87664	1.31294	1.91516	15.5245	5.55E-03	9.08E-07	1.07E-06	8.10E-06	5.5601E-03
464508.33	3772340.41	28024.65052	2.55774	1.38108	6.71093	5.54E-03	1.77E-06	7.71E-07	3.50E-06	5.5440E-03
464654.47	3772208.48	28012.79529	1.33376	1.62885	50.6524	5.54E-03	9.22E-07	9.09E-07	2.64E-05	5.5638E-03
464503.94	3772421.44	27923.61579	3.75177	1.54644	6.17343	5.52E-03	2.59E-06	8.63E-07	3.22E-06	5.5246E-03
464591.33	3772220.69	27896.57602	1.4797	1.42207	32.81351	5.51E-03	1.02E-06	7.94E-07	1.71E-05	5.5315E-03
464604.03	3772215.18	27842.89484	1.43022	1.45051	55.37058	5.50E-03	9.89E-07	8.10E-07	2.89E-05	5.5327E-03

464578.62	3772226.21	27773.28936	1.52345	1.38833	22.19036	5.49E-03	1.05E-06	7.75E-07	1.16E-05	5.5017E-03
465167.93	3772513.94	27580.80704	0.93769	16.9407	1.27644	5.45E-03	6.48E-07	9.46E-06	6.66E-07	5.4610E-03
465153.23	3772499.01	27571.14094	0.95356	23.70816	1.32779	5.45E-03	6.59E-07	1.32E-05	6.92E-07	5.4629E-03
464538.61	3772258.77	27536.72859	1.7648	1.31021	9.77085	5.44E-03	1.22E-06	7.31E-07	5.09E-06	5.4486E-03
464838.58	3772282.02	27446.68926	1.43952	3.80267	4.58476	5.42E-03	9.95E-07	2.12E-06	2.39E-06	5.4292E-03
464565.92	3772231.72	27434.38492	1.55929	1.34979	16.32672	5.42E-03	1.08E-06	7.53E-07	8.51E-06	5.4316E-03
465182.64	3772528.86	27424.90008	0.92062	12.73196	1.22705	5.42E-03	6.36E-07	7.11E-06	6.40E-07	5.4278E-03
465138.52	3772484.08	27384.15702	0.9681	36.01073	1.38107	5.41E-03	6.69E-07	2.01E-05	7.20E-07	5.4329E-03
464502.72	3772353.5	27376.85811	2.65228	1.3716	6.28222	5.41E-03	1.83E-06	7.66E-07	3.28E-06	5.4158E-03
464887.37	3772315.98	27143.13117	1.44298	5.48556	3.54989	5.36E-03	9.98E-07	3.06E-06	1.85E-06	5.3696E-03
465197.34	3772543.79	27129.72825	0.90274	9.92733	1.17986	5.36E-03	6.24E-07	5.54E-06	6.15E-07	5.3679E-03
464667.34	3772202.89	27029.80974	1.26586	1.63195	33.5863	5.34E-03	8.75E-07	9.11E-07	1.75E-05	5.3606E-03
465123.82	3772469.15	27015.03576	0.98121	64.34181	1.43699	5.34E-03	6.78E-07	3.59E-05	7.49E-07	5.3758E-03
464747.28	3772224.67	27004.65738	1.28436	2.17174	9.20357	5.34E-03	8.88E-07	1.21E-06	4.80E-06	5.3433E-03
464553.22	3772237.24	26916.40188	1.58632	1.30718	12.67964	5.32E-03	1.10E-06	7.30E-07	6.61E-06	5.3274E-03
465000.46	3772385.11	26858.35891	1.21668	15.50079	2.17508	5.31E-03	8.41E-07	8.65E-06	1.13E-06	5.3181E-03
465212.05	3772558.72	26717.60644	0.88427	7.97529	1.13487	5.28E-03	6.11E-07	4.45E-06	5.92E-07	5.2853E-03
464980.49	3772372.58	26603.13771	1.25916	12.15196	2.3506	5.26E-03	8.70E-07	6.78E-06	1.23E-06	5.2659E-03
464498.57	3772433.98	26603.02175	3.74733	1.50319	5.6616	5.26E-03	2.59E-06	8.39E-07	2.95E-06	5.2634E-03
464497.11	3772366.6	26584.44196	2.73081	1.35854	5.87903	5.25E-03	1.89E-06	7.58E-07	3.07E-06	5.2590E-03
464642.14	3772198.63	26536.93781	1.26093	1.50164	88.92301	5.24E-03	8.72E-07	8.38E-07	4.64E-05	5.2920E-03
464719.77	3772210.52	26466.03541	1.23259	1.89642	12.68157	5.23E-03	8.52E-07	1.06E-06	6.61E-06	5.2385E-03
464503.64	3772315.96	26404.75384	2.17561	1.2725	6.28753	5.22E-03	1.50E-06	7.10E-07	3.28E-06	5.2233E-03
464540.51	3772242.75	26284.89701	1.60404	1.26111	10.1659	5.19E-03	1.11E-06	7.04E-07	5.30E-06	5.2013E-03
464940.29	3772346.83	26194.22066	1.337	8.09659	2.77179	5.18E-03	9.24E-07	4.52E-06	1.45E-06	5.1831E-03
465018.31	3772392.46	26160.22625	1.1588	18.23409	2.02274	5.17E-03	8.01E-07	1.02E-05	1.05E-06	5.1815E-03
464597.85	3772202.67	26014.28818	1.31583	1.34683	41.79496	5.14E-03	9.10E-07	7.52E-07	2.18E-05	5.1641E-03
464814.17	3772257.62	25999.24629	1.33696	3.01818	5.23575	5.14E-03	9.24E-07	1.68E-06	2.73E-06	5.1430E-03
464498.11	3772328.86	25985.82867	2.26417	1.26898	5.92998	5.14E-03	1.57E-06	7.08E-07	3.09E-06	5.1404E-03
464571.17	3772214.25	25957.72497	1.40088	1.28875	18.21054	5.13E-03	9.68E-07	7.19E-07	9.50E-06	5.1407E-03
464862.45	3772291.39	25957.30982	1.38696	4.21705	3.96395	5.13E-03	9.59E-07	2.35E-06	2.07E-06	5.1348E-03
464911.4	3772325.42	25790.37487	1.36366	6.14553	3.13245	5.10E-03	9.43E-07	3.43E-06	1.63E-06	5.1024E-03
464611.18	3772196.88	25779.27622	1.26644	1.368	81.61911	5.09E-03	8.75E-07	7.64E-07	4.26E-05	5.1384E-03
464654.85	3772193.12	25743.81154	1.20217	1.50757	49.5785	5.09E-03	8.31E-07	8.42E-07	2.59E-05	5.1147E-03
464788.32	3772238.39	25709.24408	1.27327	2.53139	6.26457	5.08E-03	8.80E-07	1.41E-06	3.27E-06	5.0859E-03
464557.83	3772220.04	25665.05171	1.43358	1.25263	13.61912	5.07E-03	9.91E-07	6.99E-07	7.10E-06	5.0804E-03
464706.23	3772201.2	25637.65347	1.18512	1.7522	15.22333	5.07E-03	8.19E-07	9.78E-07	7.94E-06	5.0760E-03
464733.29	3772210.1	25600.52839	1.1983	1.93545	10.58401	5.06E-03	8.28E-07	1.08E-06	5.52E-06	5.0663E-03
465182.93	3772514.24	25529.57951	0.88605	16.39371	1.21034	5.04E-03	6.13E-07	9.15E-06	6.31E-07	5.0553E-03
464527.81	3772248.27	25513.86746	1.61139	1.21194	8.37258	5.04E-03	1.11E-06	6.77E-07	4.37E-06	5.0479E-03
465168.22	3772499.31	25510.3637	0.9002	23.10505	1.25717	5.04E-03	6.22E-07	1.29E-05	6.56E-07	5.0553E-03
465197.63	3772529.16	25403.3906	0.8708	12.23284	1.16507	5.02E-03	6.02E-07	6.83E-06	6.08E-07	5.0280E-03
465153.52	3772484.38	25337.93082	0.91313	35.29554	1.30586	5.01E-03	6.31E-07	1.97E-05	6.81E-07	5.0280E-03
464544.49	3772225.83	25190.91237	1.4578	1.21258	10.69665	4.98E-03	1.01E-06	6.77E-07	5.58E-06	4.9852E-03
464489.95	3772418.7	25176.62865	3.25953	1.39581	5.2158	4.98E-03	2.25E-06	7.79E-07	2.72E-06	4.9809E-03
465212.34	3772544.09	25162.8138	0.85494	9.49983	1.12204	4.97E-03	5.91E-07	5.30E-06	5.85E-07	4.9789E-03
464837.9	3772266.94	24935.07603	1.30989	3.33108	4.46578	4.93E-03	9.06E-07	1.86E-06	2.33E-06	4.9325E-03
464667.55	3772187.61	24828.62137	1.14431	1.50846	32.95978	4.91E-03	7.91E-07	8.42E-07	1.72E-05	4.9252E-03
464509.65	3772266.51	24823.60039	1.69711	1.16557	6.56798	4.91E-03	1.17E-06	6.51E-07	3.42E-06	4.9106E-03
465073.93	3772419.53	24648.86449	1.01502	41.5775	1.64675	4.87E-03	7.02E-07	2.32E-05	8.59E-07	4.8956E-03
465053.79	3772406.57	24634.86829	1.05145	26.44646	1.76157	4.87E-03	7.27E-07	1.48E-05	9.19E-07	4.8845E-03
464746.81	3772209.68	24631.24876	1.16318	1.97137	8.9643	4.87E-03	8.04E-07	1.10E-06	4.67E-06	4.8739E-03
464886.31	3772300.76	24589.02935	1.32611	4.6728	3.46819	4.86E-03	9.17E-07	2.61E-06	1.81E-06	4.8644E-03
464531.15	3772231.62	24557.12003	1.47276	1.16939	8.69821	4.85E-03	1.02E-06	6.53E-07	4.54E-06	4.8589E-03
465093.98	3772432.3	24500.95419	0.97878	77.36594	1.54314	4.84E-03	6.77E-07	4.32E-05	8.05E-07	4.8863E-03
464572.75	3772198.36	24424.26551	1.27093	1.22004	18.70458	4.83E-03	8.79E-07	6.81E-07	9.75E-06	4.8378E-03
464599.06	3772186.94	24276.74624	1.19203	1.26589	43.6866	4.80E-03	8.24E-07	7.07E-07	2.28E-05	4.8216E-03
464559.6	3772204.07	24276.26646	1.30335	1.19084	13.92541	4.80E-03	9.01E-07	6.65E-07	7.26E-06	4.8060E-03
464719.3	3772195.53	24211.81277	1.11796	1.73539	12.38207	4.78E-03	7.73E-07	9.69E-07	6.46E-06	4.7927E-03
464651.2	3772179.51	23983.36611	1.10624	1.39914	56.79242	4.74E-03	7.65E-07	7.81E-07	2.96E-05	4.7705E-03
464546.45	3772209.78	23979.03882	1.32951	1.15791	10.87218	4.74E-03	9.19E-07	6.46E-07	5.67E-06	4.7457E-03
464612.21	3772181.23	23966.4221	1.14765	1.28199	86.73835	4.74E-03	7.93E-07	7.16E-07	4.52E-05	4.7827E-03
464484.25	3772432.01	23925.81719	3.25255	1.3547	4.78287	4.73E-03	2.25E-06	7.56E-07	2.49E-06	4.7335E-03
464517.81	3772237.41	23802.08143	1.47818	1.12385	7.23865	4.70E-03	1.02E-06	6.27E-07	3.77E-06	4.7089E-03
464813.64	3772242.61	23694.60679	1.21557	2.68524	5.08356	4.68E-03	8.40E-07	1.50E-06	2.65E-06	4.6873E-03

