APPENDIX C6:
EBPSP GHG STUDY



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EUCALYPTUS BUSINESS PARK SPECIFIC PLAN

GREENHOUSE GAS ANALYSIS

Prepared By:

Haseeb Qureshi | hqureshi@urbanxroads.com
Michael Tirohn | mtirohn@urbanxroads.com

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16285-05 GHG Report	City of Ontario	January 20, 2026

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LIST OF ABBREVIATED TERMS

%	Percent
°C	Degrees Celsius
°F	Degrees Fahrenheit
(1)	Reference
2017 Scoping Plan	*Final 2017 Scoping Plan Update*
AB	Assembly Bill
AB 32	Global Warming Solutions Act of 2006
AB 1493	Pavley Fuel Efficiency Standards
AB 1881	California Water Conservation Landscaping Act of 2006
Annex I	Industrialized Nations
AQIA	*Eucalyptus Business Park Specific Plan Air Quality Impact Analysis*
BAU	Business as Usual
C_2F_6	Hexafluoroethane
C_2H_6	Ethane
$C_2H_2F_4$	Tetrafluroethane
$C_2H_4F_2$	Ethylidene Fluoride
CAA	Federal Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGAPS	California LBNL GHG Analysis of Policies Spreadsheet
CALGreen	California Green Building Standards Code
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resource Board
CCAP	Community Climate Action Plan
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	*CEQA Statute and Guidelines*
CDFA	California Department of Food and Agriculture
CF_4	Tetrafluoromethane
CFC	Chlorofluorocarbons
CFC-113	Trichlorotrifluoroethane
CH_4	Methane
CNRA	California Natural Resources Agency
CNRA 2009	*2009 California Climate Adaptation Strategy*
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
Convention	United Nation's Framework Convention on Climate Change
COP	Conference of the Parties
City	City of Ontario

CPUC	California Public Utilities Commission
DWR	Department of Water Resources
EMFAC	Emission Factor Model
EPA	Environmental Protection Agency
EV	Electric Vehicle
GCC	Global Climate Change
Gg	Gigagram
GHGA	Greenhouse Gas Analysis
gpd	Gallons Per Day
gpm	Gallons Per Minute
GWP	Global Warming Potential
H_2O	Water
HEPA	High Efficiency Particulate Air
HFC	Hydrofluorocarbons
HFC-23	Fluoroform
HFC-134a	1,1,1,2-tetrafluoroethane
HFC-152a	1,1-difluoroethane
hp	Horsepower
IPCC	Intergovernmental Panel on Climate Change
ISO	Independent System Operator
ITE	Institute of Transportation Engineers
kWh	Kilowatt Hours
lbs	Pounds
LBNL	Lawrence Berkeley National Laboratory
LCD	Liquid Crystal Display
LCFS	Low Carbon Fuel Standard or Executive Order S-01-07
LEV III	Low-Emission Vehicle
LULUCF	Land-Use, Land-Use Change and Forestry
MCY	Motorcycles
mpg	Miles Per Gallon
MPOs	Metropolitan Planning Organizations
$MMTCO_2e/yr$	Million Metric Ton of Carbon Dioxide Equivalent Per Year
MT/yr	Metric Tons Per Year
$MTCO_2e$	Metric Ton of Carbon Dioxide Equivalent
$MTCO_2e/yr$	Metric Ton of Carbon Dioxide Equivalent Per Year
MW	Megawatts
MWh	Megawatts Per Hour
MWELO	California Department of Water Resources' Model Water Efficient
N_2O	Nitrous Oxide
NDC	Nationally Determined Contributions
NF_3	Nitrogen Trifluoride
NHTSA	National Highway Traffic Safety Administration
NIOSH	National Institute for Occupational Safety and Health

NO_X	Nitrogen Oxides
Non-Annex I	Developing Nations
OAL	Office of Administrative Law
OPR	Office of Planning and Research
PFC	Perfluorocarbons
ppb	Parts Per Billion
ppm	Parts Per Million
ppt	Parts Per Trillion
Project	Eucalyptus Business Park Specific Plan
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient Vehicles Rule
SB	Senate Bill
SB 32	California Global Warming Solutions Act of 2006
SB 375	Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies
SB 1078	Renewable Portfolio Standards
SB 1368	Statewide Retail Provider Emissions Performance Standards
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
Scoping Plan	California Air Resources Board Climate Change Scoping Plan
SCS	Sustainable Communities Strategy
sf	Square Feet
SF_6	Sulfur Hexaflouride
SLPS	Short-Lived Climate Pollutant Strategy
SP	Service Population
TDM	Transportation Demand Measures
Title 20	Appliance Energy Efficiency Standards
Title 24	California Building Code
TRU	Transport Refrigeration Units
U.N.	United Nations
U.S.	United States
UNFCCC	United Nations' Framework Convention on Climate Change
VICS	Voluntary Interindustry Commerce Solutions
VMT	Vehicle Miles Traveled
WCI	Western Climate Initiative
WRI	World Resources Institute
ZE/NZE	Zero and Near-Zero Emissions
ZEV	Zero-Emissions Vehicle

EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this Eucalyptus Business Park Specific Plan Greenhouse Gas Analysis (GHGA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the Guidelines for Implementation of the California Environmental Quality Act (CEQA Guidelines) (1). Table ES-1 shows the findings of significance for potential greenhouse gas (GHG) impacts under the California Environmental Quality Act (CEQA).

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

Analysis	Report Section	Significance Findings	
		Unmitigated	Mitigated
GHG Impact #1: Would the Project generate GHG emissions either directly or indirectly, that may have a significant impact on the environment?	3.6	*Potentially Significant*	*Significant and Unavoidable*
GHG Impact #2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?	3.6	*Potentially Significant*	*Significant and Unavoidable*

ES.2 REGULATORY REQUIREMENTS

The Project would be required to comply with regulations imposed by the State of California, the South Coast Air Quality Management District (SCAQMD), and the City of Ontario aimed at the reduction of air pollutant emissions. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of GHG emissions include.

- Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32) (2).
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (Senate Bill [SB] 375) (3).
- Pavley Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles (4).
- California Building Code (Title 24 California Code of Regulations [CCR]). Establishes energy efficiency requirements for new construction (5).
- Appliance Energy Efficiency Standards (Title 20 CCR). Establishes energy efficiency requirements for appliances (6).
- Low Carbon Fuel Standard (LCFS). Requires carbon content of fuel sold in California to be 10 percent (%) less by 2020 (7).
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions (8).
- Renewable Portfolio Standards (RPS). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20% by 2010 and 33% by 2020. SB

350 mandated a 50% RPS by 2030. SB 100 increased the RPS requirements to 60% by 2030 with new interim targets of 44% by 2024 and 52% by 2027 (9).

- California Global Warming Solutions Act of 2006 (SB 32). Requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15 (10).
- SCAQMD Rule 2305. The SCAQMD adopted Rule 2305, the Warehouse Indirect Source Rule, on May 7, 2021. Owners and operators associated with warehouses 100,000 square feet (sf) or larger are required to directly reduce nitrogen oxides (NO_X) and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities.

Promulgated regulations that would affect the Project's emissions are accounted for in the Project's GHG calculations provided in this report. In particular, AB 1493, LCFS, and RPS are accounted for in the Project's emission calculations.

ES.3 Project Mitigation Measures (MMs)

GHG Mitigation Measures

MM GHG-1

Project development proposals pursuant to the EBPSP shall implement Community Climate Action Plan (CCAP) Screening Table Measures that achieve at least 100 points per the Screening Tables. The City shall verify that Screening Table Measures achieving the 100-point performance standard are incorporated in development plans prior to the issuance of building permit(s) and/or site plans (as applicable). The City shall verify implementation of the selected Screening Table Measures prior to the issuance of Certificate(s) of Occupancy. At the discretion of the City, measures that provide GHG reductions equivalent to GHG emissions reductions achieved via the Screening Table Measures may be implemented. Multiple development proposals may, at the discretion of the City, be allowed to collectively demonstrate achievement of at least 100 points per the Screening Tables.

AQIA Mitigation Measures

The following Project-specific mitigation measures were identified in the Eucalyptus Business Park Specific Plan Air Quality Impact Analysis Report (AQIA) (Urban Crossroads, Inc.) (11). Although these measures are designed to reduce Project air quality emissions, they would also assist in the reduction of GHGs.

MM AQ-1

To facilitate the future installation of infrastructure that would charge the batteries that power the motors of electric-powered trucks, the following shall be installed: 1) prior to the shell building permit approval, an electrical room(s) and/or exterior area(s) of the site shall be designated where future electrical panels would be located for the purpose of supplying power to on-site charging facilities for electric powered trucks. Conduit shall be installed from this designated area where the panel would be located to the onsite location where the charging facilities would be located and where electric-powered trucks would park and connect to charging facilities to charge the batteries that power the motors of the electric-powered trucks; 2) prior to issuance of a building permit for

tenant improvements, tenants that plan to operate electric trucks would be required to construct electrical charging infrastructure in addition to the required conduits.

MM AQ-2

In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants with information related to SCAQMD's Carl Moyer Program, or other such programs that promote truck retrofits or "clean" vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, and CARB regulations. Tenants shall be notified about the availability of: 1) alternatively fueled cargo handling equipment; 2) grant programs for diesel-fueled vehicle engine retrofit and/or replacement; 3) access to alternative fueling stations proximate to the site that supply compressed natural gas; and 5) the United States Environmental Protection Agency's SmartWay program.