465197.93	3772514.53	23691.94049	0.83873	15.68549	1.14897	4.68E-03	5.80E-07	8.76E-06	5.99E-07	4.6917E-03
465183.22	3772499.61	23666.67161	0.8514	22.32022	1.19188	4.68E-03	5.89E-07	1.25E-05	6.22E-07	4.6904E-03
464861.62	3772276.26	23661.22393	1.27004	3.66861	3.86179	4.68E-03	8.78E-07	2.05E-06	2.01E-06	4.6806E-03
465212.63	3772529.46	23598.03496	0.82521	11.62446	1.10776	4.66E-03	5.70E-07	6.49E-06	5.78E-07	4.6708E-03
465168.52	3772484.68	23508.50979	0.86299	34.41224	1.23653	4.65E-03	5.97E-07	1.92E-05	6.45E-07	4.6659E-03
464705.96	3772186.13	23503.4932	1.07634	1.61048	14.82625	4.64E-03	7.44E-07	8.99E-07	7.73E-06	4.6539E-03
464787.85	3772223.4	23462.63519	1.15707	2.27684	6.0732	4.64E-03	8.00E-07	1.27E-06	3.17E-06	4.6417E-03
464732.82	3772195.11	23441.03056	1.089	1.76854	10.29205	4.63E-03	7.53E-07	9.87E-07	5.37E-06	4.6393E-03
464910.18	3772310.14	23377.73241	1.26113	5.1819	3.06273	4.62E-03	8.72E-07	2.89E-06	1.60E-06	4.6250E-03
465153.81	3772469.75	23212.90776	0.87339	61.66583	1.28298	4.59E-03	6.04E-07	3.44E-05	6.69E-07	4.6228E-03
464990.92	3772361.61	23201.65697	1.14095	10.07825	2.19119	4.58E-03	7.89E-07	5.63E-06	1.14E-06	4.5924E-03
464493.02	3772269.93	23150.43503	1.63162	1.08435	5.42044	4.57E-03	1.13E-06	6.05E-07	2.83E-06	4.5793E-03
464498.75	3772256.56	23125.8725	1.5538	1.08109	5.74702	4.57E-03	1.07E-06	6.03E-07	3.00E-06	4.5746E-03
464664.54	3772173.72	23100.30934	1.05294	1.39951	35.3427	4.56E-03	7.28E-07	7.81E-07	1.84E-05	4.5848E-03
464970.91	3772348.96	23089.36941	1.17493	8.34465	2.36872	4.56E-03	8.12E-07	4.66E-06	1.24E-06	4.5694E-03
464574.11	3772182.58	22983.30923	1.15818	1.1551	19.03398	4.54E-03	8.01E-07	6.45E-07	9.93E-06	4.5531E-03
464561.13	3772188.21	22939.84224	1.1893	1.13145	14.11635	4.53E-03	8.22E-07	6.32E-07	7.36E-06	4.5419E-03
464520.15	3772221.2	22930.26913	1.35924	1.08318	7.34827	4.53E-03	9.40E-07	6.05E-07	3.83E-06	4.5366E-03
464548.14	3772193.85	22776.93022	1.21593	1.1044	10.96734	4.50E-03	8.41E-07	6.16E-07	5.72E-06	4.5081E-03
464837.25	3772251.88	22771.09894	1.19645	2.9453	4.33555	4.50E-03	8.27E-07	1.64E-06	2.26E-06	4.5045E-03
464600.08	3772171.3	22680.8398	1.08553	1.1912	45.18989	4.48E-03	7.50E-07	6.65E-07	2.36E-05	4.5069E-03
464746.34	3772194.69	22578.21743	1.05932	1.79905	8.67697	4.46E-03	7.32E-07	1.00E-06	4.52E-06	4.4679E-03
464474.67	3772418.97	22554.1033	2.86365	1.25764	4.38247	4.46E-03	1.98E-06	7.02E-07	2.29E-06	4.4619E-03
464471.48	3772355.62	22447.96497	2.18963	1.13949	4.43216	4.44E-03	1.51E-06	6.36E-07	2.31E-06	4.4404E-03
465008.14	3772367.39	22426.24996	1.08632	11.06167	2.03666	4.43E-03	7.51E-07	6.17E-06	1.06E-06	4.4396E-03
464613.07	3772165.67	22314.33945	1.04565	1.20338	91.12849	4.41E-03	7.23E-07	6.72E-07	4.75E-05	4.4584E-03
464801.37	3772222.98	22260.68741	1.11503	2.30442	5.37564	4.40E-03	7.71E-07	1.29E-06	2.80E-06	4.4038E-03
464934.05	3772319.51	22242.52842	1.19469	5.75842	2.72525	4.40E-03	8.26E-07	3.21E-06	1.42E-06	4.4008E-03
464718.83	3772180.54	22241.4638	1.01955	1.59518	11.98637	4.40E-03	7.05E-07	8.90E-07	6.25E-06	4.4030E-03
464507	3772226.91	22237.98642	1.36229	1.04269	6.23261	4.39E-03	9.42E-07	5.82E-07	3.25E-06	4.3992E-03
464470.48	3772393.36	22212.74717	2.52594	1.19435	4.31414	4.39E-03	1.75E-06	6.67E-07	2.25E-06	4.3941E-03
464651.66	3772164.11	22159.70865	1.00744	1.30324	54.90176	4.38E-03	6.96E-07	7.27E-07	2.86E-05	4.4090E-03
465212.92	3772514.83	22044.32799	0.79534	14.77124	1.09217	4.36E-03	5.50E-07	8.25E-06	5.70E-07	4.3655E-03
464522.17	3772205.13	22015.06209	1.25121	1.04163	7.39993	4.35E-03	8.65E-07	5.81E-07	3.86E-06	4.3557E-03
465198.22	3772499.91	22010.47296	0.80663	21.27104	1.13137	4.35E-03	5.58E-07	1.19E-05	5.90E-07	4.3625E-03
464470.12	3772323.4	21956.38624	1.89538	1.07289	4.373	4.34E-03	1.31E-06	5.99E-07	2.28E-06	4.3430E-03
465183.51	3772484.98	21866.91259	0.81709	33.23329	1.1724	4.32E-03	5.65E-07	1.86E-05	6.11E-07	4.3408E-03
464466.03	3772368.35	21712.52218	2.22503	1.12262	4.1659	4.29E-03	1.54E-06	6.27E-07	2.17E-06	4.2949E-03
464860.85	3772261.15	21668.6923	1.16626	3.22381	3.75063	4.28E-03	8.06E-07	1.80E-06	1.96E-06	4.2865E-03
464562.44	3772172.45	21661.12367	1.08918	1.07486	14.18651	4.28E-03	7.53E-07	6.00E-07	7.40E-06	4.2892E-03
464813.96	3772227.92	21658.51997	1.10951	2.41373	4.88643	4.28E-03	7.67E-07	1.35E-06	2.55E-06	4.2846E-03
464482.55	3772258.98	21622.50453	1.49078	1.00762	4.80776	4.27E-03	1.03E-06	5.62E-07	2.51E-06	4.2769E-03
464705.66	3772171.06	21620.48388	0.98274	1.48606	14.30126	4.27E-03	6.79E-07	8.30E-07	7.46E-06	4.2814E-03
464575.28	3772166.87	21620.416	1.05961	1.09394	19.20847	4.27E-03	7.33E-07	6.11E-07	1.00E-05	4.2838E-03
464549.6	3772178.02	21600.61156	1.11535	1.05267	10.98028	4.27E-03	7.71E-07	5.88E-07	5.73E-06	4.2756E-03
464488.2	3772245.8	21577.18234	1.425	1.00726	5.09895	4.26E-03	9.85E-07	5.62E-07	2.66E-06	4.2681E-03
464732.35	3772180.12	21555.57912	0.99489	1.62351	9.9243	4.26E-03	6.88E-07	9.06E-07	5.18E-06	4.2664E-03
464476.91	3772272.15	21521.52863	1.55356	1.00829	4.57488	4.25E-03	1.07E-06	5.63E-07	2.39E-06	4.2569E-03
465084.09	3772407.93	21519.85883	0.93278	27.39395	1.55173	4.25E-03	6.45E-07	1.53E-05	8.09E-07	4.2693E-03
464787.38	3772208.41	21517.90886	1.05661	2.06054	5.85615	4.25E-03	7.30E-07	1.15E-06	3.05E-06	4.2571E-03
464588.11	3772161.3	21474.71792	1.02746	1.10982	28.00132	4.24E-03	7.10E-07	6.20E-07	1.46E-05	4.2595E-03
465063.98	3772395.02	21468.94727	0.96348	19.22077	1.65616	4.24E-03	6.66E-07	1.07E-05	8.64E-07	4.2547E-03
464509.18	3772210.76	21463.6761	1.25909	1.00687	6.28519	4.24E-03	8.70E-07	5.62E-07	3.28E-06	4.2461E-03
465104.14	3772420.67	21456.11903	0.90201	43.32111	1.45688	4.24E-03	6.24E-07	2.42E-05	7.60E-07	4.2655E-03
464469.06	3772432.06	21448.26164	2.85341	1.22219	4.04584	4.24E-03	1.97E-06	6.82E-07	2.11E-06	4.2431E-03
464464.39	3772336.76	21392.57393	1.94253	1.06112	4.12116	4.23E-03	1.34E-06	5.92E-07	2.15E-06	4.2315E-03
464664.82	3772158.4	21333.15006	0.96132	1.30208	34.1623	4.22E-03	6.65E-07	7.27E-07	1.78E-05	4.2348E-03
465043.78	3772381.9	21317.22093	0.99377	14.38489	1.77173	4.21E-03	6.87E-07	8.03E-06	9.24E-07	4.2221E-03
465124.13	3772433.26	21277.88821	0.87152	81.32183	1.37061	4.20E-03	6.02E-07	4.54E-05	7.15E-07	4.2514E-03
464464.95	3772406.26	21271.71306	2.53823	1.16691	4.01148	4.20E-03	1.75E-06	6.51E-07	2.09E-06	4.2080E-03
464600.95	3772155.73	21208.91318	0.99318	1.12236	46.28662	4.19E-03	6.87E-07	6.27E-07	2.41E-05	4.2165E-03
465023.48	3772368.53	21104.05132	1.02313	11.24237	1.89972	4.17E-03	7.07E-07	6.28E-06	9.91E-07	4.1783E-03
464523.93	3772189.17	21080.37038	1.15355	1.00006	7.39404	4.17E-03	7.97E-07	5.58E-07	3.86E-06	4.1709E-03
464460.57	3772381.08	20916.85893	2.2499	1.1037	3.91157	4.13E-03	1.56E-06	6.16E-07	2.04E-06	4.1376E-03
465003.05	3772354.86	20892.16318	1.05107	9.05664	2.04212	4.13E-03	7.27E-07	5.06E-06	1.06E-06	4.1353E-03

464496.2	3772216.4	20825.94727	1.26041	0.97068	5.41798	4.12E-03	8.71E-07	5.42E-07	2.83E-06	4.1196E-03
464839.14	3772237.81	20800.75397	1.09479	2.64903	4.12652	4.11E-03	7.57E-07	1.48E-06	2.15E-06	4.1148E-03
464745.87	3772179.69	20782.4875	0.96952	1.64945	8.32733	4.11E-03	6.70E-07	9.21E-07	4.34E-06	4.1127E-03
464458.67	3772350.13	20742.01745	1.98082	1.04763	3.88482	4.10E-03	1.37E-06	5.85E-07	2.03E-06	4.1028E-03
464511.09	3772194.74	20657.49224	1.16478	0.97037	6.28423	4.08E-03	8.05E-07	5.42E-07	3.28E-06	4.0867E-03
464884.46	3772270.42	20609.63092	1.12823	3.52362	3.28494	4.07E-03	7.80E-07	1.97E-06	1.71E-06	4.0771E-03
464459.97	3772311.69	20585.973	1.71373	0.9956	3.93694	4.07E-03	1.18E-06	5.56E-07	2.05E-06	4.0718E-03
464652.03	3772148.75	20537.77921	0.9223	1.21711	52.94014	4.06E-03	6.38E-07	6.79E-07	2.76E-05	4.0874E-03
465213.21	3772500.21	20521.46348	0.76557	19.86731	1.07541	4.06E-03	5.29E-07	1.11E-05	5.61E-07	4.0674E-03
464718.36	3772165.55	20499.48556	0.93429	1.47211	11.46652	4.05E-03	6.46E-07	8.22E-07	5.98E-06	4.0583E-03
464555.55	3772160.24	20472.97568	1.01727	1.01012	11.91959	4.05E-03	7.03E-07	5.64E-07	6.22E-06	4.0531E-03
464568.92	3772154.44	20416.53579	0.98961	1.02809	15.93497	4.03E-03	6.84E-07	5.74E-07	8.31E-06	4.0441E-03
464981.38	3772338.11	20411.89749	1.06835	7.19451	2.20281	4.03E-03	7.39E-07	4.02E-06	1.15E-06	4.0395E-03
464542.18	3772166.05	20403.31528	1.0414	0.98914	9.38706	4.03E-03	7.20E-07	5.52E-07	4.89E-06	4.0381E-03
465198.51	3772485.28	20386.55517	0.77494	31.6143	1.11297	4.03E-03	5.36E-07	1.76E-05	5.80E-07	4.0473E-03
464932.8	3772304.21	20307.98761	1.11271	4.88395	2.6605	4.01E-03	7.69E-07	2.73E-06	1.39E-06	4.0179E-03
464459.43	3772419.16	20301.8778	2.53815	1.1383	3.73021	4.01E-03	1.75E-06	6.35E-07	1.95E-06	4.0162E-03
464851.73	3772242.75	20294.08997	1.08316	2.77251	3.81661	4.01E-03	7.49E-07	1.55E-06	1.99E-06	4.0146E-03
464472.06	3772248.06	20223.25936	1.36901	0.94151	4.31288	4.00E-03	9.46E-07	5.26E-07	2.25E-06	4.0000E-03
464477.64	3772235.05	20211.97939	1.3129	0.93912	4.51737	3.99E-03	9.08E-07	5.24E-07	2.36E-06	3.9979E-03
464466.49	3772261.07	20160.17543	1.42248	0.9392	4.09077	3.98E-03	9.83E-07	5.24E-07	2.13E-06	3.9875E-03
464498.25	3772200.31	20148.55814	1.17046	0.93902	5.42012	3.98E-03	8.09E-07	5.24E-07	2.83E-06	3.9857E-03
464454.32	3772324.87	20090.0661	1.75467	0.98644	3.73478	3.97E-03	1.21E-06	5.51E-07	1.95E-06	3.9737E-03
464455.12	3772393.81	20081.91812	2.26504	1.08304	3.66887	3.97E-03	1.57E-06	6.05E-07	1.91E-06	3.9725E-03
464704.55	3772156.34	20034.5178	0.90447	1.37699	13.8589	3.96E-03	6.25E-07	7.69E-07	7.23E-06	3.9676E-03
464452.94	3772363.5	20020.70658	2.01009	1.0326	3.66058	3.96E-03	1.39E-06	5.76E-07	1.91E-06	3.9602E-03
464595.67	3772142.83	20014.69433	0.92758	1.05474	35.90924	3.96E-03	6.41E-07	5.89E-07	1.87E-05	3.9750E-03
464460.91	3772274.09	19969.40566	1.4726	0.93795	3.91625	3.95E-03	1.02E-06	5.24E-07	2.04E-06	3.9497E-03
464759.4	3772179.27	19946.26863	0.9437	1.67317	7.07494	3.94E-03	6.52E-07	9.34E-07	3.69E-06	3.9468E-03
464813.39	3772212.89	19938.72304	1.0176	2.17645	4.70391	3.94E-03	7.03E-07	1.21E-06	2.45E-06	3.9444E-03
464515.44	3772177.66	19904.07054	1.07643	0.93929	6.44104	3.93E-03	7.44E-07	5.24E-07	3.36E-06	3.9379E-03
464731.88	3772165.12	19894.2508	0.91318	1.49643	9.46072	3.93E-03	6.31E-07	8.35E-07	4.93E-06	3.9377E-03
464786.91	3772193.42	19823.33267	0.96921	1.87494	5.61082	3.92E-03	6.70E-07	1.05E-06	2.93E-06	3.9219E-03
464864.32	3772247.7	19765.62366	1.06917	2.90051	3.54281	3.91E-03	7.39E-07	1.62E-06	1.85E-06	3.9101E-03
464665.01	3772143.12	19764.67288	0.88214	1.21482	32.71086	3.91E-03	6.10E-07	6.78E-07	1.71E-05	3.9240E-03
464609.04	3772137.02	19631.54399	0.89405	1.06308	69.42395	3.88E-03	6.18E-07	5.93E-07	3.62E-05	3.9168E-03
464908.06	3772279.69	19593.89952	1.08459	3.8479	2.90532	3.87E-03	7.50E-07	2.15E-06	1.51E-06	3.8763E-03
464485.42	3772205.88	19554.65019	1.17041	0.90648	4.74175	3.86E-03	8.09E-07	5.06E-07	2.47E-06	3.8680E-03
464448.68	3772338.05	19520.62377	1.78858	0.97541	3.54043	3.86E-03	1.24E-06	5.44E-07	1.85E-06	3.8611E-03
464502.06	3772183.46	19500.87106	1.08651	0.91112	5.5056	3.85E-03	7.51E-07	5.09E-07	2.87E-06	3.8577E-03
464543.8	3772150.15	19376.23378	0.96118	0.94498	9.25723	3.83E-03	6.64E-07	5.28E-07	4.83E-06	3.8349E-03
464557.01	3772144.41	19368.91086	0.93779	0.96218	11.76477	3.83E-03	6.48E-07	5.37E-07	6.13E-06	3.8348E-03
464453.9	3772432.05	19323.90968	2.52625	1.10748	3.4643	3.82E-03	1.75E-06	6.18E-07	1.81E-06	3.8228E-03
464876.91	3772252.64	19260.924	1.05328	3.03295	3.30058	3.81E-03	7.28E-07	1.69E-06	1.72E-06	3.8103E-03
464570.22	3772138.68	19255.765	0.91178	0.97668	15.74637	3.81E-03	6.30E-07	5.45E-07	8.21E-06	3.8145E-03
464447.22	3772376.86	19251.85352	2.03043	1.01539	3.44296	3.80E-03	1.40E-06	5.67E-07	1.80E-06	3.8081E-03
464449.67	3772406.54	19222.4942	2.27089	1.06065	3.43801	3.80E-03	1.57E-06	5.92E-07	1.79E-06	3.8025E-03
464745.41	3772164.7	19207.85155	0.89145	1.51876	7.91153	3.80E-03	6.16E-07	8.48E-07	4.13E-06	3.8012E-03
464838.35	3772222.69	19188.82965	1.00766	2.37458	3.97898	3.79E-03	6.97E-07	1.33E-06	2.07E-06	3.7960E-03
464652.3	3772133.44	19087.25037	0.84841	1.13946	50.57945	3.77E-03	5.87E-07	6.36E-07	2.64E-05	3.7994E-03
464517.37	3772161.62	19062.05608	0.99752	0.90318	6.37191	3.77E-03	6.90E-07	5.04E-07	3.32E-06	3.7714E-03
465213.51	3772485.58	19048.49073	0.73615	29.3125	1.05783	3.76E-03	5.09E-07	1.64E-05	5.52E-07	3.7816E-03
464488.69	3772189.26	19006.34835	1.09126	0.8814	4.78024	3.76E-03	7.54E-07	4.92E-07	2.49E-06	3.7596E-03
464467.07	3772224.32	18982.83643	1.21472	0.87791	4.01991	3.75E-03	8.40E-07	4.90E-07	2.10E-06	3.7546E-03
464461.56	3772237.18	18980.74776	1.26292	0.8804	3.86225	3.75E-03	8.73E-07	4.91E-07	2.01E-06	3.7541E-03
464717.89	3772150.55	18971.9437	0.86006	1.36339	10.84184	3.75E-03	5.95E-07	7.61E-07	5.65E-06	3.7560E-03
465094.3	3772396.43	18932.47308	0.86013	19.68697	1.46223	3.74E-03	5.95E-07	1.10E-05	7.62E-07	3.7536E-03
465114.34	3772409.14	18913.7754	0.83385	28.13188	1.37598	3.74E-03	5.76E-07	1.57E-05	7.18E-07	3.7545E-03
464456.05	3772250.05	18909.60231	1.30901	0.87983	3.69873	3.74E-03	9.05E-07	4.91E-07	1.93E-06	3.7400E-03
464444.19	3772313.13	18899.20513	1.59515	0.92049	3.40048	3.73E-03	1.10E-06	5.14E-07	1.77E-06	3.7380E-03
464443.03	3772351.23	18890.2266	1.81515	0.96245	3.34998	3.73E-03	1.25E-06	5.37E-07	1.75E-06	3.7364E-03
465074.2	3772383.56	18873.30058	0.88635	14.72579	1.55739	3.73E-03	6.13E-07	8.22E-06	8.12E-07	3.7392E-03
465198.8	3772470.65	18832.52158	0.74378	55.61849	1.0936	3.72E-03	5.14E-07	3.10E-05	5.70E-07	3.7536E-03
465134.31	3772421.71	18813.39173	0.80772	44.74002	1.297	3.72E-03	5.58E-07	2.50E-05	6.76E-07	3.7439E-03
464596.64	3772127.21	18778.20026	0.8549	0.99746	35.79776	3.71E-03	5.91E-07	5.57E-07	1.87E-05	3.7306E-03

464450.54	3772262.91	18763.5859	1.35198	0.87591	3.52659	3.71E-03	9.35E-07	4.89E-07	1.84E-06	3.7111E-03
464504.16	3772167.35	18763.44213	1.00972	0.87916	5.45711	3.71E-03	6.98E-07	4.91E-07	2.85E-06	3.7119E-03
465054.03	3772370.5	18758.94851	0.91216	11.5226	1.66194	3.71E-03	6.31E-07	6.43E-06	8.67E-07	3.7149E-03
464704.27	3772141.27	18559.48989	0.83333	1.27941	13.02039	3.67E-03	5.76E-07	7.14E-07	6.79E-06	3.6756E-03
464445.03	3772275.77	18511.10567	1.39157	0.87353	3.39222	3.66E-03	9.62E-07	4.88E-07	1.77E-06	3.6612E-03
465153.55	3772432.45	18488.13018	0.77964	76.69576	1.22478	3.65E-03	5.39E-07	4.28E-05	6.39E-07	3.6974E-03
465013.39	3772343.67	18483.82544	0.9611	7.69135	1.9059	3.65E-03	6.64E-07	4.29E-06	9.94E-07	3.6585E-03
464758.93	3772164.28	18457.31044	0.86923	1.53901	6.69626	3.65E-03	6.01E-07	8.59E-07	3.49E-06	3.6523E-03
464441.49	3772390.23	18448.25047	2.04238	0.99664	3.23372	3.65E-03	1.41E-06	5.56E-07	1.69E-06	3.6492E-03
464475.32	3772195.07	18438.69171	1.09074	0.85054	4.19696	3.64E-03	7.54E-07	4.75E-07	2.19E-06	3.6471E-03
464812.82	3772197.86	18436.84037	0.93698	1.97372	4.50262	3.64E-03	6.48E-07	1.10E-06	2.35E-06	3.6474E-03
464731.41	3772150.13	18432.24525	0.84189	1.38447	8.90274	3.64E-03	5.82E-07	7.73E-07	4.64E-06	3.6484E-03
464992.88	3772329.79	18401.63633	0.98312	6.46284	2.04858	3.64E-03	6.80E-07	3.61E-06	1.07E-06	3.6417E-03
464438.62	3772326.14	18399.65031	1.62511	0.91095	3.23548	3.64E-03	1.12E-06	5.09E-07	1.69E-06	3.6393E-03
464545.21	3772134.34	18387.80349	0.88957	0.90261	9.00689	3.63E-03	6.15E-07	5.04E-07	4.70E-06	3.6394E-03
464609.85	3772121.47	18378.25249	0.82462	1.0035	70.82746	3.63E-03	5.70E-07	5.60E-07	3.69E-05	3.6698E-03
464490.95	3772173.09	18376.70279	1.0175	0.8535	4.74884	3.63E-03	7.03E-07	4.76E-07	2.48E-06	3.6351E-03
464665.14	3772127.87	18376.40829	0.81328	1.13645	30.76799	3.63E-03	5.62E-07	6.34E-07	1.60E-05	3.6486E-03
464444.22	3772419.27	18352.8613	2.26834	1.03716	3.21901	3.63E-03	1.57E-06	5.79E-07	1.68E-06	3.6305E-03
464786.44	3772178.42	18326.64135	0.89261	1.71418	5.33238	3.62E-03	6.17E-07	9.57E-07	2.78E-06	3.6259E-03
464558.28	3772128.66	18320.1668	0.8672	0.91667	11.42889	3.62E-03	5.99E-07	5.12E-07	5.96E-06	3.6273E-03
464902.09	3772262.53	18301.60603	1.0168	3.31294	2.89035	3.62E-03	7.03E-07	1.85E-06	1.51E-06	3.6206E-03
464863.32	3772232.5	18291.37578	0.98857	2.58535	3.42275	3.61E-03	6.83E-07	1.44E-06	1.78E-06	3.6185E-03
464971.84	3772314.61	18286.51013	0.99961	5.44211	2.20837	3.61E-03	6.91E-07	3.04E-06	1.15E-06	3.6185E-03
464519.08	3772145.68	18221.20418	0.926	0.86767	6.24852	3.60E-03	6.40E-07	4.84E-07	3.26E-06	3.6051E-03
464437.39	3772364.41	18212.18263	1.83497	0.94852	3.16902	3.60E-03	1.27E-06	5.29E-07	1.65E-06	3.6023E-03
464571.35	3772122.99	18168.88518	0.84295	0.92834	15.21649	3.59E-03	5.83E-07	5.18E-07	7.93E-06	3.5994E-03
464506.01	3772151.35	18012.47229	0.93948	0.84721	5.36202	3.56E-03	6.49E-07	4.73E-07	2.80E-06	3.5633E-03
464649.16	3772119.61	17958.07472	0.79213	1.06981	55.73255	3.55E-03	5.48E-07	5.97E-07	2.91E-05	3.5789E-03
464477.74	3772178.82	17915.5771	1.02071	0.82651	4.17893	3.54E-03	7.06E-07	4.61E-07	2.18E-06	3.5436E-03
464456.21	3772214.27	17870.60494	1.13036	0.82307	3.58679	3.53E-03	7.81E-07	4.59E-07	1.87E-06	3.5345E-03
464450.47	3772227.67	17858.43592	1.17419	0.82518	3.45345	3.53E-03	8.12E-07	4.61E-07	1.80E-06	3.5321E-03
464433.04	3772339.15	17842.37434	1.64924	0.90033	3.07757	3.53E-03	1.14E-06	5.03E-07	1.60E-06	3.5291E-03
464914.68	3772267.48	17831.05638	0.99663	3.46132	2.71473	3.52E-03	6.89E-07	1.93E-06	1.42E-06	3.5276E-03
464744.94	3772149.71	17813.84594	0.82307	1.40365	7.41975	3.52E-03	5.69E-07	7.84E-07	3.87E-06	3.5254E-03
464837.61	3772207.59	17791.84908	0.93066	2.14206	3.81958	3.52E-03	6.43E-07	1.20E-06	1.99E-06	3.5197E-03
464444.73	3772241.07	17768.90593	1.21579	0.82493	3.32092	3.51E-03	8.40E-07	4.60E-07	1.73E-06	3.5143E-03
464492.95	3772157.02	17718.80756	0.94928	0.82511	4.67838	3.50E-03	6.56E-07	4.61E-07	2.44E-06	3.5050E-03
464597.48	3772111.65	17637.37956	0.79087	0.9444	34.70564	3.49E-03	5.47E-07	5.27E-07	1.81E-05	3.5045E-03
464435.76	3772403.59	17628.18623	2.04623	0.97613	3.03326	3.48E-03	1.41E-06	5.45E-07	1.58E-06	3.4870E-03
464438.99	3772254.47	17615.31701	1.25456	0.82147	3.17883	3.48E-03	8.67E-07	4.59E-07	1.66E-06	3.4839E-03
464717.42	3772135.56	17614.11782	0.79497	1.26683	10.08697	3.48E-03	5.50E-07	7.07E-07	5.26E-06	3.4872E-03
464431.74	3772377.59	17500.46206	1.84797	0.93321	2.99443	3.46E-03	1.28E-06	5.21E-07	1.56E-06	3.4616E-03
464438.76	3772432	17488.39499	2.25606	1.0102	3.00499	3.46E-03	1.56E-06	5.64E-07	1.57E-06	3.4596E-03
464546.46	3772118.6	17446.80787	0.82556	0.86222	8.60826	3.45E-03	5.71E-07	4.81E-07	4.49E-06	3.4532E-03
464888.29	3772242.31	17422.80812	0.9625	2.80986	2.98595	3.44E-03	6.65E-07	1.57E-06	1.56E-06	3.4467E-03
464520.59	3772129.83	17398.66227	0.86133	0.83306	6.05158	3.44E-03	5.95E-07	4.65E-07	3.16E-06	3.4424E-03
464464.53	3772184.56	17392.60687	1.01945	0.7986	3.7098	3.44E-03	7.05E-07	4.46E-07	1.93E-06	3.4400E-03
464433.25	3772267.87	17377.13436	1.28984	0.81673	3.04089	3.43E-03	8.92E-07	4.56E-07	1.59E-06	3.4368E-03
464927.26	3772272.42	17374.19884	0.97561	3.61568	2.55554	3.43E-03	6.74E-07	2.02E-06	1.33E-06	3.4373E-03
464428.49	3772314.37	17365.90723	1.48471	0.85367	2.97029	3.43E-03	1.03E-06	4.77E-07	1.55E-06	3.4347E-03
465168.63	3772432.97	17357.42683	0.74048	78.69423	1.15985	3.43E-03	5.12E-07	4.39E-05	6.05E-07	3.4750E-03
464479.88	3772162.7	17351.98682	0.95526	0.80162	4.12887	3.43E-03	6.60E-07	4.47E-07	2.15E-06	3.4322E-03
464559.39	3772112.98	17329.90341	0.80433	0.87364	10.87204	3.42E-03	5.56E-07	4.88E-07	5.67E-06	3.4313E-03
464662.53	3772113.8	17273.12133	0.75928	1.06655	30.90876	3.41E-03	5.25E-07	5.95E-07	1.61E-05	3.4306E-03
464507.66	3772135.44	17261.88336	0.87543	0.81569	5.21802	3.41E-03	6.05E-07	4.55E-07	2.72E-06	3.4149E-03
464703.97	3772126.21	17252.26669	0.77097	1.1923	11.96663	3.41E-03	5.33E-07	6.66E-07	6.24E-06	3.4166E-03
464427.47	3772352.16	17243.59363	1.66775	0.88838	2.92408	3.41E-03	1.15E-06	4.96E-07	1.52E-06	3.4107E-03
464610.55	3772105.98	17227.88535	0.76346	0.94863	70.05079	3.40E-03	5.28E-07	5.30E-07	3.65E-05	3.4420E-03
464572.33	3772107.37	17143.66167	0.78175	0.88296	14.36084	3.39E-03	5.40E-07	4.93E-07	7.49E-06	3.3963E-03
464758.46	3772149.28	17137.57219	0.80376	1.42092	6.26477	3.39E-03	5.56E-07	7.93E-07	3.27E-06	3.3912E-03
464730.95	3772135.14	17129.63822	0.7792	1.28515	8.23348	3.38E-03	5.39E-07	7.17E-07	4.29E-06	3.3905E-03
464812.27	3772182.83	17102.76612	0.86576	1.7988	4.28212	3.38E-03	5.98E-07	1.00E-06	2.23E-06	3.3835E-03
464494.72	3772141.06	17047.91834	0.88654	0.7967	4.56833	3.37E-03	6.13E-07	4.45E-07	2.38E-06	3.3723E-03
464785.97	3772163.43	17011.95765	0.82532	1.57404	5.02678	3.36E-03	5.71E-07	8.79E-07	2.62E-06	3.3658E-03