MM AQ-3

Idling Regulations. Prior to issuance of a certificate of occupancy, legible, durable, weather-proof signs shall be installed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include the following instructions for truck drivers to shut off engines when not in use.

1. Instructions for drivers of diesel trucks to restrict idling to no more than five minutes once the vehicle is stopped, the transmission is set to "neutral" or "park" and the parking brake is engaged.
2. Telephone numbers of the building facilities manager and CARB to report violations.

MM AQ-4

All future operations shall adhere to the following:

1. Sites shall clearly mark entry and exit points for trucks and service vehicles.
2. Facility operators shall maintain records of their fleet equipment owned by the facility and ensure that all diesel-fueled Medium-Heavy Duty Trucks ("MHDT") and Heavy-Heavy Duty Trucks ("HHD") use year CARB 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the lead agency.
3. Facility operators shall train their managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.
4. Signs should be posted in the appropriate locations and/or handouts should be provided that show the locations of nearest food options, fueling, truck maintenance services, and other similar convenience services.
5. Each Facility shall designate a Compliance Officer responsible for implementing the measures described herein and/or in the project conditions of approval and mitigation measures. Contact information shall be provided to the City and updated annually, and signs shall be posted in visible locations providing the contact information for the Compliance Officer to the surrounding community. The Compliance Officer also shall

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

6. Signs shall be posted in the appropriate locations heavy truck drivers to park and perform any self-maintenance of trucks in designated on-site areas and not within the surrounding community or on public streets.
7. The Project plans and specifications shall include signs at every truck exit driveway providing directional information to the truck route.

MM AQ-5

Electric Vehicle Charging and Future Truck Charging Capability. Prior to issuance of building permits, the following features shall be demonstrated on the Project's building plans to the extent feasible over minimum California Code of Regulations Title 24 requirements. Installation shall be verified by the City prior to issuance of a certificate of occupancy.

1. For use by employees and visitors conducting business at the building, install automobile electric vehicle (EV) charging stations at the minimum number required by the California Code of Regulations Title 24. All charging stations shall be equipped with Level 2 or faster chargers. Signs shall be posted indicating that the charging stations are for exclusive use by the building's employees and by visitors conducting business at the building.
2. Install appropriate electrical infrastructure sufficiently sized to accommodate the potential installation of additional auto and truck EV charging stations in the future.
3. Install raceways for conduit to tractor trailer parking areas in logical, gated locations determined by the Project Applicant during construction document plan check, for the purpose of accommodating the future installation of EV truck charging stations at such time this technology becomes commercially available. The charging station location(s) are to be located inside the gated and secured truck courts.

MM AQ-6

Water Efficient Fixtures. All water fixtures within the Project shall be water efficient (toilets/urinals (1.5 gallons per minute [gpm] or less), showerheads (2.0 gpm or less), and faucets (1.28 gpm or less)).

MM AQ-7

City Review of Construction Documents. Prior to issuance of building permits, the following features shall be demonstrated on the Project's building and landscape plans to the extent feasible. Installation shall be verified by the City prior to issuance of a certificate of occupancy.

1. Install Energy Star-rated heating, cooling, lighting, and appliances
2. Structures shall be equipped with outdoor electric outlets in the front and rear to facilitate use of electrical lawn and garden equipment.
3. Install rooftop solar energy systems which generate enough electricity to meet 45% of annual warehouse electricity demand.

MM AQ-8

Tenant Lease Agreement. Prior to issuance of a certificate of occupancy, the following language shall be included within tenant lease agreements in order to reduce operational air pollutant emissions to the extent feasible:

1. Information about energy efficiency, energy-efficient lighting and lighting control systems, energy management, and existing energy incentive programs.
2. Information about funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment.
3. Requirements to use the cleanest technologies available and to provide the necessary infrastructure to support zero-emission vehicles, equipment, and appliances that would be operating on site at such time this technology becomes commercially available. This requirement shall apply to equipment such as forklifts, handheld landscaping equipment, yard trucks, office appliances, etc.
4. Requirements to exclusively use zero-emission light and medium-duty delivery trucks and vans, when economically feasible.
5. Requirements to operate in compliance with, and to monitor compliance with, all current and applicable air quality regulations for on-road trucks including the California Air Resources Board's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation.
6. Requirements and identification of the responsible party to maintain, replace, and upgrade rooftop solar panels per the manufacturer's recommendations for the life of the lease. The proposed Project would comply with existing solar requirements per the California Energy Code in effect during permitting of the Project (at the time of Construction Drawing Plan Check Submittal). In the case that the tenant requires additional solar capacity, this shall be addressed during the tenant improvement process. The proposed Project would be required to meet the CCR Title 24 energy efficiency standards in effect during permitting of the proposed Project
7. Requirements and identification of the responsible party to maintain, replace, and repair the legible, durable, weather-proof signs that were installed at initial building occupancy placed at truck access gates, loading docks, and truck parking areas that identify applicable CARB anti-idling regulations.
8. The tenant agreement shall include notification that the tenant shall comply with CARB Truck and Bus regulation, including requirements that only haul trucks meeting model year 2010 engine emission standards shall be used for the on-road transport of materials to and from the Project site.
9. Requirements for the building owner to (12)provide a Green Cleaning Products and Paint Education Program available to the building tenant, to keep at the building's office, break room, leasing space, or on an accessible website.

1 INTRODUCTION

This report presents the results of the GHGA prepared by Urban Crossroads, Inc., for the proposed Eucalyptus Business Park Specific Plan Project (Project). The purpose of this GHGA is to evaluate Project-related construction and operational emissions and determine the level of GHG impacts as a result of constructing and operating the Project.

1.1 SITE LOCATION

The Project site is located generally south of Ontario Ranch Road, west of Walker Avenue, east of Campus Avenue, and north of Eucalyptus Avenue in the City of Ontario, as shown in Exhibit 1-A. Access to the proposed Project would be provided to the surrounding roadways of Campus Avenue, Eucalyptus Avenue, Bon View Avenue, Grove Avenue, and Walker Avenue.

The Specific Plan area is currently used for mostly agricultural uses, including dairy farming. GHGs commonly generated by these types of uses include Methane (CH_4) from enteric fermentation, Nitrous Oxide (N_2O) from manure and fertilizers, and Carbon Dioxide (CO_2) from soil liming, fertilizer, and fuel. CH_4 is the leading GHG associated with milk production, making up about 62% of the farm-gate life cycle GHG emissions (12).

1.2 PROJECT DESCRIPTION

The Project is to consist of a business park with mixed-use retail, a public animal shelter, and park use on approximately 189.0 acres and a total building footprint of 2,939,000 square feet (SF), and includes the following uses:

- Phase 1 (2028):
  - 340,700 SF Industrial Park
  - 553,300 SF Warehousing
  - 326,200 SF High-Cube Fulfillment Center (Sort)
  - 33.8-Acre Park
- Phase 2 (2029):
  - 273,700 SF Industrial Park
  - 553,300 SF Warehousing
  - 261,000 SF High-Cube Fulfillment Center (Sort)
  - 5,000 SF Retail
  - 5,000 SF Fast-Food Restaurant with Drive-Thru
  - 35,000 SF Public Animal Shelter
  - 37.7-Acre Park
- Phase 3 (2031):
  - 162,600 SF Industrial Park
  - 211,700 SF Manufacturing
  - 163,600 SF Warehousing
  - 47,900 SF High-Cube Fulfillment Center (Sort)
  - 21.0-Acre Park

Buildout of the proposed Project is anticipated to occur in 2031. A preliminary land use plan is presented in Exhibit 1-B. It should be noted that the open space located immediately north of the specific plan would not generate significant emissions and is thus not considered in this analysis.