464862.39	3772217.33	16987.28605	0.91637	2.32019	3.29211	3.36E-03	6.33E-07	1.30E-06	1.72E-06	3.3605E-03
464466.82	3772168.37	16923.7999	0.95733	0.77706	3.67473	3.34E-03	6.62E-07	4.34E-07	1.92E-06	3.3473E-03
464422.98	3772327.23	16875.34606	1.50644	0.84412	2.83317	3.33E-03	1.04E-06	4.71E-07	1.48E-06	3.3377E-03
464445.64	3772203.53	16861.58164	1.0532	0.77347	3.21714	3.33E-03	7.28E-07	4.32E-07	1.68E-06	3.3348E-03
464439.97	3772216.77	16839.03282	1.09125	0.77529	3.11555	3.33E-03	7.54E-07	4.33E-07	1.62E-06	3.3304E-03
464430.04	3772416.96	16803.32572	2.04315	0.95489	2.84442	3.32E-03	1.41E-06	5.33E-07	1.48E-06	3.3239E-03
465124.56	3772397.69	16780.46678	0.77318	19.94674	1.29958	3.32E-03	5.34E-07	1.11E-05	6.78E-07	3.3283E-03
465104.54	3772385.01	16777.93359	0.79584	14.91661	1.37814	3.32E-03	5.50E-07	8.33E-06	7.19E-07	3.3251E-03
464649.49	3772104.27	16776.28255	0.73402	1.00619	49.90276	3.32E-03	5.07E-07	5.62E-07	2.60E-05	3.3422E-03
464426.09	3772390.77	16771.40629	1.85445	0.91616	2.82367	3.31E-03	1.28E-06	5.11E-07	1.47E-06	3.3175E-03
464434.3	3772230.01	16759.01043	1.12747	0.77506	3.00633	3.31E-03	7.79E-07	4.33E-07	1.57E-06	3.3145E-03
464481.79	3772146.67	16758.96403	0.89434	0.7763	4.05152	3.31E-03	6.18E-07	4.33E-07	2.11E-06	3.3149E-03
465084.46	3772372.19	16727.20746	0.81848	11.68711	1.46461	3.31E-03	5.66E-07	6.52E-06	7.64E-07	3.3133E-03
465064.31	3772359.19	16645.99803	0.84076	9.4604	1.55942	3.29E-03	5.81E-07	5.28E-06	8.13E-07	3.2961E-03
464421.89	3772365.18	16612.69022	1.68072	0.87515	2.77362	3.28E-03	1.16E-06	4.89E-07	1.45E-06	3.2859E-03
464428.63	3772243.25	16610.65649	1.16124	0.77291	2.89735	3.28E-03	8.03E-07	4.31E-07	1.51E-06	3.2852E-03
464526.59	3772112.03	16604.54781	0.79696	0.80449	6.13051	3.28E-03	5.51E-07	4.49E-07	3.20E-06	3.2854E-03
464539.99	3772106.21	16583.19378	0.77897	0.81738	7.2943	3.28E-03	5.38E-07	4.56E-07	3.80E-06	3.2818E-03
464744.47	3772134.71	16572.41417	0.76278	1.3016	6.8534	3.27E-03	5.27E-07	7.27E-07	3.57E-06	3.2797E-03
464598.2	3772096.14	16568.94366	0.73396	0.89512	32.25632	3.27E-03	5.07E-07	5.00E-07	1.68E-05	3.2920E-03
464913.26	3772252.11	16567.56657	0.93066	3.04893	2.63253	3.27E-03	6.43E-07	1.70E-06	1.37E-06	3.2776E-03
464513.19	3772117.84	16554.11817	0.81277	0.78969	5.24534	3.27E-03	5.62E-07	4.41E-07	2.74E-06	3.2750E-03
465044.08	3772345.99	16553.93598	0.86237	7.8433	1.66389	3.27E-03	5.96E-07	4.38E-06	8.68E-07	3.2771E-03
464836.9	3772192.51	16530.14821	0.86203	1.94299	3.64389	3.27E-03	5.96E-07	1.08E-06	1.90E-06	3.2701E-03
465143.38	3772407.39	16507.93102	0.7468	26.03082	1.22761	3.26E-03	5.16E-07	1.45E-05	6.40E-07	3.2778E-03
464982.71	3772304.73	16505.60323	0.91894	4.88421	2.04796	3.26E-03	6.35E-07	2.73E-06	1.07E-06	3.2661E-03
465003.3	3772318.82	16477.84561	0.9022	5.65885	1.90637	3.26E-03	6.24E-07	3.16E-06	9.94E-07	3.2610E-03
464453.75	3772174.04	16440.88062	0.9555	0.75168	3.29398	3.25E-03	6.61E-07	4.20E-07	1.72E-06	3.2517E-03
464499.8	3772123.66	16425.68599	0.82601	0.77317	4.56537	3.25E-03	5.71E-07	4.32E-07	2.38E-06	3.2493E-03
464468.85	3772152.29	16417.39343	0.89895	0.75474	3.61361	3.24E-03	6.21E-07	4.21E-07	1.88E-06	3.2472E-03
464716.95	3772120.57	16404.51187	0.73756	1.18058	9.18583	3.24E-03	5.10E-07	6.59E-07	4.79E-06	3.2476E-03
464422.96	3772256.49	16404.17316	1.19212	0.76837	2.78262	3.24E-03	8.24E-07	4.29E-07	1.45E-06	3.2443E-03
464417.47	3772340.09	16344.55543	1.52351	0.83356	2.70031	3.23E-03	1.05E-06	4.65E-07	1.41E-06	3.2328E-03
464566.78	3772094.58	16297.91652	0.73775	0.83698	11.39156	3.22E-03	5.10E-07	4.67E-07	5.94E-06	3.2275E-03
464416.02	3772308.07	16238.61848	1.37188	0.79842	2.68123	3.21E-03	9.48E-07	4.46E-07	1.40E-06	3.2117E-03
464486.4	3772129.47	16211.82554	0.8362	0.75502	4.03967	3.20E-03	5.78E-07	4.21E-07	2.11E-06	3.2067E-03
464887.18	3772227.06	16208.06879	0.89595	2.5086	2.87813	3.20E-03	6.19E-07	1.40E-06	1.50E-06	3.2064E-03
464611.13	3772090.52	16176.54433	0.70931	0.89793	62.7981	3.20E-03	4.90E-07	5.01E-07	3.27E-05	3.2304E-03
464662.7	3772098.53	16138.81623	0.70496	1.00239	26.37849	3.19E-03	4.87E-07	5.60E-07	1.38E-05	3.2040E-03
464417.29	3772269.73	16126.19614	1.21977	0.76333	2.67316	3.19E-03	8.43E-07	4.26E-07	1.39E-06	3.1893E-03
464703.65	3772111.15	16091.51488	0.716	1.11417	10.68992	3.18E-03	4.95E-07	6.22E-07	5.57E-06	3.1865E-03
464580.17	3772088.77	16056.47707	0.71556	0.84369	15.18944	3.17E-03	4.95E-07	4.71E-07	7.92E-06	3.1818E-03
464420.45	3772403.95	16037.59668	1.85492	0.89762	2.65833	3.17E-03	1.28E-06	5.01E-07	1.39E-06	3.1723E-03
464455.92	3772157.9	16018.38594	0.9001	0.73228	3.24859	3.17E-03	6.22E-07	4.09E-07	1.69E-06	3.1681E-03
464424.31	3772430.33	15988.43828	2.0321	0.93083	2.65989	3.16E-03	1.40E-06	5.20E-07	1.39E-06	3.1628E-03
464730.48	3772120.15	15967.2957	0.72379	1.19653	7.47276	3.16E-03	5.00E-07	6.68E-07	3.90E-06	3.1604E-03
464757.99	3772134.29	15964.85105	0.74598	1.31648	5.78652	3.15E-03	5.16E-07	7.35E-07	3.02E-06	3.1591E-03
464416.32	3772378.19	15962.40397	1.68854	0.86102	2.6287	3.15E-03	1.17E-06	4.81E-07	1.37E-06	3.1573E-03
464473	3772135.29	15938.28915	0.84344	0.73556	3.59948	3.15E-03	5.83E-07	4.11E-07	1.88E-06	3.1524E-03
464429.46	3772205.9	15919.42056	1.01775	0.73008	2.81427	3.15E-03	7.04E-07	4.08E-07	1.47E-06	3.1484E-03
464811.73	3772167.81	15918.50392	0.80268	1.64683	4.04377	3.15E-03	5.55E-07	9.19E-07	2.11E-06	3.1492E-03
464423.86	3772218.99	15842.7392	1.04943	0.72978	2.72728	3.13E-03	7.25E-07	4.07E-07	1.42E-06	3.1332E-03
464785.5	3772148.44	15840.18403	0.76577	1.45092	4.69248	3.13E-03	5.29E-07	8.10E-07	2.45E-06	3.1340E-03
464861.52	3772202.18	15839.41247	0.85169	2.09466	3.15224	3.13E-03	5.89E-07	1.17E-06	1.64E-06	3.1334E-03
464528.09	3772096.18	15807.70093	0.74352	0.77172	5.80606	3.12E-03	5.14E-07	4.31E-07	3.03E-06	3.1277E-03
464514.83	3772101.93	15804.26313	0.75905	0.75933	5.02427	3.12E-03	5.25E-07	4.24E-07	2.62E-06	3.1266E-03
464411.96	3772352.96	15781.03725	1.53614	0.82259	2.57331	3.12E-03	1.06E-06	4.59E-07	1.34E-06	3.1213E-03
464410.28	3772321.47	15759.41429	1.39065	0.78952	2.5614	3.11E-03	9.61E-07	4.41E-07	1.34E-06	3.1169E-03
464938.23	3772261.92	15755.10747	0.89515	3.3054	2.34176	3.11E-03	6.19E-07	1.85E-06	1.22E-06	3.1170E-03
464541.34	3772090.43	15750.22795	0.72635	0.78237	6.79448	3.11E-03	5.02E-07	4.37E-07	3.54E-06	3.1169E-03
464593.57	3772082.95	15742.08161	0.69262	0.84826	21.92366	3.11E-03	4.79E-07	4.74E-07	1.14E-05	3.1232E-03
464501.58	3772107.69	15737.70105	0.77261	0.74535	4.39885	3.11E-03	5.34E-07	4.16E-07	2.29E-06	3.1132E-03
464649.74	3772088.96	15706.34961	0.68262	0.94813	39.80525	3.10E-03	4.72E-07	5.29E-07	2.08E-05	3.1255E-03
464418.25	3772232.09	15703.06593	1.07899	0.72811	2.64105	3.10E-03	7.46E-07	4.06E-07	1.38E-06	3.1056E-03
464554.6	3772084.67	15623.93684	0.70772	0.7912	8.11549	3.09E-03	4.89E-07	4.42E-07	4.23E-06	3.0926E-03

464459.61	3772141.1	15608.14287	0.84751	0.71499	3.22805	3.08E-03	5.86E-07	3.99E-07	1.68E-06	3.0870E-03
464488.32	3772113.44	15597.56046	0.7837	0.7298	3.90309	3.08E-03	5.42E-07	4.07E-07	2.04E-06	3.0852E-03
465158.52	3772408.04	15573.61782	0.71047	26.11782	1.16175	3.08E-03	4.91E-07	1.46E-05	6.06E-07	3.0932E-03
464442.99	3772163.52	15567.90142	0.89788	0.70918	2.94132	3.08E-03	6.21E-07	3.96E-07	1.53E-06	3.0789E-03
464412.64	3772245.18	15506.13607	1.10609	0.72518	2.55382	3.06E-03	7.65E-07	4.05E-07	1.33E-06	3.0667E-03
465178.68	3772421.07	15505.49996	0.69068	41.74744	1.10074	3.06E-03	4.77E-07	2.33E-05	5.74E-07	3.0884E-03
464744	3772119.72	15464.3024	0.70941	1.21073	6.22717	3.06E-03	4.90E-07	6.76E-07	3.25E-06	3.0603E-03
464911.97	3772236.8	15440.03874	0.87024	2.70786	2.5431	3.05E-03	6.02E-07	1.51E-06	1.33E-06	3.0545E-03
464567.86	3772078.92	15429.54747	0.688	0.79818	9.95367	3.05E-03	4.76E-07	4.46E-07	5.19E-06	3.0551E-03
464836.21	3772177.43	15394.70724	0.80068	1.77087	3.45446	3.04E-03	5.54E-07	9.89E-07	1.80E-06	3.0455E-03
464475.07	3772119.2	15392.68371	0.79224	0.71295	3.49666	3.04E-03	5.48E-07	3.98E-07	1.82E-06	3.0445E-03
465198.78	3772433.94	15372.7866	0.67094	81.03462	1.04418	3.04E-03	4.64E-07	4.52E-05	5.44E-07	3.0840E-03
464606.97	3772077.14	15364.79053	0.66938	0.8508	34.87346	3.04E-03	4.63E-07	4.75E-07	1.82E-05	3.0553E-03
464716.48	3772105.58	15330.71516	0.68676	1.10325	8.15637	3.03E-03	4.75E-07	6.16E-07	4.25E-06	3.0348E-03
464414.8	3772417.13	15304.12432	1.84973	0.87836	2.50219	3.02E-03	1.28E-06	4.90E-07	1.30E-06	3.0273E-03
464407.03	3772258.27	15269.71847	1.13049	0.71949	2.45475	3.02E-03	7.82E-07	4.02E-07	1.28E-06	3.0199E-03
464446.21	3772146.92	15220.90077	0.84831	0.69354	2.91606	3.01E-03	5.86E-07	3.87E-07	1.52E-06	3.0103E-03
464581.11	3772073.16	15170.65303	0.66749	0.80324	12.57118	3.00E-03	4.61E-07	4.48E-07	6.56E-06	3.0053E-03
464461.81	3772124.95	15131.02513	0.79804	0.69493	3.15132	2.99E-03	5.52E-07	3.88E-07	1.64E-06	2.9926E-03
464662.81	3772083.29	15122.26796	0.65692	0.94407	20.32381	2.99E-03	4.54E-07	5.27E-07	1.06E-05	2.9999E-03
464886.14	3772211.85	15121.31726	0.83563	2.25423	2.76224	2.99E-03	5.78E-07	1.26E-06	1.44E-06	2.9914E-03
464424.5	3772182.09	15107.93214	0.92291	0.68798	2.61196	2.99E-03	6.38E-07	3.84E-07	1.36E-06	2.9879E-03
464702.64	3772096.39	15090.38448	0.66868	1.0443	9.38053	2.98E-03	4.62E-07	5.83E-07	4.89E-06	2.9879E-03
464418.95	3772195.05	15085.77574	0.95225	0.68884	2.54568	2.98E-03	6.58E-07	3.85E-07	1.33E-06	2.9835E-03
464413.39	3772208.02	15005.95883	0.98004	0.68858	2.4797	2.97E-03	6.77E-07	3.84E-07	1.29E-06	2.9677E-03
464963.2	3772271.72	14990.9999	0.85767	3.58206	2.09867	2.96E-03	5.93E-07	2.00E-06	1.09E-06	2.9660E-03
465114.82	3772373.67	14969.43605	0.7388	11.7036	1.29929	2.96E-03	5.11E-07	6.53E-06	6.78E-07	2.9658E-03
464401.42	3772271.37	14968.25177	1.15199	0.71441	2.36714	2.96E-03	7.96E-07	3.99E-07	1.23E-06	2.9603E-03
464730.01	3772105.15	14933.26573	0.67462	1.11708	6.65326	2.95E-03	4.66E-07	6.24E-07	3.47E-06	2.9555E-03
465094.75	3772360.89	14930.71372	0.75851	9.50413	1.37785	2.95E-03	5.24E-07	5.31E-06	7.18E-07	2.9570E-03
464757.52	3772119.3	14915.06241	0.69467	1.22349	5.27136	2.95E-03	4.80E-07	6.83E-07	2.75E-06	2.9513E-03
465074.63	3772347.95	14879.884	0.77789	7.90705	1.46351	2.94E-03	5.38E-07	4.41E-06	7.63E-07	2.9461E-03
464407.84	3772220.98	14871.96819	1.00601	0.68741	2.41318	2.94E-03	6.95E-07	3.84E-07	1.26E-06	2.9412E-03
464811.2	3772152.8	14861.85713	0.74657	1.51385	3.78997	2.94E-03	5.16E-07	8.45E-07	1.98E-06	2.9402E-03
465013.74	3772307.87	14851.08709	0.83153	4.99111	1.77407	2.93E-03	5.75E-07	2.79E-06	9.25E-07	2.9390E-03
464448.55	3772130.71	14816.20366	0.80106	0.67597	2.8574	2.93E-03	5.54E-07	3.77E-07	1.49E-06	2.9302E-03
464860.69	3772187.04	14812.89003	0.79351	1.9009	3.0031	2.93E-03	5.49E-07	1.06E-06	1.57E-06	2.9303E-03
464785.03	3772133.44	14786.69801	0.71275	1.342	4.33435	2.92E-03	4.93E-07	7.49E-07	2.26E-06	2.9255E-03
464649.94	3772073.68	14741.56165	0.63701	0.89511	25.42976	2.91E-03	4.40E-07	5.00E-07	1.33E-05	2.9273E-03
465133.2	3772382.32	14706.7579	0.71382	13.65811	1.22747	2.91E-03	4.93E-07	7.62E-06	6.40E-07	2.9149E-03
464402.29	3772233.94	14691.75094	1.02993	0.68493	2.34229	2.90E-03	7.12E-07	3.82E-07	1.22E-06	2.9055E-03
464936.75	3772246.53	14677.74434	0.84043	2.91859	2.26682	2.90E-03	5.81E-07	1.63E-06	1.18E-06	2.9039E-03
464409.16	3772430.3	14586.58091	1.83864	0.85678	2.34929	2.88E-03	1.27E-06	4.78E-07	1.23E-06	2.8854E-03
464743.53	3772104.73	14477.68252	0.66198	1.12938	5.56835	2.86E-03	4.58E-07	6.30E-07	2.90E-06	2.8649E-03
464396.74	3772246.9	14469.5304	1.05158	0.681	2.26682	2.86E-03	7.27E-07	3.80E-07	1.18E-06	2.8616E-03
464910.77	3772221.52	14419.17225	0.81476	2.42162	2.44682	2.85E-03	5.63E-07	1.35E-06	1.28E-06	2.8526E-03
464835.55	3772162.36	14380.61718	0.74578	1.62105	3.25567	2.84E-03	5.16E-07	9.05E-07	1.70E-06	2.8449E-03
464716.02	3772090.58	14366.84081	0.64148	1.03353	7.05297	2.84E-03	4.43E-07	5.77E-07	3.68E-06	2.8437E-03
464413.67	3772171.97	14338.60273	0.86868	0.65098	2.36351	2.83E-03	6.01E-07	3.63E-07	1.23E-06	2.8356E-03
464407.92	3772185.4	14302.41344	0.89566	0.65182	2.31335	2.83E-03	6.19E-07	3.64E-07	1.21E-06	2.8285E-03
464391.18	3772259.86	14213.92248	1.07072	0.67477	2.1814	2.81E-03	7.40E-07	3.77E-07	1.14E-06	2.8111E-03
464402.17	3772198.82	14213.4977	0.92112	0.65157	2.26056	2.81E-03	6.37E-07	3.64E-07	1.18E-06	2.8109E-03
464885.17	3772196.66	14166.70081	0.78106	2.03708	2.64016	2.80E-03	5.40E-07	1.14E-06	1.38E-06	2.8025E-03
464702.33	3772081.33	14153.82715	0.62506	0.9806	7.83382	2.80E-03	4.32E-07	5.47E-07	4.08E-06	2.8020E-03
464422.04	3772142.22	14051.14569	0.79861	0.63607	2.38316	2.78E-03	5.52E-07	3.55E-07	1.24E-06	2.7788E-03
464961.54	3772256.26	14003.6495	0.80884	3.14312	2.03599	2.77E-03	5.59E-07	1.75E-06	1.06E-06	2.7706E-03
464729.54	3772090.16	13997.37332	0.63069	1.04553	5.80608	2.77E-03	4.36E-07	5.84E-07	3.03E-06	2.7701E-03
464399.59	3772417.23	13993.01448	1.6833	0.81166	2.22097	2.77E-03	1.16E-06	4.53E-07	1.16E-06	2.7679E-03
464757.05	3772104.31	13974.59847	0.64892	1.14031	4.73775	2.76E-03	4.49E-07	6.37E-07	2.47E-06	2.7651E-03
465168.62	3772396.27	13950.00645	0.66304	18.01393	1.10041	2.76E-03	4.58E-07	1.01E-05	5.74E-07	2.7677E-03
465148.4	3772383.12	13940.16487	0.68037	13.57093	1.16097	2.75E-03	4.70E-07	7.58E-06	6.05E-07	2.7634E-03
465188.76	3772409.27	13915.30554	0.64574	25.5309	1.04458	2.75E-03	4.46E-07	1.43E-05	5.45E-07	2.7650E-03
464810.67	3772137.78	13913.8413	0.69642	1.39657	3.52459	2.75E-03	4.81E-07	7.80E-07	1.84E-06	2.7526E-03
464385.63	3772272.82	13902.87838	1.08729	0.66962	2.10937	2.75E-03	7.52E-07	3.74E-07	1.10E-06	2.7496E-03
464390.66	3772225.67	13898.97319	0.96663	0.64757	2.13939	2.75E-03	6.68E-07	3.61E-07	1.12E-06	2.7487E-03

464859.9	3772171.92	13866.87021	0.74088	1.7333	2.8435	2.74E-03	5.12E-07	9.68E-07	1.48E-06	2.7432E-03
464784.56	3772118.45	13848.37287	0.66552	1.24525	3.96629	2.74E-03	4.60E-07	6.95E-07	2.07E-06	2.7398E-03
465208.86	3772422.12	13830.66979	0.62844	40.11327	0.99271	2.73E-03	4.34E-07	2.24E-05	5.18E-07	2.7564E-03
464935.39	3772231.19	13723.76109	0.78994	2.59668	2.18725	2.71E-03	5.46E-07	1.45E-06	1.14E-06	2.7151E-03
464384.91	3772239.1	13679.54492	0.98627	0.64366	2.07248	2.70E-03	6.82E-07	3.59E-07	1.08E-06	2.7053E-03
464403.1	3772161.25	13622.82099	0.8183	0.6172	2.15342	2.69E-03	5.66E-07	3.45E-07	1.12E-06	2.6940E-03
464743.06	3772089.74	13579.61245	0.61946	1.05614	4.89871	2.68E-03	4.28E-07	5.90E-07	2.55E-06	2.6870E-03
464383.26	3772349.16	13529.19102	1.31184	0.71472	2.06874	2.67E-03	9.07E-07	3.99E-07	1.08E-06	2.6759E-03
464909.65	3772206.27	13503.28658	0.76394	2.17868	2.34529	2.67E-03	5.28E-07	1.22E-06	1.22E-06	2.6713E-03
464715.55	3772075.59	13498.537	0.60099	0.97044	5.9638	2.67E-03	4.15E-07	5.42E-07	3.11E-06	2.6715E-03
464834.91	3772147.3	13468.66534	0.6965	1.48973	3.05034	2.66E-03	4.81E-07	8.32E-07	1.59E-06	2.6644E-03
464379.16	3772252.52	13423.90036	1.00354	0.63822	2.00112	2.65E-03	6.94E-07	3.56E-07	1.04E-06	2.6548E-03
465044.53	3772310.45	13417.23227	0.75494	5.03791	1.55013	2.65E-03	5.22E-07	2.81E-06	8.08E-07	2.6555E-03
465105.07	3772349.65	13416.40295	0.70528	7.86227	1.29633	2.65E-03	4.88E-07	4.39E-06	6.76E-07	2.6568E-03
464378.98	3772323.74	13396.41157	1.20768	0.68492	2.01684	2.65E-03	8.35E-07	3.82E-07	1.05E-06	2.6495E-03
464394.02	3772430.24	13361.25019	1.67211	0.79127	2.08855	2.64E-03	1.16E-06	4.42E-07	1.09E-06	2.6430E-03
464986.32	3772266	13352.60066	0.77603	3.38353	1.84008	2.64E-03	5.36E-07	1.89E-06	9.60E-07	2.6420E-03
464884.25	3772181.49	13292.70046	0.73136	1.85014	2.51102	2.63E-03	5.06E-07	1.03E-06	1.31E-06	2.6296E-03
464729.07	3772075.17	13150.34101	0.59128	0.98079	4.98789	2.60E-03	4.09E-07	5.47E-07	2.60E-06	2.6022E-03
465123.03	3772357.26	13141.41078	0.68148	8.64704	1.22429	2.60E-03	4.71E-07	4.83E-06	6.38E-07	2.6028E-03
464373.41	3772265.94	13128.33681	1.01831	0.63198	1.92847	2.59E-03	7.04E-07	3.53E-07	1.01E-06	2.5963E-03
464756.58	3772089.31	13123.01459	0.60787	1.06546	4.20629	2.59E-03	4.20E-07	5.95E-07	2.19E-06	2.5964E-03
464960.01	3772240.86	13101.5266	0.76315	2.78134	1.96901	2.59E-03	5.28E-07	1.55E-06	1.03E-06	2.5921E-03
464810.15	3772122.77	13059.9719	0.65146	1.29269	3.25299	2.58E-03	4.50E-07	7.22E-07	1.70E-06	2.5836E-03
464377.59	3772362.4	13023.60596	1.31547	0.70301	1.9694	2.57E-03	9.09E-07	3.92E-07	1.03E-06	2.5759E-03
464381.58	3772388.47	13020.33593	1.42446	0.73042	1.99654	2.57E-03	9.85E-07	4.08E-07	1.04E-06	2.5754E-03
464374.64	3772227.67	13018.9568	0.92285	0.61046	1.91503	2.57E-03	6.38E-07	3.41E-07	9.99E-07	2.5746E-03
464784.09	3772103.46	13002.18715	0.62317	1.1588	3.59626	2.57E-03	4.31E-07	6.47E-07	1.88E-06	2.5723E-03
464859.14	3772156.82	12991.81227	0.69312	1.58705	2.67725	2.57E-03	4.79E-07	8.86E-07	1.40E-06	2.5701E-03
464373.37	3772336.83	12946.74658	1.21434	0.67548	1.92988	2.56E-03	8.39E-07	3.77E-07	1.01E-06	2.5606E-03
464934.13	3772215.88	12878.78163	0.74343	2.3256	2.1029	2.54E-03	5.14E-07	1.30E-06	1.10E-06	2.5479E-03
464384.41	3772417.28	12848.0697	1.53873	0.75144	1.98003	2.54E-03	1.06E-06	4.19E-07	1.03E-06	2.5414E-03
464368.97	3772311.71	12799.34033	1.12151	0.64866	1.8815	2.53E-03	7.75E-07	3.62E-07	9.81E-07	2.5314E-03
464368.95	3772240.95	12782.54225	0.93834	0.60615	1.85766	2.53E-03	6.49E-07	3.38E-07	9.69E-07	2.5279E-03
464742.59	3772074.74	12765.11235	0.58123	0.9899	4.26034	2.52E-03	4.02E-07	5.53E-07	2.22E-06	2.5257E-03
464908.6	3772191.05	12693.71685	0.71759	1.97087	2.23926	2.51E-03	4.96E-07	1.10E-06	1.17E-06	2.5112E-03
464834.28	3772132.24	12648.78718	0.65213	1.37388	2.84029	2.50E-03	4.51E-07	7.67E-07	1.48E-06	2.5022E-03
465178.75	3772384.59	12561.66334	0.6204	13.01537	1.04243	2.48E-03	4.29E-07	7.27E-06	5.44E-07	2.4905E-03
465158.55	3772371.48	12545.79236	0.63566	10.41032	1.0977	2.48E-03	4.39E-07	5.81E-06	5.72E-07	2.4860E-03
465198.89	3772397.56	12545.43368	0.60512	16.81919	0.99125	2.48E-03	4.18E-07	9.39E-06	5.17E-07	2.4894E-03
464797.61	3772103.04	12520.05168	0.61026	1.16621	3.18724	2.47E-03	4.22E-07	6.51E-07	1.66E-06	2.4768E-03
464363.26	3772254.24	12519.53507	0.95178	0.60039	1.79554	2.47E-03	6.58E-07	3.35E-07	9.36E-07	2.4759E-03
464984.64	3772250.53	12513.56548	0.73496	2.97601	1.78325	2.47E-03	5.08E-07	1.66E-06	9.30E-07	2.4759E-03
464371.92	3772375.64	12512.78209	1.31623	0.6911	1.87519	2.47E-03	9.10E-07	3.86E-07	9.78E-07	2.4749E-03
465138.29	3772358.2	12505.21241	0.65078	8.55316	1.15714	2.47E-03	4.50E-07	4.77E-06	6.03E-07	2.4770E-03
464883.38	3772166.33	12494.61835	0.68603	1.68783	2.37678	2.47E-03	4.74E-07	9.42E-07	1.24E-06	2.4717E-03
465218.97	3772410.39	12493.52759	0.58988	22.45353	0.94381	2.47E-03	4.08E-07	1.25E-05	4.92E-07	2.4823E-03
464367.76	3772349.93	12485.22971	1.21843	0.66586	1.8464	2.47E-03	8.42E-07	3.72E-07	9.63E-07	2.4694E-03
464375.84	3772401.87	12466.10012	1.42059	0.71545	1.89046	2.46E-03	9.82E-07	3.99E-07	9.86E-07	2.4658E-03
465014.24	3772272.45	12404.02848	0.72675	3.52876	1.63475	2.45E-03	5.02E-07	1.97E-06	8.52E-07	2.4545E-03
464363.42	3772324.67	12393.02652	1.12799	0.64024	1.80558	2.45E-03	7.80E-07	3.57E-07	9.42E-07	2.4511E-03
464958.61	3772225.5	12309.27063	0.72081	2.47913	1.89806	2.43E-03	4.98E-07	1.38E-06	9.90E-07	2.4353E-03
464378.9	3772430.14	12285.42775	1.52782	0.73351	1.86985	2.43E-03	1.06E-06	4.09E-07	9.75E-07	2.4302E-03
464810.2	3772107.98	12276.21834	0.61101	1.20172	2.9723	2.43E-03	4.22E-07	6.71E-07	1.55E-06	2.4285E-03
464783.62	3772088.47	12239.61974	0.58508	1.08121	3.23615	2.42E-03	4.04E-07	6.04E-07	1.69E-06	2.4214E-03
464357.57	3772267.52	12222.09613	0.96302	0.59446	1.73478	2.42E-03	6.66E-07	3.32E-07	9.05E-07	2.4171E-03
465054.95	3772299.47	12214.00101	0.70204	4.43794	1.44722	2.41E-03	4.85E-07	2.48E-06	7.55E-07	2.4173E-03
464858.41	3772141.72	12202.13251	0.64982	1.45838	2.51074	2.41E-03	4.49E-07	8.14E-07	1.31E-06	2.4138E-03
465075.17	3772312.64	12161.55413	0.68789	5.01886	1.36486	2.40E-03	4.76E-07	2.80E-06	7.12E-07	2.4072E-03
464932.95	3772200.61	12141.01565	0.70087	2.0956	2.01393	2.40E-03	4.85E-07	1.17E-06	1.05E-06	2.4019E-03
464356.16	3772306.22	12051.20749	1.04822	0.61257	1.72942	2.38E-03	7.25E-07	3.42E-07	9.02E-07	2.3834E-03
464822.79	3772112.92	12028.24679	0.61109	1.23761	2.78022	2.38E-03	4.22E-07	6.91E-07	1.45E-06	2.3795E-03
464362.16	3772363.02	12020.58408	1.22006	0.65566	1.76521	2.38E-03	8.43E-07	3.66E-07	9.20E-07	2.3775E-03
464366.24	3772388.88	12003.81535	1.31416	0.67873	1.7846	2.37E-03	9.08E-07	3.79E-07	9.31E-07	2.3743E-03
464357.87	3772337.63	11974.71908	1.13224	0.63166	1.73231	2.37E-03	7.83E-07	3.53E-07	9.03E-07	2.3684E-03