EXHIBIT 1-A: PROJECT LOCATION

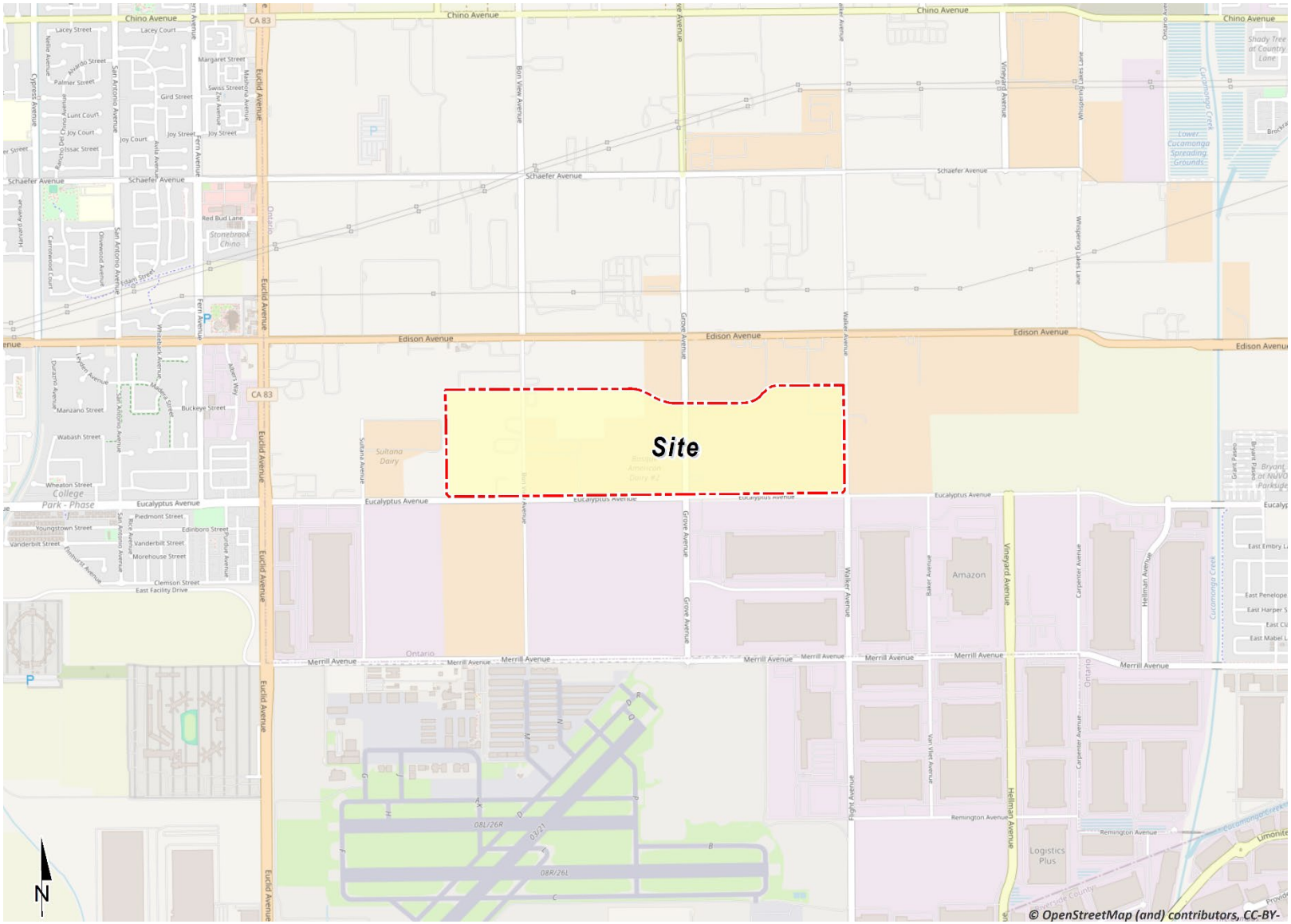
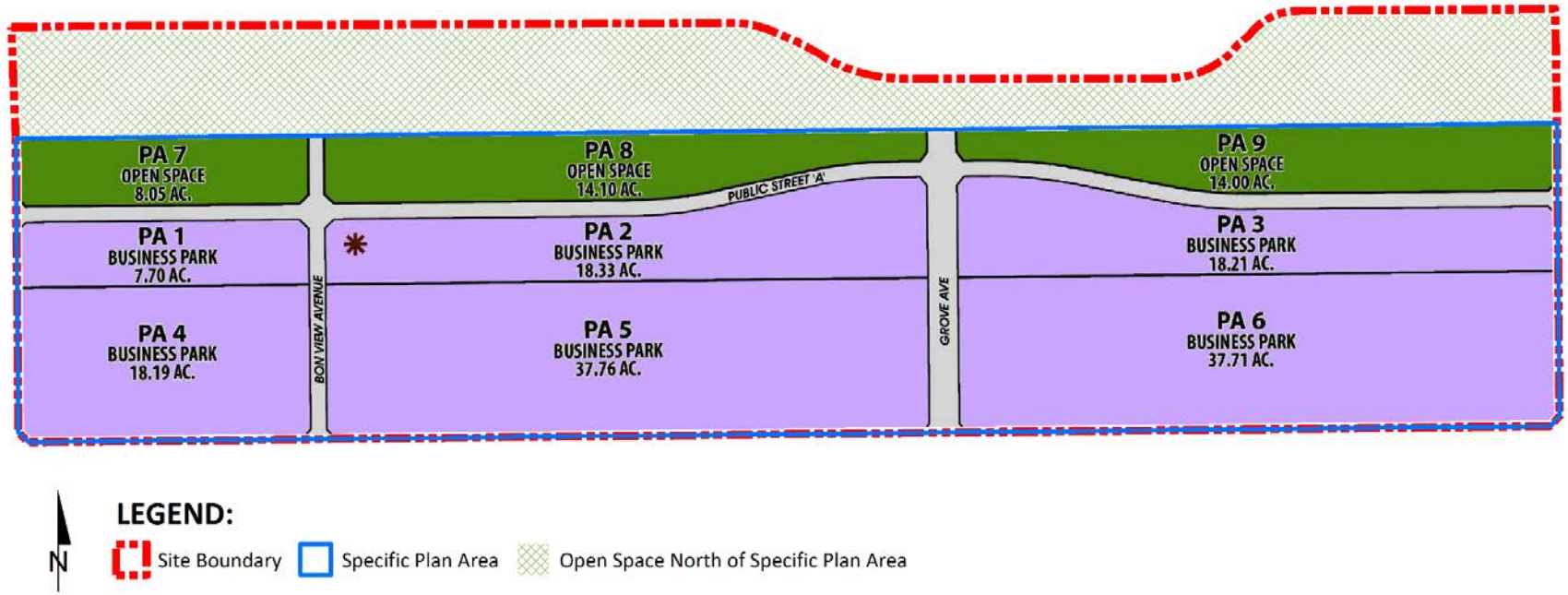


EXHIBIT 1-B: PRELIMINARY LAND USE PLAN



2 CLIMATE CHANGE SETTING

2.1 INTRODUCTION TO GLOBAL CLIMATE CHANGE (GCC)

GCC is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. The majority of scientists believe that the climate shift taking place since the Industrial Revolution is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of GHGs in the earth's atmosphere, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases. The majority of scientists believe that this increased rate of climate change is the result of GHGs resulting from human activity and industrialization over the past 200 years.

An individual project, like the Project evaluated in this GHGA, cannot generate enough GHG emissions to affect a discernible change in global climate. However, the Project may participate in the potential for GCC 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 GCC. Because these changes may have serious environmental consequences, Section 3 will evaluate the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to the greenhouse effect.

2.2 GLOBAL CLIMATE CHANGE DEFINED

GCC refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2, N_2O, CH_4, hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the earth's atmosphere, but prevent radiative heat from escaping, thus warming the earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages.

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic activity. Without the natural GHG effect, the earth's average temperature would be approximately 61 degrees Fahrenheit (°F) cooler than it is currently. The cumulative accumulation of these gases in the earth's atmosphere is considered to be the cause for the observed increase in the earth's temperature.

2.3 GHGS

2.3.1 GHGs and Health Effects

GHGs trap heat in the atmosphere, creating a GHG effect that results in global warming and climate change. Many gases demonstrate these properties as discussed in Table 2-1. For the purposes of this analysis, emissions of CO_2, CH_4, and N_2O were evaluated because these gases are the primary contributors to GCC from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

TABLE 2-1: GHGS (1 OF 6)

GHGs	Description	Sources	Health Effects
Water	Water is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. Climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change. As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the earth, thus	The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.	There are no known direct health effects related to water vapor at this time. It should be noted however that when some pollutants react with water vapor, the reaction forms a transport mechanism for some of these pollutants to enter the human body through water vapor.

TABLE 2-1: GHGS (2 OF 6)

GHGs	Description	Sources	Health Effects
Water (Continued)	further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on. This is referred to as a "positive feedback loop." The extent to which this positive feedback loop would continue is unknown as there are also dynamics that hold the positive feedback loop in check. As an example, when water vapor increases in the atmosphere, more of it would eventually condense into clouds, which are more able to reflect incoming solar radiation (thus allowing less energy to reach the earth's surface and heat it up) (13).		
CO_2	CO_2 is an odorless and colorless GHG. Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of CO_2 in the atmosphere is projected to increase to a minimum of 540	CO_2 is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. CO_2 is naturally removed from the air by photosynthesis, dissolution into	Outdoor levels of CO_2 are not high enough to result in negative health effects. According to the National Institute for Occupational Safety and Health (NIOSH) high concentrations of CO_2 can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of CO_2 in the earth's atmosphere are estimated to be approximately 370 ppm, the actual reference

TABLE 2-1: GHGS (3 OF 6)

GHGs	Description	Sources	Health Effects
CO_2 (Continued)	ppm by 2100 as a direct result of anthropogenic sources (14).	ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks (15).	exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period (16).
CH_4	CH_4 is an extremely effective absorber of radiation, although its atmospheric concentration is less than CO_2 and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs.	CH_4 in the atmosphere is generated by many different sources, such as fossil fuel production, transport and use, from the decay of organic matter in wetlands, and as a byproduct of digestion by ruminant animals such as cows. Determining which specific sources are responsible for variations in annual increases of CH_4 is complex, but scientists estimate that fossil fuel production and use contributes roughly 30% of the total CH_4 emissions. These industrial sources of CH_4 are relatively simple to pinpoint and control using current technology (17).	CH_4 is extremely reactive with oxidizers, halogens, and other halogen-containing compounds. Exposure to elevated levels of CH_4 can cause asphyxiation, loss of consciousness, headache and dizziness, nausea and vomiting, weakness, loss of coordination, and an increased breathing rate.