464907.61	3772175.85	11952.05758	0.67498	1.79129	2.1298	2.36E-03	4.67E-07	1.00E-06	1.11E-06	2.3644E-03
464370.1	3772415.27	11919.89315	1.41352	0.70018	1.79014	2.36E-03	9.77E-07	3.91E-07	9.33E-07	2.3578E-03
464983.09	3772235.11	11762.84304	0.69649	2.63858	1.72322	2.32E-03	4.81E-07	1.47E-06	8.99E-07	2.3273E-03
464882.54	3772151.2	11756.41891	0.64459	1.54591	2.24103	2.32E-03	4.46E-07	8.63E-07	1.17E-06	2.3257E-03
464847.97	3772122.81	11672.61267	0.61166	1.31489	2.45174	2.31E-03	4.23E-07	7.34E-07	1.28E-06	2.3091E-03
464350.41	3772319.64	11663.60786	1.05359	0.60386	1.65642	2.30E-03	7.28E-07	3.37E-07	8.64E-07	2.3068E-03
464957.3	3772210.17	11601.88876	0.68153	2.22378	1.8236	2.29E-03	4.71E-07	1.24E-06	9.51E-07	2.2953E-03
464809.66	3772092.96	11577.96305	0.57448	1.11863	2.70923	2.29E-03	3.97E-07	6.24E-07	1.41E-06	2.2903E-03
464356.55	3772376.12	11557.3117	1.2193	0.64473	1.68502	2.28E-03	8.43E-07	3.60E-07	8.79E-07	2.2859E-03
464352.32	3772350.59	11550.79485	1.13436	0.62271	1.66134	2.28E-03	7.84E-07	3.48E-07	8.66E-07	2.2845E-03
464783.15	3772073.47	11543.55681	0.55063	1.01121	2.89593	2.28E-03	3.81E-07	5.64E-07	1.51E-06	2.2836E-03
464360.57	3772402.12	11503.3436	1.30948	0.66584	1.69753	2.27E-03	9.05E-07	3.72E-07	8.85E-07	2.2753E-03
464860.56	3772127.76	11457.59622	0.61047	1.35401	2.31176	2.26E-03	4.22E-07	7.56E-07	1.21E-06	2.2665E-03
464931.84	3772185.37	11451.84504	0.66128	1.89767	1.92259	2.26E-03	4.57E-07	1.06E-06	1.00E-06	2.2655E-03
464364.36	3772428.67	11387.9669	1.403	0.68394	1.69339	2.25E-03	9.70E-07	3.82E-07	8.83E-07	2.2526E-03
465188.92	3772372.99	11368.48853	0.58194	9.6926	0.98758	2.25E-03	4.02E-07	5.41E-06	5.15E-07	2.2528E-03
465209.04	3772385.93	11363.19148	0.56838	11.61427	0.94083	2.25E-03	3.93E-07	6.48E-06	4.91E-07	2.2528E-03
465168.74	3772359.92	11352.53651	0.59549	8.15753	1.03788	2.24E-03	4.12E-07	4.55E-06	5.41E-07	2.2489E-03
465148.49	3772346.69	11323.46742	0.60895	6.95152	1.0919	2.24E-03	4.21E-07	3.88E-06	5.69E-07	2.2425E-03
464906.67	3772160.67	11286.31456	0.63601	1.63525	2.01756	2.23E-03	4.40E-07	9.13E-07	1.05E-06	2.2327E-03
464344.66	3772333.06	11261.17081	1.05693	0.59573	1.59077	2.23E-03	7.31E-07	3.33E-07	8.30E-07	2.2272E-03
465045.11	3772275.23	11241.0301	0.66628	3.53145	1.4316	2.22E-03	4.61E-07	1.97E-06	7.47E-07	2.2245E-03
465007.57	3772244.72	11238.24103	0.67125	2.80417	1.57254	2.22E-03	4.64E-07	1.57E-06	8.20E-07	2.2236E-03
464873.15	3772132.7	11237.32313	0.60849	1.3936	2.18471	2.22E-03	4.21E-07	7.78E-07	1.14E-06	2.2229E-03
464834.7	3772102.79	11226.08966	0.57609	1.18432	2.40282	2.22E-03	3.98E-07	6.61E-07	1.25E-06	2.2207E-03
464340.5	3772307.37	11191.71538	0.98458	0.57565	1.56192	2.21E-03	6.81E-07	3.21E-07	8.14E-07	2.2134E-03
465065.38	3772288.51	11155.49989	0.65475	3.92725	1.35179	2.20E-03	4.53E-07	2.19E-06	7.05E-07	2.2078E-03
464346.76	3772363.55	11126.18917	1.13441	0.6133	1.59138	2.20E-03	7.84E-07	3.42E-07	8.30E-07	2.2006E-03
465085.57	3772301.61	11100.63276	0.64235	4.38487	1.27807	2.19E-03	4.44E-07	2.45E-06	6.66E-07	2.1971E-03
464350.94	3772389.21	11099.59059	1.21618	0.63324	1.60724	2.19E-03	8.41E-07	3.53E-07	8.38E-07	2.1954E-03
464981.65	3772219.74	11092.60825	0.66059	2.35584	1.66033	2.19E-03	4.57E-07	1.32E-06	8.66E-07	2.1946E-03
464885.74	3772137.65	11021.56793	0.60589	1.43387	2.06886	2.18E-03	4.19E-07	8.00E-07	1.08E-06	2.1803E-03
464354.9	3772415.36	11014.3704	1.30217	0.65233	1.61355	2.18E-03	9.00E-07	3.64E-07	8.41E-07	2.1786E-03
464956.08	3772194.89	10963.25582	0.64508	2.00613	1.74643	2.17E-03	4.46E-07	1.12E-06	9.11E-07	2.1689E-03
464809.13	3772077.94	10944.01131	0.5414	1.04396	2.45846	2.16E-03	3.74E-07	5.83E-07	1.28E-06	2.1649E-03
464338.91	3772346.49	10855.39807	1.05833	0.58713	1.52555	2.15E-03	7.32E-07	3.28E-07	7.95E-07	2.1470E-03
464859.74	3772112.62	10833.86984	0.57515	1.252	2.15003	2.14E-03	3.98E-07	6.99E-07	1.12E-06	2.1431E-03
464334.81	3772320.65	10828.55493	0.988	0.56785	1.50062	2.14E-03	6.83E-07	3.17E-07	7.82E-07	2.1416E-03
464930.8	3772170.15	10827.7346	0.62474	1.72639	1.82882	2.14E-03	4.32E-07	9.64E-07	9.54E-07	2.1420E-03
465102.69	3772307.13	10766.48443	0.62049	4.54275	1.20658	2.13E-03	4.29E-07	2.54E-06	6.29E-07	2.1312E-03
464341.21	3772376.51	10706.44973	1.13253	0.60325	1.52265	2.12E-03	7.83E-07	3.37E-07	7.94E-07	2.1176E-03
464345.33	3772402.3	10649.393	1.21094	0.62167	1.53337	2.10E-03	8.37E-07	3.47E-07	8.00E-07	2.1064E-03
464834.03	3772087.72	10622.3501	0.54328	1.10183	2.20619	2.10E-03	3.76E-07	6.15E-07	1.15E-06	2.1012E-03
465006	3772229.3	10609.92369	0.63865	2.49122	1.51876	2.10E-03	4.41E-07	1.39E-06	7.92E-07	2.0992E-03
464910.92	3772147.53	10583.97654	0.59839	1.51531	1.86562	2.09E-03	4.14E-07	8.46E-07	9.73E-07	2.0937E-03
464349.23	3772428.6	10539.47001	1.29198	0.63788	1.53213	2.08E-03	8.93E-07	3.56E-07	7.99E-07	2.0847E-03
464980.31	3772204.4	10489.73076	0.62704	2.11616	1.59485	2.07E-03	4.33E-07	1.18E-06	8.32E-07	2.0753E-03
464333.16	3772359.91	10450.24376	1.05787	0.57824	1.46222	2.07E-03	7.31E-07	3.23E-07	7.62E-07	2.0669E-03
464884.77	3772122.46	10436.0327	0.57179	1.32153	1.93828	2.06E-03	3.95E-07	7.38E-07	1.01E-06	2.0644E-03
464954.93	3772179.63	10376.01697	0.61108	1.8185	1.66742	2.05E-03	4.22E-07	1.02E-06	8.69E-07	2.0527E-03
464923.51	3772152.48	10363.22401	0.59357	1.55641	1.77622	2.05E-03	4.10E-07	8.69E-07	9.26E-07	2.0501E-03
465055.59	3772264.39	10341.6685	0.62297	3.1683	1.33351	2.04E-03	4.31E-07	1.77E-06	6.95E-07	2.0465E-03
465199.12	3772361.47	10339.02269	0.5472	7.39512	0.93573	2.04E-03	3.78E-07	4.13E-06	4.88E-07	2.0481E-03
465219.23	3772374.37	10337.56893	0.53506	8.34838	0.89304	2.04E-03	3.70E-07	4.66E-06	4.66E-07	2.0483E-03
465178.95	3772348.43	10326.79789	0.55933	6.49766	0.98145	2.04E-03	3.87E-07	3.63E-06	5.12E-07	2.0452E-03
465097.6	3772294.59	10309.86766	0.60605	3.99967	1.19978	2.04E-03	4.19E-07	2.23E-06	6.26E-07	2.0406E-03
465158.72	3772335.25	10308.36343	0.57137	5.71668	1.0305	2.04E-03	3.95E-07	3.19E-06	5.37E-07	2.0412E-03
465118.06	3772308.35	10295.23968	0.59495	4.48283	1.13902	2.03E-03	4.11E-07	2.50E-06	5.94E-07	2.0379E-03
464335.66	3772389.47	10292.05044	1.12887	0.59324	1.45786	2.03E-03	7.80E-07	3.31E-07	7.60E-07	2.0357E-03
465138.43	3772321.89	10291.3312	0.58322	5.05012	1.08303	2.03E-03	4.03E-07	2.82E-06	5.65E-07	2.0374E-03
464858.94	3772097.5	10270.42673	0.54306	1.16132	1.9923	2.03E-03	3.75E-07	6.48E-07	1.04E-06	2.0316E-03
465075.82	3772277.58	10238.37781	0.61252	3.48691	1.26308	2.02E-03	4.23E-07	1.95E-06	6.59E-07	2.0262E-03
464339.72	3772415.4	10209.6244	1.20371	0.60994	1.46348	2.02E-03	8.32E-07	3.40E-07	7.63E-07	2.0195E-03
464936.1	3772157.42	10152.93059	0.58825	1.59782	1.69331	2.01E-03	4.07E-07	8.92E-07	8.83E-07	2.0085E-03
464833.38	3772072.66	10069.19636	0.51339	1.02773	2.02006	1.99E-03	3.55E-07	5.74E-07	1.05E-06	1.9917E-03

465004.55	3772213.92	10042.02904	0.60795	2.22794	1.4628	1.98E-03	4.20E-07	1.24E-06	7.63E-07	1.9868E-03
464909.81	3772132.29	10038.35237	0.56591	1.39219	1.75837	1.98E-03	3.91E-07	7.77E-07	9.17E-07	1.9858E-03
464979.06	3772189.1	9943.88854	0.59571	1.9113	1.52749	1.97E-03	4.12E-07	1.07E-06	7.97E-07	1.9673E-03
464330.11	3772402.43	9885.02474	1.12357	0.58346	1.39737	1.95E-03	7.77E-07	3.26E-07	7.29E-07	1.9552E-03
464334.11	3772428.49	9784.14299	1.19415	0.59733	1.39468	1.93E-03	8.26E-07	3.33E-07	7.27E-07	1.9353E-03
464858.17	3772082.39	9755.21466	0.51375	1.08022	1.84101	1.93E-03	3.55E-07	6.03E-07	9.60E-07	1.9296E-03
464961.28	3772167.31	9719.40946	0.57564	1.68027	1.54561	1.92E-03	3.98E-07	9.38E-07	8.06E-07	1.9228E-03
465045.8	3772240.26	9681.22088	0.59259	2.61669	1.30925	1.91E-03	4.10E-07	1.46E-06	6.83E-07	1.9157E-03
464934.84	3772142.12	9646.1693	0.55767	1.46335	1.60408	1.91E-03	3.86E-07	8.17E-07	8.36E-07	1.9082E-03
465066.07	3772253.56	9551.76401	0.58418	2.84912	1.24271	1.89E-03	4.04E-07	1.59E-06	6.48E-07	1.8902E-03
464908.75	3772117.07	9538.05515	0.53599	1.28346	1.65221	1.88E-03	3.71E-07	7.16E-07	8.62E-07	1.8868E-03
465003.19	3772198.58	9527.45795	0.57912	2.00431	1.40521	1.88E-03	4.00E-07	1.12E-06	7.33E-07	1.8850E-03
465087.43	3772269.53	9523.15841	0.57792	3.18182	1.1827	1.88E-03	4.00E-07	1.78E-06	6.17E-07	1.8847E-03
464973.87	3772172.26	9511.49966	0.56873	1.72157	1.47923	1.88E-03	3.93E-07	9.61E-07	7.71E-07	1.8817E-03
465107.94	3772283.43	9472.47825	0.56865	3.50846	1.12484	1.87E-03	3.93E-07	1.96E-06	5.87E-07	1.8748E-03
465128.37	3772297.1	9448.06226	0.55878	3.87479	1.0704	1.87E-03	3.86E-07	2.16E-06	5.58E-07	1.8701E-03
465209.34	3772350	9445.93769	0.51574	5.76928	0.88668	1.87E-03	3.57E-07	3.22E-06	4.62E-07	1.8706E-03
465189.19	3772337	9439.03151	0.52665	5.25029	0.92825	1.87E-03	3.64E-07	2.93E-06	4.84E-07	1.8690E-03
465168.98	3772323.87	9430.79339	0.53749	4.7484	0.9727	1.86E-03	3.72E-07	2.65E-06	5.07E-07	1.8671E-03
465148.71	3772310.57	9429.29117	0.54819	4.2878	1.02007	1.86E-03	3.79E-07	2.39E-06	5.32E-07	1.8666E-03
464986.46	3772177.2	9305.1683	0.5614	1.76254	1.4172	1.84E-03	3.88E-07	9.84E-07	7.39E-07	1.8409E-03
464959.88	3772151.95	9255.32596	0.54723	1.53415	1.47038	1.83E-03	3.78E-07	8.56E-07	7.67E-07	1.8309E-03
464933.66	3772126.85	9179.45374	0.5293	1.34512	1.51521	1.81E-03	3.66E-07	7.51E-07	7.90E-07	1.8159E-03
464999.05	3772182.14	9101.71565	0.55375	1.8032	1.35915	1.80E-03	3.83E-07	1.01E-06	7.09E-07	1.8007E-03
465056.32	3772229.54	8985.00341	0.55692	2.37734	1.21709	1.78E-03	3.85E-07	1.33E-06	6.35E-07	1.7779E-03
464882.1	3772076.98	8972.32422	0.48582	1.05416	1.56625	1.77E-03	3.36E-07	5.88E-07	8.17E-07	1.7748E-03
465077.25	3772244.46	8892.3515	0.55107	2.60084	1.16047	1.76E-03	3.81E-07	1.45E-06	6.05E-07	1.7596E-03
464984.91	3772161.79	8867.27374	0.53498	1.60386	1.35362	1.75E-03	3.70E-07	8.95E-07	7.06E-07	1.7542E-03
464958.56	3772136.63	8823.1865	0.52064	1.40617	1.39532	1.74E-03	3.60E-07	7.85E-07	7.28E-07	1.7454E-03
465097.83	3772258.51	8809.55105	0.54352	2.83425	1.10604	1.74E-03	3.76E-07	1.58E-06	5.77E-07	1.7434E-03
465118.3	3772272.31	8744.51481	0.53505	3.08873	1.05483	1.73E-03	3.70E-07	1.72E-06	5.50E-07	1.7306E-03
465138.7	3772285.9	8702.05437	0.526	3.36598	1.00648	1.72E-03	3.64E-07	1.88E-06	5.25E-07	1.7224E-03
465159.01	3772299.3	8678.70486	0.51657	3.66511	0.96103	1.71E-03	3.57E-07	2.05E-06	5.01E-07	1.7179E-03
465179.26	3772312.54	8667.56617	0.50684	3.98137	0.91838	1.71E-03	3.50E-07	2.22E-06	4.79E-07	1.7158E-03
465199.45	3772325.64	8666.95538	0.49705	4.30287	0.87818	1.71E-03	3.44E-07	2.40E-06	4.58E-07	1.7159E-03
465009.95	3772171.62	8494.20747	0.52152	1.67192	1.25046	1.68E-03	3.61E-07	9.33E-07	6.52E-07	1.6805E-03
464983.47	3772146.41	8465.70233	0.5102	1.46568	1.28957	1.67E-03	3.53E-07	8.18E-07	6.72E-07	1.6747E-03
464957.31	3772121.33	8423.83595	0.49583	1.29345	1.32109	1.66E-03	3.43E-07	7.22E-07	6.89E-07	1.6664E-03
465067.08	3772219.4	8372.1877	0.5252	2.17124	1.13307	1.65E-03	3.63E-07	1.21E-06	5.91E-07	1.6566E-03
465087.71	3772233.58	8264.78122	0.51926	2.34506	1.0829	1.63E-03	3.59E-07	1.31E-06	5.65E-07	1.6354E-03
465108.24	3772247.51	8173.76431	0.51231	2.53087	1.03508	1.62E-03	3.54E-07	1.41E-06	5.40E-07	1.6175E-03
465008.37	3772156.19	8118.02802	0.49853	1.52323	1.19564	1.60E-03	3.45E-07	8.50E-07	6.23E-07	1.6060E-03
465128.68	3772261.22	8105.51054	0.50469	2.72901	0.98954	1.60E-03	3.49E-07	1.52E-06	5.16E-07	1.6041E-03
464982.1	3772131.06	8096.69511	0.48701	1.34466	1.22598	1.60E-03	3.37E-07	7.51E-07	6.39E-07	1.6017E-03
465149.04	3772274.74	8054.64008	0.4965	2.93785	0.94648	1.59E-03	3.43E-07	1.64E-06	4.94E-07	1.5941E-03
465169.33	3772288.08	8021.10917	0.48792	3.1539	0.90575	1.59E-03	3.37E-07	1.76E-06	4.72E-07	1.5876E-03
465189.56	3772301.27	8000.14997	0.47906	3.37045	0.86736	1.58E-03	3.31E-07	1.88E-06	4.52E-07	1.5836E-03
464930.42	3772081.15	7993.73393	0.45608	1.06523	1.26151	1.58E-03	3.15E-07	5.95E-07	6.58E-07	1.5812E-03
465060.02	3772191.28	7783.97309	0.49214	1.79813	1.0772	1.54E-03	3.40E-07	1.00E-06	5.62E-07	1.5401E-03
465006.88	3772140.8	7772.77552	0.47691	1.3937	1.14091	1.54E-03	3.30E-07	7.78E-07	5.95E-07	1.5377E-03
464980.8	3772115.75	7749.97122	0.46517	1.23793	1.16357	1.53E-03	3.22E-07	6.91E-07	6.07E-07	1.5331E-03
465098.18	3772222.72	7704.66037	0.49041	2.11864	1.01131	1.52E-03	3.39E-07	1.18E-06	5.27E-07	1.5246E-03
465118.67	3772236.55	7611.67889	0.48408	2.26653	0.9692	1.50E-03	3.35E-07	1.27E-06	5.05E-07	1.5062E-03
465139.07	3772250.17	7538.02505	0.47713	2.42001	0.92889	1.49E-03	3.30E-07	1.35E-06	4.84E-07	1.4917E-03
465159.4	3772263.62	7482.84202	0.46971	2.57689	0.89047	1.48E-03	3.25E-07	1.44E-06	4.64E-07	1.4809E-03
465058.18	3772175.75	7452.75248	0.47262	1.62824	1.0363	1.47E-03	3.27E-07	9.09E-07	5.40E-07	1.4745E-03
465005.48	3772125.44	7451.55732	0.45649	1.28	1.08677	1.47E-03	3.16E-07	7.15E-07	5.67E-07	1.4741E-03
465179.67	3772276.9	7439.81711	0.46181	2.73234	0.85407	1.47E-03	3.19E-07	1.53E-06	4.45E-07	1.4725E-03
464953.92	3772075.57	7397.73377	0.43102	1.02618	1.11103	1.46E-03	2.98E-07	5.73E-07	5.79E-07	1.4633E-03
465088.12	3772197.93	7310.5824	0.46917	1.80346	0.98364	1.44E-03	3.24E-07	1.01E-06	5.13E-07	1.4465E-03
465056.45	3772160.26	7145.88816	0.45399	1.48156	0.99511	1.41E-03	3.14E-07	8.27E-07	5.19E-07	1.4138E-03
465129.1	3772225.61	7110.09241	0.4584	2.03555	0.90821	1.41E-03	3.17E-07	1.14E-06	4.74E-07	1.4069E-03
465149.47	3772239.15	7032.43134	0.45201	2.15409	0.87255	1.39E-03	3.12E-07	1.20E-06	4.55E-07	1.3916E-03
465169.78	3772252.53	6973.40567	0.44524	2.27168	0.83829	1.38E-03	3.08E-07	1.27E-06	4.37E-07	1.3800E-03
465054.83	3772144.82	6863.69994	0.43631	1.35428	0.95397	1.36E-03	3.02E-07	7.56E-07	4.97E-07	1.3579E-03