TABLE 2-1: GHGS (4 OF 6)

GHGs	Description	Sources	Health Effects
N_2O	N_2O, also known as laughing gas, is a colorless GHG. Concentrations of N_2O also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb).	N_2O is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, i.e., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. N_2O can be transported into the stratosphere, be deposited on the earth's surface, and be converted to other compounds by chemical reaction (18).	N_2O can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage) (18).
Chlorofluorocarbons (CFCs)	CFCs are gases formed synthetically by replacing all hydrogen atoms in CH_4 or ethane (C_2H_6) with chlorine	CFCs have no natural source. They are found in aerosol	In confined indoor locations, working with CFC-113 or other CFCs is

TABLE 2-1: GHGS (5 OF 6)

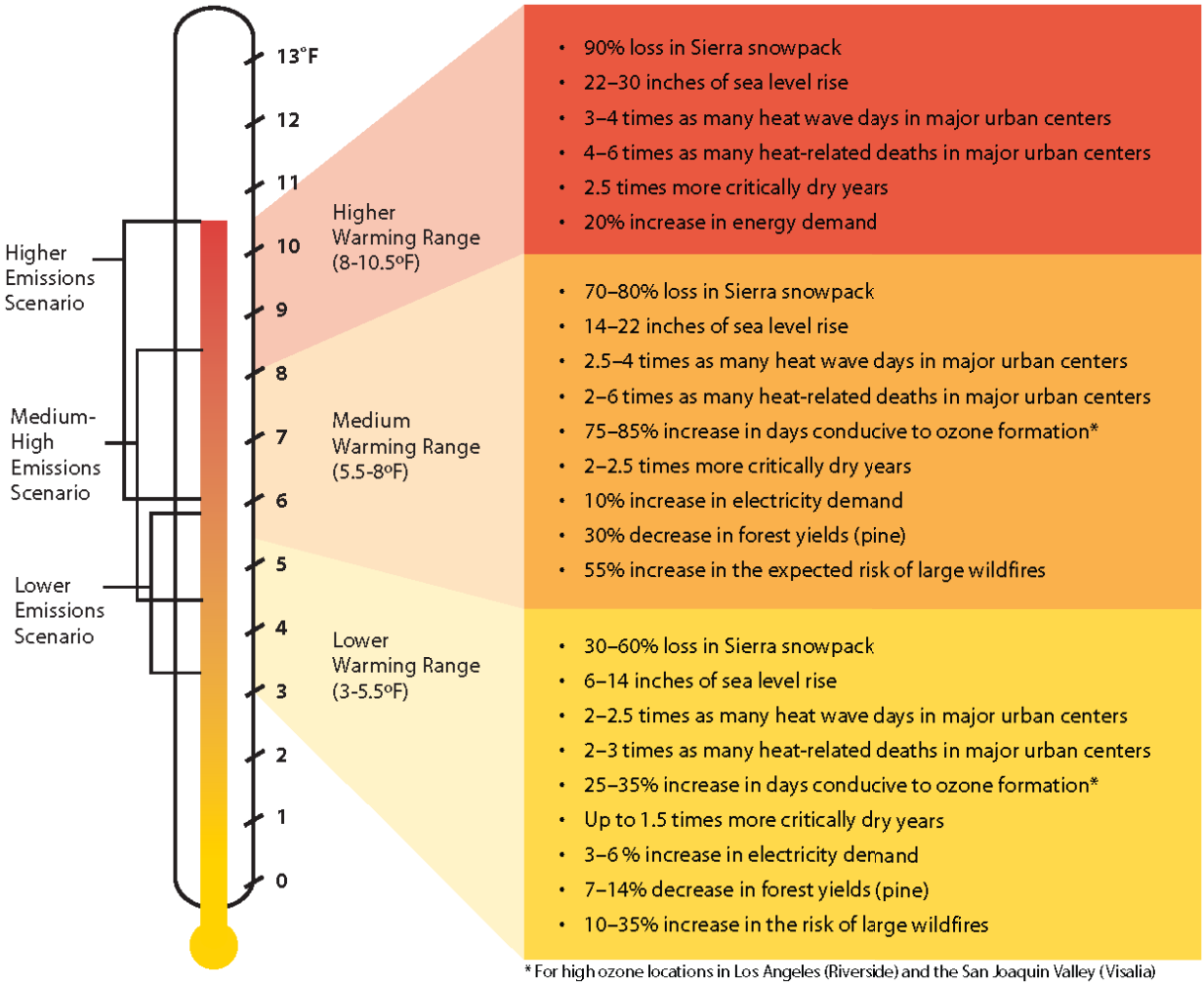
GHGs	Description	Sources	Health Effects
Chlorofluorocarbons (CFCs) (Continued)	and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the earth's surface).	sprays, blowing agents for foams and packing materials, as solvents, and as refrigerants. (19).	thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.
HFCs	HFCs are synthetic, man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential (GWP). The HFCs with the largest measured atmospheric abundances are (in order), Fluoroform (HFC-23), 1,1,1,2-tetrafluoroethane (HFC-134a), and 1,1-difluoroethane (HFC-152a). Prior to 1990, the only significant emissions were of HFC-23. HCF-134a emissions are increasing due to its use as a refrigerant.	HFCs are manmade for applications such as automobile air conditioners and refrigerants.	No health effects are known to result from exposure to HFCs.
PFCs	PFCs have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above earth's surface, are able to destroy the compounds. Because of this, PFCs have exceptionally long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The EPA estimates that concentrations of CF_4 in the	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.	No health effects are known to result from exposure to PFCs.

TABLE 2-1: GHGS (6 OF 6)

GHGs	Description	Sources	Health Effects
PFCs (Continued)	atmosphere are over 70 parts per trillion (ppt).		
SF_6	SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (23,900) (20). The EPA indicates that concentrations in the 1990s were about 4 ppt.	SF_6 is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.
Nitrogen Trifluoride (NF_3)	NF_3 is a colorless gas with a distinctly moldy odor. The World Resources Institute (WRI) indicates that NF_3 has a 100-year GWP of 17,200 (21).	NF_3 is used in industrial processes and is produced in the manufacturing of semiconductors, Liquid Crystal Display (LCD) panels, types of solar panels, and chemical lasers.	Long-term or repeated exposure may affect the liver and kidneys and may cause fluorosis (22).

The potential health effects related directly to the emissions of CO_2, CH_4, and N_2O as they relate to development projects, such as the Project, are still being debated in the scientific community. Their cumulative effects to GCC have the potential to cause adverse effects to human health. Increases in Earth's ambient temperatures would result in more intense heat waves, causing more heat-related deaths. Exhibit 2-A presents the potential impacts of global warming (23).

EXHIBIT 2-A: SUMMARY OF PROJECTED GLOBAL WARMING IMPACT, 2070-2099 (AS COMPARED WITH 1961-1990)



Source: Barbara H. Allen-Diaz. "Climate change affects us all." *University of California, Agriculture and Natural Resources*, 2009.

2.4 GLOBAL WARMING POTENTIAL (GWP)

GHGs have varying GWP values. GWP of a GHG indicates the amount of warming a gas cause over a given period of time and represents the potential of a gas to trap heat in the atmosphere. CO_2 is utilized as the reference gas for GWP, and thus has a GWP of 1. CO_2 equivalent (CO_2e) is a term used for describing the different GHGs in a common unit. CO_2e signifies the amount of CO_2 which would have the equivalent GWP.

The Intergovernmental Panel on Climate Change (IPCC) is the international body for assessing the science related to climate change. IPCC Assessment Reports cover the full scientific, technical and socio-economic assessment of climate change. The atmospheric lifetime and GWP of selected GHGs are summarized at Table 2-2. As shown in the table below, GWP for the 2nd Assessment Report range from 1 for CO_2 to 23,900 for SF_6 and GWP for the 6th Assessment Report range from 1 for CO_2 to 25,200 for SF_6 (24).

TABLE 2-2: GWP AND ATMOSPHERIC LIFETIME OF SELECT GHGS

Gas	Atmospheric Lifetime (years)	GWP (100-year time horizon)	
		2nd Assessment Report	6th Assessment Report
CO_2	Multiple	1	1
CH_4	11.8	21	28
N_2O	109	310	273
HFC-23	228	11,700	14,600
HFC-134a	14	1,300	1,526
HFC-152a	1.6	140	164
SF_6	3,200	23,900	25,200

Source: IPCC Second Assessment Report, 1995 and IPCC Sixth Assessment Report, 2023

2.5 GHG EMISSIONS INVENTORIES

2.5.1 Global

Worldwide anthropogenic GHG emissions are tracked by the IPCC for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). Human GHG emissions data for Annex I nations are available through 2021. Based on the latest available data, the sum of these emissions totaled approximately 28,272,940 gigagram (Gg) CO_2e[1] (25) (26) as summarized on Table 2-3.

2.5.2 United States

As noted in Table 2-3, the United States, as a single country, was the number two producer of GHG emissions in 2021.

2.5.3 State of California

California has significantly slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls but is still a substantial contributor to the U.S. emissions inventory total (18). The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Based upon the 2024 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2022 GHG emissions period, California emitted an average 371.1 million metric tons of CO_2e per year ($MMTCO_2e/yr$) or 371,100 Gg CO_2e (5.85% of the total U.S. GHG emissions) (27). Based on data published by the U.S. Energy Information Administration, California's per capita (9.12 metric tons) GHG emissions are much less than the nationwide per capita (15.8 metric ton) average (28).

[1] The global emissions are the sum of Annex I and non-Annex I countries, without counting Land-Use, Land-Use Change and Forestry (LULUCF). For countries without 2021 data, the United Nations' Framework Convention on Climate Change (UNFCCC) data for the most recent year were used U.N. Framework Convention on Climate Change, "Annex I Parties – GHG total without LULUCF," The most recent GHG emissions for China and India are from 2014 and 2016, respectively.

TABLE 2-3: TOP GHG PRODUCING COUNTRIES AND THE EUROPEAN UNION

Emitting Countries	GHG Emissions (Gg CO_2e)
China	12,300,200
United States	6,340,228
European Union (27-member countries)	3,468,394
India	2,839,425
Russian Federation	2,156,599
Japan	1,168,094
Total	28,272,940

2.6 EFFECTS OF CLIMATE CHANGE IN CALIFORNIA

2.6.1 Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. Based on *Our Changing Climate Assessing the Risks to California by the California Climate Change Center*, large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced (29).

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a significant increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

2.6.2 Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the state from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to

water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there might be many years with insufficient snow for skiing and snowboarding.

The State's water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

2.6.3 Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of the water supply needed. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate ozone pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

2.6.4 Forests and Landscapes

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including precipitation, winds, temperature, and landscape and vegetation conditions, future risks would not be uniform throughout the state. In contrast, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the state. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the state's forests has the potential to decrease as a result of GCC.

2.6.5 Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the state's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12-14 inches.

2.7 Regulatory Setting

2.7.1 International

Climate change is a global issue involving GHG emissions from all around the world; therefore, countries such as the ones discussed below have made an effort to reduce GHGs.

IPCC

In 1988, the United Nations (U.N.) and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of risk of human-induced climate change, its potential impacts, and options for adaptation and mitigation.

United Nation's Framework Convention on Climate Change (UNFCCC)

On March 21, 1994, the U.S. joined a number of countries around the world in signing the Convention. Under the UNFCCC, 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.

International Climate Change Treaties

The Kyoto Protocol is an international agreement linked to the UNFCCC. 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 an average of 5% against 1990 levels over the five-year period 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 U.S. Senate for ratification, which effectively ended American involvement in the Kyoto Protocol. In December 2009, international leaders met in Copenhagen to address the future of international climate change commitments post-Kyoto. No binding agreement was reached in Copenhagen; however, the UN Climate Change Committee identified the long-term goal of limiting the maximum global average temperature increase to no more than 2 degrees Celsius (°C) above pre-industrial levels, subject to a review in 2015. The Committee held additional meetings in Durban, South Africa in November 2011; Doha, Qatar in November 2012; and Warsaw, Poland in November 2013. The meetings gradually gained consensus among participants on individual climate change issues.

On September 23, 2014, more than 100 Heads of State and Government and leaders from the private sector and civil society met at the Climate Summit in New York hosted by the U.N. At the Summit, 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.

Parties to the UNFCCC reached a landmark agreement on December 12, 2015, in Paris, charting a fundamentally new course in the two-decade-old global climate effort. Culminating a four-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 UNFCCC Conference of the Parties (COP) 21. Together, the Paris Agreement and the accompanying COP decision:

- Reaffirm the goal of limiting global temperature increase well below 2°C, while urging efforts to limit the increase to 1.5 degrees;
- Establish binding commitments by all parties to make "nationally determined contributions" (NDCs), and to pursue domestic measures aimed at achieving them;
- Commit all countries to report regularly on their emissions and "progress made in implementing and achieving" their NDCs, and to undergo international review;
- Commit all countries to submit new NDCs every five years, with the clear expectation that they would "represent a progression" beyond previous ones;
- Reaffirm the binding obligations of developed countries under the UNFCCC to support the efforts of developing countries, while for the first time encouraging voluntary contributions by developing countries too;
- Extend the current goal of mobilizing $100 billion a year in support by 2020 through 2025, with a new, higher goal to be set for the period after 2025;
- Extend a mechanism to address "loss and damage" resulting from climate change, which explicitly would not "involve or provide a basis for any liability or compensation;"
- Require parties engaging in international emissions trading to avoid "double counting;" and
- Call for a new mechanism, similar to the Clean Development Mechanism under the Kyoto Protocol, enabling emission reductions in one country to be counted toward another country's NDC (C2ES 2015a) (30).

Following President Biden's day one executive order, the United States officially rejoined the landmark Paris Agreement on February 19, 2021, positioning the country to once again be part of the global climate solution. Meanwhile, city, state, business, and civic leaders across the country and around the world have been ramping up efforts to drive the clean energy advances needed to meet the goals of the agreement and put the brakes on dangerous climate change.

2.7.2 National

Prior to the last decade, there have been no concrete federal regulations of GHGs or major planning for climate change adaptation. The following are actions regarding the federal government, GHGs, and fuel efficiency.

GHG Endangerment

In *Massachusetts v. Environmental Protection Agency* 549 U.S. 497 (2007), decided on April 2, 2007, the U.S. Supreme Court found that four GHGs, including CO_2, are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA). The Supreme Court held that the EPA 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 CAA:

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

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 Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator's findings (31).

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 U.S. On April 1, 2010, the EPA, and the Department of Transportation's National Highway Traffic Safety Administration (NHTSA) 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 U.S.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty (MD) 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 (mpg) 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 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). In August 2012, the EPA and the NHTSA issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025. The new standards apply to passenger cars, light-duty trucks, and MD 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 mpg if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks (HDT) and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20%

reduction in CO_2 emissions and fuel consumption by the 2018 model year. For HDT 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% reduction for gasoline vehicles and a 15% reduction for diesel vehicles by the 2018 model year (12 and 17%, respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10% reduction in fuel consumption and CO_2 emissions from the 2014 to 2018 model years.

On April 2, 2018, the EPA signed the Mid-term Evaluation Final Determination, which declared that the MY 2022-2025 GHG standards are not appropriate and should be revised (32). This Final Determination serves to initiate a notice to further consider appropriate standards for MY 2022-2025 light-duty vehicles. On August 2, 2018, the NHTSA in conjunction with the EPA, released a notice of proposed rulemaking, the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks* (SAFE Vehicles Rule). The SAFE Vehicles Rule was proposed to amend existing Corporate Average Fuel Economy (CAFE) and tailpipe CO_2 standards for passenger cars and light trucks and to establish new standards covering model years 2021 through 2026. As of March 31, 2020, the NHTSA and EPA finalized the SAFE Vehicle Rule which increased stringency of CAFE and CO_2 emissions standards by 1.5% each year through model year 2026 (33). On December 21, 2021, after reviewing all the public comments submitted on NHTSA's April 2021 Notice of Proposed Rulemaking, NHTSA finalizes the CAFE Preemption rulemaking to withdraw its portions of the so-called SAFE I Rule. The final rule concludes that the SAFE I Rule overstepped the agency's legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests. The final rule ensures that the SAFE I Rule will no longer form an improper barrier to states exploring creative solutions to address their local communities' environmental and public health challenges (34).

On March 31, 2022, NHTSA finalized CAFE standards for MY 2024-2026. The standards for passenger cars and light trucks for MYs 2024-2025 were increased at a rate of 8% per year and then increased at a rate of 10% per year for MY 2026 vehicles. NHTSA currently projects that the revised standards would require an industry fleet-wide average of roughly 49 mpg in MY 2026 and would reduce average fuel outlays over the lifetimes of affected vehicles that provide consumers hundreds of dollars in net savings. These standards are directly responsive to the agency's statutory mandate to improve energy conservation and reduce the nation's energy dependence on foreign sources (35).

Mandatory Reporting of GHGs

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 GHGs Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the U.S. and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons per year (MT/yr) or more 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 CAA permitting programs to limit which facilities would be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

> *"This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the CAA, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to GHG sources, starting with the largest GHG emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for GHG emissions until at least April 30, 2016."*

The EPA estimates that facilities responsible for nearly 70% of the national GHG emissions from stationary sources would 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 GHG Emissions for New Stationary Sources: Electric Utility Generating Units

As required by a settlement agreement, the EPA proposed new performance standards for emissions of CO_2 for new, affected, fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts (MW) would be required to meet an output-based standard of 1,000 pounds (lbs) of CO_2 per MW-hour (MWh), based on the performance of widely used natural gas combined cycle technology. It should be noted that on February 9, 2016, the Supreme Court issued a stay of this regulation pending litigation. Additionally, the current EPA Administrator has also signed a measure to repeal the Clean Power Plan, including the CO_2 standards. The Clean Power Plan was officially repealed on June 19, 2019, when the EPA issued the final Affordable Clean Energy rule (ACE). Under ACE, new state-specific emission guidelines were established that provided existing coal-fired electric utility generating units with achievable standards.

On January 19, 2021, the D.C. Circuit Court of Appeals ruled that the EPA's ACE Rule for GHG emissions from power plants rested on an erroneous interpretation of the CAA that barred EPA from considering measures beyond those that apply at and to an individual source. The court therefore vacated and remanded the ACE Rule and adopted a replacement rule which regulates CO_2 emissions from existing power plants, potentially again considering generation shifting and other measures to more aggressively target power sector emissions.

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. Successful examples in the U.S. include the Acid Rain Program and the N_2O Budget Trading Program and Clean Air Interstate Rule in the northeast. 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 Regional GHG Initiative is an effort to reduce GHGs among the states of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. Each state caps CO_2 emissions from power plants, auctions CO_2 emission allowances, and invests the proceeds in strategic energy programs that further reduce emissions, save consumers money, create jobs, and build a clean energy economy. The Initiative began in 2008 and has retained all participating states as of 2020.

The Western Climate Initiative (WCI) partner jurisdictions have developed a comprehensive initiative to reduce regional GHG emissions to 15% below 2005 levels by 2020. The partners were originally California, British Columbia, Manitoba, Ontario, and Quebec. However, Manitoba and Ontario are not currently participating. California linked with Quebec's cap-and-trade system January 1, 2014, and joint offset auctions took place in 2015. While the WCI has yet to publish whether it has successfully reached the 2020 emissions goal initiative set in 2007, SB 32 requires that California, a major partner in the WCI, adopt the goal of reducing statewide GHG emissions to 40% below the 1990 level by 2030.