465098.64	3772187.2	6860.1286	0.44488	1.64772	0.91798	1.36E-03	3.08E-07	9.20E-07	4.79E-07	1.3573E-03
465081.24	3772170	6848.81528	0.44168	1.51833	0.93239	1.35E-03	3.05E-07	8.48E-07	4.86E-07	1.3550E-03
465053.29	3772129.41	6601.14954	0.41948	1.2429	0.91329	1.30E-03	2.90E-07	6.94E-07	4.76E-07	1.3059E-03
465159.89	3772228.16	6581.83779	0.42911	1.92525	0.82015	1.30E-03	2.97E-07	1.07E-06	4.28E-07	1.3024E-03
465079.5	3772154.51	6580.8611	0.42526	1.3847	0.89633	1.30E-03	2.94E-07	7.73E-07	4.67E-07	1.3020E-03
465051.83	3772114.03	6354.17528	0.40344	1.14481	0.87337	1.26E-03	2.79E-07	6.39E-07	4.55E-07	1.2570E-03
465129.62	3772190.23	6349.03686	0.41842	1.58328	0.82834	1.25E-03	2.89E-07	8.84E-07	4.32E-07	1.2562E-03
465077.87	3772139.06	6332.73416	0.40958	1.26834	0.86044	1.25E-03	2.83E-07	7.08E-07	4.49E-07	1.2528E-03
465076.31	3772123.64	6103.00872	0.39465	1.16644	0.82509	1.21E-03	2.73E-07	6.51E-07	4.30E-07	1.2074E-03
465102.44	3772148.71	6077.92117	0.39934	1.28887	0.81187	1.20E-03	2.76E-07	7.19E-07	4.23E-07	1.2025E-03
465140.11	3772179.42	5986.67373	0.39849	1.44421	0.77667	1.18E-03	2.75E-07	8.06E-07	4.05E-07	1.1845E-03
465100.79	3772133.25	5860.51622	0.38543	1.18363	0.78046	1.16E-03	2.66E-07	6.61E-07	4.07E-07	1.1594E-03
465130.22	3772155.05	5740.00293	0.38332	1.2706	0.75209	1.13E-03	2.65E-07	7.09E-07	3.92E-07	1.1356E-03
CONCUNIT ug/	m^3									
DEPUNIT g/m^	2									

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                                ***   MODEL SETUP
OPTIONS SUMMARY   ***
 -
- -

 **Model Is Setup For Calculation of Average CONCentration
Values.

   -- DEPOSITION LOGIC --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION. DRYDPLT = F
 **Model Uses NO WET DEPLETION. WETDPLT = F

 **Model Uses URBAN Dispersion Algorithm for the SBL for   247
Source(s),
   for Total of   1 Urban Area(s):
   Urban Population =   2180000.0 ; Urban Roughness Length =
1.000 m

 **Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

 **Other Options Specified:
        ADJ_U*   - Use ADJ_U* option for SBL in AERMET
        TEMP_Sub - Meteorological data includes TEMP
substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of: DPM

 **Model Calculates ANNUAL Averages Only

 **This Run Includes: 247 Source(s);   5 Source Group(s);
and   1169 Receptor(s)

               with: 0 POINT(s), including
                          0 POINTCAP(s) and   0 POINTHOR(s)

```
                and:    246 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with      0
line(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  16216

 **Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs External File(s) of High Values for
Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked
Values (SUMMFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:
c for Calm Hours

m for Missing Hours

b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =
367.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                Emission Units =
GRAMS/SEC                                ;  Emission Rate Unit
Factor =   0.10000E+07
                Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      4.2 MB of
RAM.

 **Input Runstream File:          aermod.inp
 **Output Print File:             aermod.out

 **Detailed Error/Message File:   Dedeaux Industrial Center
Project.err
 **File for Summary of Results:   Dedeaux Industrial Center
Project.sum
```

Dedeaux Industrial Center Project

Top 10 Concentrations

AERMOD (19191)

AERMET (16216)

7/7/2020

X	Y	ELEV	HILL	ZFLAG	Unit Emissions AVERAGE CONC SITEAREA	Unit Emissions AVERAGE CONC ROAD1	Unit Emissions AVERAGE CONC ROAD2	Unit Emissions AVERAGE CONC ROAD3
464753.85	3772434.57	363.74	363.74	0	336532.6338	21.05544	76.33752	12.42952
464740.33	3772434.99	363.87	363.87	0	328897.085	32.0559	75.1461	14.20431
464726.81	3772435.41	363.88	363.88	0	300904.1922	49.26451	66.31472	16.34522
464780.9	3772433.72	363.44	363.44	0	298490.3045	11.31052	74.69393	9.67725
464794.42	3772433.3	363.44	363.44	0	261198.1586	8.93885	73.25471	8.60375
464739.86	3772420	363.84	363.84	0	237219.5566	18.77165	34.47409	13.35369
464753.39	3772419.58	363.72	363.72	0	236668.0369	14.34238	36.04311	11.71273
464726.34	3772420.42	363.89	363.89	0	226208.0081	24.05002	30.85516	15.36407
464708.8	3772430.17	363.81	363.81	0	226114.5475	45.5711	30.91275	19.47486
464818.96	3772437.2	361.79	361.79	0	212856.2187	6.61122	90.8266	7.15594
CONCUNIT ug/	m^3							
DEPUNIT g/m^	2							

Appendix C:
Additional Air Quality Supporting Information

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Dedeaux Industrial Center Project Construction Assumptions

Dedeaux Industrial Center Project – Construction and Passenger Operations - Date: 7/6/2020 9:20 PM

Construction Phase (Construction Activity)

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Demolition	Demolition	10/5/2020	10/30/2020	5	20
Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5
Grading	Grading	11/7/2020	11/18/2020	5	8
Building Construction	Building Construction	11/19/2020	10/6/2021	5	230
Paving	Paving	11/19/2020	12/14/2020	5	18
Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8	81	0.73
Demolition	Excavators	3	8	158	0.38
Demolition	Rubber Tired Dozers	2	8	247	0.40
Site Preparation	Rubber Tired Dozers	3	8	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	1	8	158	0.38
Grading	Graders	1	8	187	0.41
Grading	Rubber Tired Dozers	1	8	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8	97	0.37
Building Construction	Cranes	1	7	231	0.29
Building Construction	Forklifts	3	8	89	0.20
Building Construction	Generator Sets	1	8	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37
Building Construction	Welders	1	8	46	0.45
Paving	Cement and Mortar Mixers	2	6	9	0.56
Paving	Pavers	1	8	130	0.42
Paving	Paving Equipment	2	6	132	0.36
Paving	Rollers	2	6	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37
Architectural Coating	Air Compressors	1	6	78	0.48

Construction Trips and Construction Vehicle Miles Traveled (VMT)

Phase Name	Worker Trips per Day	Vendor Trips per Day	Total Hauling per Phase	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Demolition	15	4	378	14.7	6.9	20
Site Preparation	18	4	0	14.7	6.9	20
Grading	15	4	388	14.7	6.9	20
Building Construction	60	24	0	14.7	6.9	20
Paving	20	4	0	14.7	6.9	20
Architectural Coating	12	4	0	14.7	6.9	20

Import and Export During the Grading Phase

Export volume: 3,100 cubic yards
Import volume: 0 cubic yards

Dedeaux Industrial Center Project

Estimation of Demolition Debris

Removal of Hardscape

Approximate Size	152,750	sq-feet
Thickness	6	inches
Volume	76,375	cu-ft
Volume	2,829	cy

Conversion Weight of Impervious:	2,700	lbs/cy
Weight of Impervious:	3,818.75	tons of debris

Conversion of Tons of Debris to Cubic Yards

Conversion Factor	1 cy = 0.5 tons	
Impervious	7,637.50	cy

Total

Removal of surfaces	7638	cy
Total	**7,638**	**cy**

Removal of surfaces	3819	tons of debris
Total	**3,819**	**tons of debris**

Notes: cy = cubic yards; ft= feet; ~ = approximate; lbs = pounds; sq-feet = square feet; cu-ft = cubic feet

Source of conversion factors:
Federal Emergency Management Agency (FEMA). 2010. Debris Estimating Field Guide. September. Website: https://www.fema.gov/pdf/government/grant/pa/fema_329_debris_estimating.pdf. Accessed February 2019.

DownEaster. 2015. Material Weight – Pounds per Cubic Yard. June 9. Website: https://downeastermfg.com/wp-content/uploads/2015/.../Cubic_Yardage_Chart-D.pdf. Accessed February 2019.

Appendix D:
Additional Energy Supporting Information

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Dedeaux Industrial Center Project—Energy Consumption Summary

FCS Project Number: 4996.0012
Date of Last Revision: July 8, 2020

Summary of Energy Use During Construction		(Annually)
Construction vehicle fuel	13,223	gallons (gasoline, diesel)
Construction equipment fuel	15,919	gallons (diesel)
Construction office trailer electricity	7,305	kilowatt hours

Summary of Energy Use During Proposed Operations		(Annually)
Operational vehicle fuel consumption		
Passenger Vehicles	*12,847*	*gallons (gasoline, diesel)*
Trucks	*122,601*	*gallons (gasoline, diesel)*
Total (Passenger Vehicles + Trucks)	135,448	gallons (gasoline, diesel)
Operational natural gas consumption	76,975	kilo-British Thermal Units
Operational electricity consumption	134,001	kilowatt hours

Construction Vehicle Fuel Calculations

California Air Resource Board (ARB). 2020. EMFAC2014 Web Database. Website: https://www.arb.ca.gov/emfac/2014/.
Accessed July 7, 2020.