SmartWay Program

The SmartWay Program is a public-private initiative between the EPA, large and small trucking companies, rail carriers, logistics companies, commercial manufacturers, retailers, and other federal and state agencies. Its purpose is to improve fuel efficiency and the environmental performance (reduction of both GHG emissions and air pollution) of the goods movement supply chains. SmartWay is comprised of four components (36):

1. SmartWay Transport Partnership: A partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption, and improve performance annually.
2. SmartWay Technology Program: A testing, verification, and designation program to help freight companies identify equipment, technologies, and strategies that save fuel and lower emissions.
3. SmartWay Vehicles: A program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo.
4. SmartWay International Interests: Guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay.

SmartWay effectively refers to requirements geared towards reducing fuel consumption. Most large trucking fleets driving newer vehicles are compliant with SmartWay design requirements. Moreover, over time, all HDTs would have to comply with the CARB GHG Regulation that is designed with the SmartWay Program in mind, to reduce GHG emissions by making them more fuel-efficient. For instance, in 2015, 53 foot or longer dry vans or refrigerated trailers equipped with a combination of

SmartWay-verified low-rolling resistance tires and SmartWay-verified aerodynamic devices would obtain a total of 10% or more fuel savings over traditional trailers.

Through the SmartWay Technology Program, the EPA has evaluated the fuel saving benefits of various devices through grants, cooperative agreements, emissions, and fuel economy testing, demonstration projects and technical literature review. As a result, the EPA has determined the following types of technologies provide fuel saving and/or emission reducing benefits when used properly in their designed applications, and has verified certain products:

- Idle reduction technologies – less idling of the engine when it is not needed would reduce fuel consumption.
- Aerodynamic technologies minimize drag and improve airflow over the entire tractor-trailer vehicle. Aerodynamic technologies include gap fairings that reduce turbulence between the tractor and trailer, side skirts that minimize wind under the trailer, and rear fairings that reduce turbulence and pressure drop at the rear of the trailer.
- Low rolling resistance tires can roll longer without slowing down, thereby reducing the amount of fuel used. Rolling resistance (or rolling friction or rolling drag) is the force resisting the motion when a tire rolls on a surface. The wheel would eventually slow down because of this resistance.
- Retrofit technologies include things such as diesel particulate filters, emissions upgrades (to a higher tier), etc., which would reduce emissions.
- Federal excise tax exemptions.

Executive Order 13990

On January 20, 2021, Federal agencies were directed to immediately review, and take action to address, Federal regulations promulgated and other actions taken during the last 4 years that conflict with national objectives to improve public health and the environment; ensure access to clean air and water; limit exposure to dangerous chemicals and pesticides; hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; reduce GHG emissions; bolster resilience to the impacts of climate change; restore and expand our national treasures and monuments; and prioritize both environmental justice and employment.

2.7.3 California

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.

2.7.3.1 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, 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 provided GHG reductions. This section describes the major provisions of the legislation.

AB 1881

The Water Conservation in Landscaping Act of 2006 requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

SB 1368

California SB 1368 adds Sections 8340 and 8341 to the Public Utilities Code (effective January 1, 2007) with the intent "to prevent long-term investments in power plants with GHG emissions in excess of those produced by a combined-cycle natural gas power plant" with the aim of "reducing emissions of GHGs from the state's electricity consumption, not just the state's electricity production." SB 1368 provides a mechanism for reducing the GHG emissions of electricity providers, both in-state and out-of-state, thereby assisting CARB in meeting its mandate under AB 32, the Global Warming Solutions Act of 2006.

AB 32

The California State Legislature enacted AB 32, which required that GHGs emitted in California be reduced to 1990 levels by the year 2020 (this goal has been met[2]). GHGs, 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, NF_3, has also been added to the list of GHGs. CARB is the state agency charged with monitoring and regulating sources of GHGs. Pursuant to AB 32, CARB adopted regulations to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 states the following:

> *"Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems."*

SB 375

On September 30, 2008, SB 375 was signed by Governor Schwarzenegger. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40% of the total GHG emissions in California. SB 375 states, "Without improved land use and transportation policy, California would not be able to achieve the goals of AB 32." SB 375 does the following: it (1) requires metropolitan planning organizations (MPOs) 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.

[2] Based upon the 2024 GHG inventory data (i.e., the latest year for which data are available) for the 2000-2022 GHG emissions period, California emitted an average 371.1 $MMTCO_2e$) (26). This is less than the 2020 emissions target of 431 $MMTCO_2e$. This is less than the 2020 emissions target of 431 $MMTCO_2e$.

SB 375 requires MPOs to prepare a Sustainable Communities Strategy (SCS) within the Regional Transportation Plan (RTP) that guides growth while taking into account the transportation, housing, environmental, and economic needs of the region. SB 375 uses CEQA streamlining as an incentive to encourage residential projects, which help achieve AB 32 goals to reduce GHG emissions. Although SB 375 does not prevent CARB from adopting additional regulations, such actions are not anticipated in the foreseeable future.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that CARB accepts as achieving the GHG emission reduction targets.
2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the MMs required by an applicable prior environmental document.

AB 1493 - Pavley Fuel Efficiency Standards

The second phase of the implementation for the Pavley bill was incorporated into Amendments to the Low-Emission Vehicle Program (LEV III) or the Advanced Clean Cars (ACC) program. The ACC program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for MY 2017 through 2025. The regulation will reduce GHGs from new cars by 34% from 2016 levels by 2025. The new rules will clean up gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid EV and hydrogen fuel cell cars. The package will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California. On March 9, EPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards for cars and light trucks, which other states can also adopt and enforce. With this authority restored, EPA will continue partnering with states to advance the next generation of clean vehicle technologies.

Clean Energy and Pollution Reduction Act of 2015 (SB 350)

In October 2015, the legislature approved, and Governor Jerry Brown 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 EV charging stations. Provisions for a 50% reduction in the use of petroleum statewide were removed from the Bill because of 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% to 50% by 2030, with interim targets of 40% by 2024, and 45% by 2027.
- Double the energy efficiency in existing buildings by 2030. This target would be achieved through the California Public Utilities Commission (CPUC), the California Energy Commission (CEC), and local publicly owned utilities.

- Reorganize the Independent System Operator (ISO) to develop more regional electrify transmission markets and to improve accessibility in these markets, which would facilitate the growth of renewable energy markets in the western United States.

SB 32

On September 8, 2016, Governor Brown signed SB 32 and its companion bill, AB 197. SB 32 requires the state to reduce statewide GHG emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15. The new legislation builds upon the AB 32 goal and provides an intermediate goal to achieving S-3-05, which sets a statewide GHG reduction target of 80% below 1990 levels by 2050. AB 197 creates a legislative committee to oversee regulators to ensure that CARB not only responds to the Governor, but also the Legislature (10).

2017 CARB Scoping Plan

In November 2017, CARB released the *Final 2017 Scoping Plan Update* (*2017 Scoping Plan*), which identifies the State's post-2020 reduction strategy. The *2017 Scoping Plan* reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the LCFS, and much cleaner cars, trucks, and freight movement, utilizing cleaner, renewable energy, and strategies to reduce CH_4 emissions from agricultural and other wastes.

The *2017 Scoping Plan* establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030 (37).

California's climate strategy would require contributions from all sectors of the economy, including the land base, and would include enhanced focus on zero and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (CH_4, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries would further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the *2017 Scoping Plan* framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing zero-emission vehicles (ZEV) buses and trucks.
- LCFS, with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the RPS to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
    - Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing CH4 and HCF emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
    - Continued implementation of SB 375.

- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

Note, however, that the *2017 Scoping Plan* acknowledges that:

> *"[a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."*

In addition to the statewide strategies listed above, the *2017 Scoping Plan* also identifies local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 metric tons of CO_2e ($MTCO_2e$) or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidence-based bright-line numeric thresholds—consistent with the *2017 Scoping Plan* and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and MMs that avoid or minimize project emissions to the degree feasible; or a performance-based metric using a CAP or other plan to reduce GHG emissions is appropriate.

According to research conducted by the Lawrence Berkeley National Laboratory (LBNL) and supported by CARB, California, under its existing and proposed GHG reduction policies, could achieve the 2030 goals under SB 32. The research utilized a new, validated model known as the California LBNL GHG Analysis of Policies Spreadsheet (CALGAPS), which simulates GHG and criteria pollutant emissions in California from 2010 to 2050 in accordance to existing and future GHG-reducing policies. The CALGAPS model showed that by 2030, emissions could range from 211 to 428 $MTCO_2e$ per year ($MTCO_2e$/yr), indicating that "even if all modeled policies are not implemented, reductions could be sufficient to reduce emissions 40% below the 1990 level [of SB 32]." CALGAPS analyzed emissions through 2050 even though it did not generally account for policies that might be put in place after 2030. Although the research indicated that the emissions would not meet the State's 80% reduction goal by 2050, various combinations of policies could allow California's cumulative emissions to remain very low through 2050 (38) (39).

Cap-and-Trade Program

The *2017 Scoping Plan* identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program would help put California on the path to meet its goal of achieving a 40% reduction in GHG emissions from 1990 levels by 2030. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap would be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program pursuant to its authority under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from regulated entities by more than 16% between 2013 and 2020, and by an additional 40% by 2030. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production)

commenced in 2013 and would decline over time, achieving GHG emission reductions throughout the program's duration.

Covered entities that emit more than 25,000 $MTCO_2e$/yr must comply with the Cap-and-Trade Program. Triggering of the 25,000 $MTCO_2e$/yr "inclusion threshold" is measured against a subset of emissions reported and verified under the California Regulation for the Mandatory Reporting of GHG Emissions (Mandatory Reporting Rule or "MRR").

Under the Cap-and-Trade Program, CARB issues allowances equal to the total amount of allowable emissions over a given compliance period and distributes these to regulated entities. Covered entities are allocated free allowances in whole or part (if eligible), and may buy allowances at auction, purchase allowances from others, or purchase offset credits. Each covered entity with a compliance obligation is required to surrender "compliance instruments" for each $MTCO_2e$ of GHG they emit. There also are requirements to surrender compliance instruments covering 30% of the prior year's compliance obligation by November of each year (40).

The Cap-and-Trade Program provides a firm cap, which provides the highest certainty of achieving the 2030 target. An inherent feature of the Cap-and-Trade program is that it does not guarantee GHG emissions reductions in any discrete location or by any particular source. Rather, GHG emissions reductions are only guaranteed on an accumulative basis. As summarized by CARB in the *First Update to the Climate Change Scoping Plan*:

> *"The Cap-and-Trade Regulation gives companies the flexibility to trade allowances with others or take steps to cost-effectively reduce emissions at their own facilities. Companies that emit more have to turn in more allowances or other compliance instruments. Companies that can cut their GHG emissions have to turn in fewer allowances. But as the cap declines, aggregate emissions must be reduced. In other words, a covered entity theoretically could increase its GHG emissions every year and still comply with the Cap-and-Trade Program if there is a reduction in GHG emissions from other covered entities. Such a focus on aggregate GHG emissions is considered appropriate because climate change is a global phenomenon, and the effects of GHG emissions are considered cumulative."* (41)

The Cap-and-Trade Program covers approximately 80% of California's GHG emissions (37). The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-state or imported. Accordingly, GHG emissions associated with CEQA projects' electricity usage are covered by the Cap-and-Trade Program. The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-state or imported.

2022 CARB Scoping Plan

On December 15, 2022, CARB adopted the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan) (42). The 2022 Scoping Plan builds on the 2017 Scoping Plan as well as the requirements set forth by AB 1279, which directs the state to become carbon neutral no later than 2045. To achieve this statutory objective, the 2022 Scoping Plan lays out how California can reduce

GHG emissions by 85% below 1990 levels and achieve carbon neutrality by 2045. The Scoping Plan scenario to do this is to "deploy a broad portfolio of existing and emerging fossil fuel alternatives and clean technologies, and align with statutes, Executive Orders, Board direction, and direction from the governor." The 2022 Scoping Plan sets one of the most aggressive approaches to reach carbon neutrality in the world. Unlike the 2017 Scoping Plan, CARB no longer includes a numeric per capita threshold and instead advocates for compliance with a local GHG reduction strategy (CAP) consistent with *CEQA Guidelines* section 15183.5.

The key elements of the 2022 CARB Scoping Plan focus on transportation - the regulations that will impact this sector are adopted and enforced by CARB on vehicle manufacturers and outside the jurisdiction and control of local governments. As stated in the Plan's executive summary:

> *"The major element of this unprecedented transformation is the aggressive reduction of fossil fuels wherever they are currently used in California, building on and accelerating carbon reduction programs that have been in place for a decade and a half. That means rapidly moving to zero-emission transportation; electrifying the cars, buses, trains, and trucks that now constitute California's single largest source of planet-warming pollution."*
>
> *"[A]pproval of this plan catalyzes a number of efforts, including the development of new regulations as well as amendments to strengthen regulations and programs already in place, not just at CARB but across state agencies."*

Under the 2022 Scoping Plan, the State will lead efforts to meet the 2045 carbon neutrality goal through implementation of the following objectives:

- Reimagine roadway projects that increase VMT in a way that meets community needs and reduces the need to drive.
- Double local transit capacity and service frequencies by 2030.
- Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.
- Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.
- Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.
- Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.
- Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.
- Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles.
- Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.
- Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.

- Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services.
- Expand universal design features for new mobility services.
- Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.
- Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).
- Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.
- Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.
- Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.

Included in the 2022 Scoping Plan is a set of Local Actions (Appendix D to the 2022 Scoping Plan) aimed at providing local jurisdictions with tools to reduce GHGs and assist the state in meeting the ambitious targets set forth in the 2022 Scoping Plan. Appendix D to the 2022 Scoping Plan includes a section on evaluating plan-level and project-level alignment with the State's Climate Goals in CEQA GHG analyses. In this section, CARB identifies several recommendations and strategies that should be considered for new development in order to determine consistency with the 2022 Scoping Plan. Notably, this section is focused on Residential and Mixed-Use Projects, in fact CARB states in Appendix D (page 4): "...focuses primarily on climate action plans (CAPs) and local authority over new residential development. It does not address other land use types (e.g., industrial) or air permitting."

Additionally on Page 21 in Appendix D, CARB states: "The recommendations outlined in this section apply only to residential and mixed-use development project types. California currently faces both a housing crisis and a climate crisis, which necessitates prioritizing recommendations for residential projects to address the housing crisis in a manner that simultaneously supports the State's GHG and regional air quality goals. CARB plans to continue to explore new approaches for other land use types in the future." As such, it would be inappropriate to apply the requirements contained in Appendix D of the 2022 Scoping Plan to any land use types other than residential or mixed-use residential development.

2.7.3.2 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

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% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would 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 (LCFS)

Governor Schwarzenegger 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% by 2020. CARB adopted the LCFS on April 23, 2009.

After a series of legal changes, in order to address the Court ruling, CARB 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 intensity fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. On November 16, 2015, the Office of Administrative Law (OAL) approved the Final Rulemaking Package. The new LCFS regulation became effective on January 1, 2016.

In 2018, CARB approved amendments to the regulation, which included strengthening the carbon intensity benchmarks through 2030 in compliance with the SB 32 GHG emissions reduction target for 2030. The amendments included crediting opportunities to promote zero emission vehicle adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector (43).

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* (*CNRA 2009*) 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 Brown issued an executive order to establish a California GHG reduction target of 40% below 1990 levels by 2030. The Governor's executive order aligned California's GHG reduction targets with those of leading international governments ahead of the U.N. Climate Change Conference in Paris late 2015. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the *2017 Scoping Plan* to express the 2030 target in terms of $MMTCO_2e$. The Order also requires the state's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions. As with Executive Order S-3-05, this Order is not legally enforceable to local governments and the private sector. Legislation that would update AB 32 to make post 2020 targets and requirements a mandate is in process in the State Legislature.

Executive Order B-55-18 and SB 100

SB 100 and Executive Order B-55-18 were signed by Governor Brown on September 10, 2018. Under the existing RPS, 25% of retail sales of electricity are required to be from renewable sources by December 31, 2016, 33% by December 31, 2020, 40% by December 31, 2024, 45% by December 31, 2027, and 50% by December 31, 2030. SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours (kWh) of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030. In addition to targets under AB 32 and SB 32, Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California EPA (CalEPA), the California Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

2.7.3.3 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.

Title 20 CCR Sections 1601 et seq. – Appliance Efficiency Regulations

The Appliance Efficiency Regulations regulate 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 (RV) or other mobile equipment (CEC 2012).

Title 24 Energy Efficiency Standards and California Green Building Standards

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code 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. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

The 2022 California Title 24 Energy Standards became effective on January 1, 2023, with updates for the 2025 standards set to take effect on January 1, 2026. As the Project is expected to be completed in 2029, it will need to comply with the Title 24 Energy Standards in effect at that time, which may include further updates beyond the 2025 version.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2025 California Green Building Code Standards that go into effect on January 1, 2026. The Project would be required to comply with the applicable standards in place at the time plan check submittals are made.

CARB Refrigerant Management Program

CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in sections 95380 to 95398 of Title 17, CCR. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

SB 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 (OPR) 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 OPR pursuant to subdivision (a)."

In 2012, Public Resources Code Section 21083.05 was amended to state:

> *"The Office of Planning and Research and the Natural Resources Agency shall periodically update the guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption, to incorporate new information or criteria established by the State Air Resources Board pursuant to Division 25.5 (commencing with Section 38500) of the Health and Safety Code."*

On December 28, 2018, the Natural Resources Agency announced the OAL approved the amendments to the *CEQA Guidelines* for implementing CEQA. The 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.

Section 15064.4 was added to the *CEQA Guidelines* and states that in determining the significance of a project's GHG emissions, the lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change. A project's incremental contribution may be cumulatively considerable even if it appears relatively insignificant compared to statewide, national, or global emissions. The agency's analysis should consider a timeframe that is appropriate for the project. The agency's analysis also must reasonably reflect evolving scientific knowledge and state regulatory schemes. Additionally, a lead agency may use a

model or methodology to estimate GHG emissions resulting from a project. The lead agency has discretion to select the model or methodology it considers most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use (44).

2.7.4 Regional

The Project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

SCAQMD

SCAQMD is the agency responsible for air quality planning and regulation in the SCAB. The SCAQMD addresses the impacts to climate change of projects subject to SCAQMD permit as a lead agency if they are the only agency having discretionary approval for the project and acts as a responsible agency when a land use agency must also approve discretionary permits for the project. The SCAQMD acts as an expert commenting agency for impacts to air quality. This expertise carries over to GHG emissions, so the agency helps local land use agencies through the development of models and emission thresholds that can be used to address GHG emissions.