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (SC)
Calendar Year: 2020
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

VMT = Vehicle Miles Traveled
FE = Fuel Economy

							Calculations	
VehClass	MdlYr	Speed	Fuel	Population	VMT (mi/day)	Consumption (1000 gallons/day)	FE (mi/gallon)	VMT*FE
LDA	Aggregated	Aggregated	GAS	522273.6796	20641785.8	713.8060471	28.9179196	596917503
LDA	Aggregated	Aggregated	DSL	4517.875175	199436.988	5.086242315	39.2110669	7820137.1
LDT1	Aggregated	Aggregated	GAS	43535.12872	1496474.03	62.17161353	24.070053	36020209
LDT1	Aggregated	Aggregated	DSL	58.76841342	1524.44568	0.053856222	28.3058413	43150.718
LDT2	Aggregated	Aggregated	GAS	176865.0835	7041678.16	325.9682921	21.6023409	152116732
LDT2	Aggregated	Aggregated	DSL	270.4372111	12297.0763	0.410094793	29.9859363	368739.35
MDV	Aggregated	Aggregated	GAS	139816.2756	4951591.18	314.2840486	15.7551463	78013044
MDV	Aggregated	Aggregated	DSL	1676.246379	78098.6537	3.382144751	23.0914581	1803411.8
LHDT1	Aggregated	Aggregated	GAS	12195.28396	338929.49	31.12528761	10.8892003	3690671.1
LHDT1	Aggregated	Aggregated	DSL	10267.87744	333853.826	16.61626841	20.0919856	6707786.3
LHDT2	Aggregated	Aggregated	GAS	2199.691014	72566.4944	7.143328486	10.1586389	737176.81
LHDT2	Aggregated	Aggregated	DSL	3603.507034	131373.828	7.089679938	18.5302904	2434395.2
MHDT	Aggregated	Aggregated	GAS	1223.593135	61809.951	8.545663699	7.23290234	447065.34
MHDT	Aggregated	Aggregated	DSL	14982.19098	853618.174	96.1843349	8.87481496	7575703.3
HHDT	Aggregated	Aggregated	GAS	86.73679615	10053.1609	2.172668248	4.62710352	46517.016
HHDT	Aggregated	Aggregated	DSL	12463.80207	1761305.02	301.5783626	5.84028976	10286532

Worker
Weighted Average FE 25.364024

Vendor
Weighted Average FE 8.9591013

Haul
Weighted Average FE 5.8334044

Dedeaux Industrial Center Project—Construction Parameters

Construction

Source: AQ/GHG Appendix, CalEEMod Output

Dedeaux Industrial Center Project – Construction and Passenger Operations - San Bernardino-South Coast County, Annual (Date: 7/6/2020 9:20 PM)

Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Demolition	Demolition	10/5/2020	10/30/2020	5	20
Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5
Grading	Grading	11/7/2020	11/18/2020	5	8
Building Construction	Building Construction	11/19/2020	10/6/2021	5	230
Paving	Paving	11/19/2020	12/14/2020	5	18
Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18

Construction Trips and VMT

	Trips per Day		Total Trips	Construction Trip Length in Miles				Trips per Phase			VMT per Phase			Fuel Consumption (gallons)		
Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Number of Days per Phase	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trips	Vendor Trips	Hauling Trips	Worker Trips	Vendor Trips	Hauling Trips
Demolition	15	4	378	14.7	6.9	20	20	300	80	378	4,410	552	7,560	173.87	61.61	64.80
Site Preparation	18	4	0	14.7	6.9	20	5	90	20	0	1,323	138	0	52.16	15.40	0.00
Grading	15	4	388	14.7	6.9	20	8	120	32	388	1,764	221	7,760	69.55	24.65	66.51
Building Construction	60	24	0	14.7	6.9	20	230	13,800	5,520	0	202,860	38,088	0	7,997.94	4,251.32	0.00
Paving	20	4	0	14.7	6.9	20	18	360	72	0	5,292	497	0	208.64	55.45	0.00
Architectural Coating	12	4	0	14.7	6.9	20	18	216	72	0	3,175	497	0	125.19	55.45	0.00

Total Project Construction VMT (miles)

274,137

Total Project Fuel Consumption (gallons)

13,223

Construction Equipment Fuel Calculation

Dedeaux Industrial Center Project
Source: AQ/GHG Appendix, CalEEMod Output
Dedeaux Industrial Center Project – Construction and Passenger Operations - San Bernardino-South Coast County, Annual (Date: 7/6/2020 9:20 PM)
Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
Demolition	Demolition	10/5/2020	10/30/2020	5	20
Site Preparation	Site Preparation	10/31/2020	11/6/2020	5	5
Grading	Grading	11/7/2020	11/18/2020	5	8
Building Construction	Building Construction	11/19/2020	10/6/2021	5	230
Paving	Paving	11/19/2020	12/14/2020	5	18
Architectural Coating	Architectural Coating	10/6/2021	10/29/2021	5	18

Construction Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of Days	HP Hours	Fuel (gallons/HP-hour)	Diesel Fuel Usage
Demolition	Concrete/Industrial Saws	1	8	81	0.73	20	9,460.80	0.042	397.75
Demolition	Excavators	3	8	158	0.38	20	28,819.20	0.020	569.59
Demolition	Rubber Tired Dozers	2	8	247	0.40	20	31,616.00	0.020	646.04
Site Preparation	Rubber Tired Dozers	3	8	247	0.40	5	11,856.00	0.020	242.26
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37	5	5,742.40	0.019	109.24
Grading	Excavators	1	8	158	0.38	8	3,842.56	0.020	75.94
Grading	Graders	1	8	187	0.41	8	4,906.88	0.021	103.88
Grading	Rubber Tired Dozers	1	8	247	0.40	8	6,323.20	0.020	129.21
Grading	Tractors/Loaders/Backhoes	3	8	97	0.37	8	6,890.88	0.019	131.09
Building Construction	Cranes	1	7	231	0.29	230	107,853.90	0.015	1,606.58
Building Construction	Forklifts	3	8	89	0.20	230	98,256.00	0.021	2,045.11
Building Construction	Generator Sets	1	8	84	0.74	230	114,374.40	0.042	4,849.10
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37	230	173,348.70	0.019	3,297.73
Building Construction	Welders	1	8	46	0.45	230	38,088.00	0.026	985.69
Paving	Cement and Mortar Mixers	2	6	9	0.56	18	1,088.64	0.032	34.90
Paving	Pavers	1	8	130	0.42	18	7,862.40	0.022	169.24
Paving	Paving Equipment	2	6	132	0.36	18	10,264.32	0.018	188.18
Paving	Rollers	2	6	80	0.38	18	6,566.40	0.019	127.47
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	18	5,168.16	0.019	98.32
Architectural Coating	Air Compressors	1	6	78	0.48	18	4,043.52	0.028	111.75
				Total Construction Equipment Fuel Consumption (gallons)					**15,919.06**

Notes:
Equipment assumptions are provided in the CalEEMod output files.
Source of usage estimates: California Air Resource Board (ARB). 2020. OFFROAD2017 (v1.0.1) Emissions Inventory
Website: https://www.arb.ca.gov/orion/. Accessed July 7, 2020.

Fuel Usage Estimates

California Air Resource Board (ARB). 2020. OFFROAD2017 (v1.0.1) Emissions Inventory. Website: https://www.arb.ca.gov/orion/. Accessed July 7, 2020.

OFFROAD2017 (v1.0.1) Emissions Inventory

Region Type: Sub-Area
Region: San Bernardino (SC)
Calendar Year: 2020
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2017 Equipment Types
Units: Emissions: tons/day, Fuel Consumption: gallons/year, Activity: hours/year, HP-Hours: HP-hours/year

									Calculations
Region	Calendar Year	Vehicle Class	Model Year	HP_Bin	Fuel	Fuel (gallons/year)	Total Activity (hours/year)	Horsepower Hours (HP-hours/year)	Fuel (gallons/HP-hour)
San Bernardino (SC)	2020	ConstMin - Cranes	Aggregated	300	Diesel	127051.39	38361.29	8529306.75	0.0148959
San Bernardino (SC)	2020	ConstMin - Excavators	Aggregated	175	Diesel	365229.39	126564.98	18479451.76	0.0197641
San Bernardino (SC)	2020	ConstMin - Graders	Aggregated	175	Diesel	223034.31	70885.74	10535389.02	0.0211700
San Bernardino (SC)	2020	ConstMin - Pavers	Aggregated	175	Diesel	48407.80	14257.39	2248893.87	0.0215252
San Bernardino (SC)	2020	ConstMin - Paving Equipment	Aggregated	175	Diesel	20588.70	7756.99	1123004.81	0.0183336
San Bernardino (SC)	2020	ConstMin - Rollers	Aggregated	100	Diesel	116583.75	68842.12	6005769.26	0.0194120
San Bernardino (SC)	2020	ConstMin - Rough Terrain Forklifts	Aggregated	100	Diesel	294708.46	147286.14	14159108.60	0.0208141
San Bernardino (SC)	2020	ConstMin - Rubber Tired Dozers	Aggregated	300	Diesel	15238.89	3413.12	745765.12	0.0204339
San Bernardino (SC)	2020	ConstMin - Tractors/Loaders/Backhoes	Aggregated	300	Diesel	193050.50	48881.39	10147900.53	0.0190237
San Bernardino (SC)	2020	OFF - ConstMin - Cement and Mortar Mixers	Aggregated	25	Diesel	3306.90	10001.00	103149.00	0.0320594
San Bernardino (SC)	2020	OFF - ConstMin - Concrete/Industrial Saws	Aggregated	50	Diesel	1686.30	1215.45	40109.85	0.0420420
San Bernardino (SC)	2020	OFF - Light Commercial - Generator Sets	Aggregated	50	Diesel	79832.80	57060.45	1882994.85	0.0423967
San Bernardino (SC)	2020	OFF - Light Commercial - Welders	Aggregated	50	Diesel	133082.65	111792.20	5142441.20	0.0258793

Construction Office Electricity Calculation

Energy Appendix: CalEEMod Typical Construction Trailer

Typical Construction Trailer - Riverside-South Coast County, Annual

Date: 6/4/2020 11:25 AM

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6854.4	1.6558	9.0000e-005	2.0000e-005	1.6636
Total		**1.6558**	**9.0000e-005**	**2.0000e-005**	**1.6636**

kWh/yr = kilowatt hours per year

Energy by Land Use - Electricity

Annual	6,854	kWh/yr
Total Over Construction	**7,305**	**kWh**

Total Construction Schedule

Start	10/5/2020
End	10/29/2021
Total Calendar Days	389
Years	1.07

Operational Fuel Calculation—Passenger Vehicles

California Air Resource Board (ARB). 2020. EMFAC2014 Web Database. Website: https://www.arb.ca.gov/emfac/2014/. Accessed July 7, 2020.

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (SC)
Calendar Year: 2021
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

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Given *Calculations*

VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
LDA	Aggregated	Aggregated	GAS	532030.0575	20874160.63	704.7545235	29.61905165	618272842
LDA	Aggregated	Aggregated	DSL	4926.592687	213090.1355	5.311144111	40.12132435	8549458.442
LDT1	Aggregated	Aggregated	GAS	43154.69332	1486505.895	60.32288362	24.64248733	36631202.69
LDT1	Aggregated	Aggregated	DSL	56.42254309	1457.487432	0.05073299	28.72859316	41871.56347
LDT2	Aggregated	Aggregated	GAS	181337.9022	7187480.199	323.8308674	22.19516705	159527323.7
LDT2	Aggregated	Aggregated	DSL	298.38211	13205.21092	0.431746973	30.58553217	403888.4035
MDV	Aggregated	Aggregated	GAS	138621.9014	4881787.772	303.3245526	16.09427173	78568818.93
MDV	Aggregated	Aggregated	DSL	1855.394742	84093.00135	3.566013519	23.58179544	1983063.956

Passenger Vehicles
Weighted Average FE (miles/gallon) **26.0199**

Total VMT—Passenger Vehicles
Source: AQ/GHG Appendix, CalEEMod Output
Dedeaux Industrial Center Project – Construction and Passenger Operations - San Bernardino-South Coast County, Annual (Date: 7/6/2020 9:20 PM)

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	78.00	78.00	78.00	334,286	334,286
Total	78.00	78.00	78.00	334,286	334,286

	Annual VMT (miles)	Fuel Consumption	
Total VMT—Passenger Vehicles	334,286	12,847	gallons per year

Proposed Operation Fuel Calculation—Trucks

California Air Resource Board (ARB). 2020. EMFAC2014 Web Database. Website: https://www.arb.ca.gov/emfac/2014/. Accessed July 7, 2020.

EMFAC2014 (v1.0.7) Emissions Inventory
Region Type: Sub-Area
Region: San Bernardino (SC)
Calendar Year: 2021
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

VMT = Vehicle Miles Traveled
FE = Fuel Economy

Given							*Calculations*	
VehClass	MdlYr	Speed	Fuel	Population	VMT	Fuel Consumption	FE	VMT*FE
HHDT	Aggregated	Aggregated	GAS	85.01556029	9869.427799	2.121119972	4.65293238	45921.7802
HHDT	Aggregated	Aggregated	DSL	12810.01456	1830803.575	310.9366324	5.888027926	10779822.6
							HHDT	
							Weighted Average FE	**5.88140552**
LHDT1	Aggregated	Aggregated	GAS	11544.54686	315247.197	28.91972892	10.90076597	3436435.92
LHDT1	Aggregated	Aggregated	DSL	10162.4222	325881.7042	16.13035217	20.20301236	6583792.1
							LHDT1	
							Weighted Average FE	**15.6290381**
LHDT2	Aggregated	Aggregated	GAS	2118.420894	69554.93809	6.829454194	10.18455298	708385.952
LHDT2	Aggregated	Aggregated	DSL	3621.112418	130900.7019	7.014740907	18.66080353	2442712.28
							LHDT2	
							Weighted Average FE	**15.7196786**
MHDT	Aggregated	Aggregated	GAS	1227.037953	62224.4268	8.648116874	7.195141752	447713.571
MHDT	Aggregated	Aggregated	DSL	15253.53292	890403.3439	100.6867507	8.843301999	7874105.67
							MHDT	
							Weighted Average FE	**8.73564628**

Fuel Economy Summary—Trucks
Source: AQ/GHG Appendix, CalEEMod Output
Dedeaux Industrial Center Project – Truck Operations - San Bernardino-South Coast County, Annual
Date: 7/6/2020 10:00 PM

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	56.00	56.00	56.00	815,360	815,360
Total	56.00	56.00	56.00	815,360	815,360

Vehicle Class	FE	Vehicle Type Classification	Truck VMT (miles)	Fuel Consumption (gallons/year)
HHDT	5.881405519	0.6785714	553,280	94,072.75
LHDT1	15.62903809	0.0273525	22,302	1,426.97
LHDT2	15.71967859	0.0083618	6,818	433.72
MHDT	8.735646281	0.2857143	232,960	26,667.75
		Total	**815,360**	**122,601**

Project Operations Natural Gas Use

Source: AQ/GHG Appendix, CalEEMod Output
Dedeaux Industrial Center Project – Construction and Passenger Operations
San Bernardino-South Coast County, Annual (Date: 7/6/2020 9:20 PM)

kBTU/yr = kilo-British Thermal Units/year

	Natural Gas Use (kBTU/yr)	
General Office Building	6,940	
Other Non-Asphalt Surfaces	0	
Parking Lot	0	
Unrefrigerated Warehouse-No Rail	70,035	
Total	**76,975**	**kBTU/yr**

Project Operations Electricity Use

Source: AQ/GHG Appendix, CalEEMod Output

Dedeaux Industrial Center Project – Construction and Passenger Operations

San Bernardino-South Coast County, Annual (Date: 7/6/2020 9:20 PM)

Project Electricity Use

kWh/yr = kilowatt hours per year

Land Use	Electricity Use (kWh/yr)	
General Office Building	19,040	
Other Non-Asphalt Surfaces	0	
Parking Lot	33,541	
Unrefrigerated Warehouse-No Rail	81,420	
Total	**134,001**	**kWh/yr**

Typical Construction Trailer

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	0.72	1000sqft	0.02	720.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	532.57	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 intensity factor adjusted consistent with Renewables Portfolio Standards.

Land Use - Upper range of typical single-wide mobile office trailer = 720 square feet.

Construction Phase - Typical construction trailer for energy use estimates - estimates would be included in the operational component of the results

Off-road Equipment - Zeroed out construction equipment

Off-road Equipment - Zeroed out construction equipment

Vehicle Trips - Run for energy estimation only

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	0.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	532.57
tblVehicleTrips	ST_TR	2.46	0.00
tblVehicleTrips	SU_TR	1.05	0.00
tblVehicleTrips	WD_TR	11.03	0.00

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	1.6558	1.6558	9.0000e-005	2.0000e-005	1.6636
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.6558	1.6558	9.0000e-005	2.0000e-005	1.6636
NaturalGas Mitigated	1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1333	0.1333	0.0000	0.0000	0.1341
NaturalGas Unmitigated	1.0000e-005	1.2000e-004	1.0000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1333	0.1333	0.0000	0.0000	0.1341

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6854.4	1.6558	9.0000e-005	2.0000e-005	1.6636
Total		**1.6558**	**9.0000e-005**	**2.0000e-005**	**1.6636**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	6854.4	1.6558	9.0000e-005	2.0000e-005	1.6636
Total		**1.6558**	**9.0000e-005**	**2.0000e-005**	**1.6636**

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