In 2008, SCAQMD formed a Working Group to identify GHG emissions thresholds for land use projects that could be used by local lead agencies in the SCAB. The Working Group developed several different options that are contained in the SCAQMD Draft Guidance Document – Interim CEQA GHG Significance Threshold, which 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:
  - Residential and commercial land use: 3,000 $MTCO_2e/yr$
  - Industrial land use: 10,000 $MTCO_2e/yr$
  - Based on land use type: residential: 3,500 $MTCO_2e/yr$; commercial: 1,400 $MTCO_2e/yr$; or mixed use: 3,000 $MTCO_2e/yr$
- Tier 4 has the following options:
  - Option 1: Reduce Business-as-Usual (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 populations (SP), which includes residents and employees: 4.8 $MTCO_2e$ per SP per year for projects and 6.6 $MTCO_2e$ per SP per year for plans;
- Option 3, 2035 target: 3.0 $MTCO_2e$ per SP per year for projects and 4.1 $MTCO_2e$ per SP per year for plans

- Tier 5 involves mitigation offsets to achieve target significance threshold.

The SCAQMD's interim thresholds used the Executive Order S-3-05-year 2050 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 ppm, thus stabilizing global climate.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the project would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations.

SCAQMD Regulation XXVII, adopted in 2009 includes the following rules:

- Rule 2700 defines terms and post global warming potentials.
- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.
- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD would fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

Connect SoCal 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy

On April 4, 2024, Southern California Association of Governments' (SCAG) Regional Council adopted the Connect SoCal 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The SCAG 2024 Connect SoCal refers to the Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the year 2024. It outlines a comprehensive vision and plan for transportation and sustainable growth across Southern California, addressing issues such as transportation infrastructure, land use, housing, and environmental sustainability. The plan aims to guide development and policy decisions to support a more connected, efficient, and sustainable future for the region (45).

SCAQMD Rule 2305

The SCAQMD adopted Rule 2305, the Warehouse Indirect Source Rule, on May 7, 2021. Owners and operators associated with warehouses 100,000 square feet (sf) or larger are required to directly reduce NO_X and PM emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. While NO_X and PM emissions are the target of this regulation, GHG emission reductions would also be realized through the implementation of zero-emission and/or near-zero emissions trucks, solar panels, and electric vehicle chargers.

2.7.5 Local

City of Ontario Community Climate Action Plan (CCAP)

The Community Climate Action Plan (CCAP) contains further guidance on the City of Ontario's GHG Inventory reduction goals, policies, guidelines, and implementation programs. The purpose of the CCAP is to provide guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City of Ontario (46). The CCAP builds upon the Reduction Plan to address City-specific information and City-specific GHG reduction measures. To address the state's requirement to reduce GHG emissions, the CCAP was prepared with the goal of reducing GHG emissions within the City by 15% below 2008 levels by the year 2020. The City's target is consistent with the AB 32 target and ensures that the City of Ontario achieves GHG reductions locally that complement and are consistent with state efforts to reduce GHG emissions.

As part of the CCAP, the City of Ontario published a guidance document titled "Greenhouse Gas Emissions, CEQA Thresholds and Screening Tables" (December 2014). As part of this guidance, the CCAP determined that if GHG emissions of a given project exceeds 3,000 $MTCO_2e/yr$, then project emissions would need to be reduced by 25 percent when compared to year 2008 emissions levels. Alternatively, the project would need to achieve a minimum of 100 points pursuant to measures identified in the Screening Tables.

The 2022 update to the Ontario Plan includes an update to the City's CCAP which was originally adopted on December 16, 2014. As stated in The Ontario Plan 2050 Draft Supplemental Environmental Impact Report (SEIR), the measures included in the 2022 update to the CCAP are not substantially different than that of the 2014 CCAP and therefore there is no change in the environmental impacts associated with the CCAP. As such, it is appropriate for the proposed Project to rely on the CEQA Thresholds and Screening Tables that were adopted under the 2014 CCAP, since the 2022 update to the CCAP does not contain measures that would be substantially different than the 2014 CCAP (47).

3 PROJECT GHG IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will result in a significant GHG impact. The significance of these potential impacts is described in the following sections.

3.2 STANDARDS OF SIGNIFICANCE

The criteria used to determine the significance of potential Project-related GHG impacts are taken from the Initial Study Checklist in Appendix G of the State *CEQA Guidelines* (14 California Code of Regulations §§15000, et seq.). Based on these thresholds, a project would result in a significant impact related to GHG if it would (48):

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

3.3 MODELS EMPLOYED TO GREENHOUSE GASES

3.3.1 CalEEMod

The California Air Pollution Control Officers Association (CAPCOA) in conjunction with other California air districts, including SCAQMD, released CalEEMod 2022 in May 2022. CalEEMod periodically releases updates, as such the latest version available at the time of this report has been utilized in this analysis. The purpose of this model is to calculate construction-source and operational-source criteria pollutants and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (49). Accordingly, the latest version of CalEEMod has been used for this Project to determine GHG emissions. Output from the model runs for construction and operational activity for the Project is provided in Appendices 3.1 through 3.6. CalEEMod includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water, refrigerants, and stationary sources.

3.4 CONSTRUCTION EMISSIONS

Project construction activities would generate CO_2 and CH_4 emissions. The *Eucalyptus Business Park Specific Plan Air Quality Impact Analysis* (AQIA) report contains detailed information regarding Project construction activities (11). As discussed in the AQIA, construction-related emissions are expected from the following activities.

- Demolition
- Site Preparation
- Grading
- Building Construction
- Paving
- Architectural Coating

3.4.1 Construction Duration

For purposes of analysis, Project construction will begin in January 2027 and end in June 2031. The construction schedule utilized in the analysis, shown in Table 3-1, represents a "conservative" analysis scenario. That is, should construction occur any time after the assumed dates, construction emissions would be reduced when compared to the levels presented here. This is due to the decrease in emission factors for construction equipment over time, and increasing stringency in emissions regulations.[3] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per the *CEQA Guidelines* (50).

TABLE 3-1: CONSTRUCTION DURATION

Phase	Construction Activity	Start Date	End Date	Days
1	Demolition	1/1/2027	2/18/2027	35
	Site Preparation	2/19/2027	3/18/2027	20
	Grading	3/19/2027	6/3/2027	55
	Building Construction	6/4/2027	6/30/2028	281
	Paving	1/8/2028	6/30/2028	125
	Architectural Coating	1/8/2028	6/30/2028	125
2	Demolition	7/1/2028	8/18/2028	35
	Site Preparation	8/19/2028	9/15/2028	20
	Grading	9/16/2028	12/1/2028	55
	Building Construction	12/2/2028	12/31/2029	281
	Paving	7/10/2029	12/31/2029	125
	Architectural Coating	7/10/2029	12/31/2029	125
3	Demolition	1/1/2030	2/18/2030	35
	Site Preparation	2/19/2030	3/18/2030	20
	Grading	3/19/2030	6/3/2030	55
	Building Construction	6/4/2030	6/30/2031	280
	Paving	2/11/2031	6/30/2031	100
	Architectural Coating	2/11/2031	6/30/2031	100

3.4.2 Construction Equipment

Site specific construction fleet may vary due to specific project needs at the time of construction. The associated construction equipment was generally based on data provided by the Project applicant. Consistent with industry standards and typical construction practices, each piece of equipment is assumed to operate up to a total of eight (8) hours per day. Table 3-2 presents the anticipated construction equipment that would be used during each phase Project construction. It is assumed that Phases 1, 2, and 3 would each utilize the same types and quantities of equipment.

[3] As shown in the CalEEMod User's Guide Version 2022, Appendix G "Table G-11. Statewide Average Annual Offroad Equipment Emission Factors" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 3-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS – PHASES 1, 2, AND 3

Construction Activity	Equipment	Quantity	Hours
Demolition	Tractors/Loaders/Backhoes	6	8
	Excavators	2	8
	Other Material Handling Equipment	2	8
	Off-Highway Trucks	2	8
Site Preparation	Rubber Tired Dozers	3	8
	Crawler Tractors	4	8
Grading	Graders	4	8
	Excavators	2	8
	Rubber Tired Dozers	4	8
	Off-Highway Trucks	2	8
	Crawler Tractors	2	8
Building Construction	Forklifts	3	8
	Generator Sets	2	8
	Cranes	2	8
	Welders	2	8
	Tractors/Loaders/Backhoes	3	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	3	8

3.4.3 Construction Emissions Summary

For construction phase emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total GHG emissions for the construction activities, dividing it by a 30-year Project life then adding that number to the annual operational phase GHG emissions (51). As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions. The amortized construction emissions from each phase are presented in Tables 3-3, 3-4, and 3-5 for Phases 1, 2, and 3, respectively. As shown below, the total amortized GHG emissions at buildout of Phases 1, 2, and 3 would be 262.27 MT CO_2e/yr.

TABLE 3-3: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS – PHASE 1

Year	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
2027	1,829.41	0.08	0.11	1.42	1,864.21
2028	1,408.22	0.05	0.09	1.26	1,437.55
Total	3,237.63	0.13	0.20	2.68	3,301.75
Amortized	107.92	0.00	0.01	0.09	110.06

Source: CalEEMod construction-source emissions are presented in Appendices 3.1.

TABLE 3-4: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS – PHASE 2

Year	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
2028	852.11	0.05	0.06	0.35	870.85
2029	1,722.73	0.06	0.09	1.24	1,752.95
Total	2,574.84	0.11	0.15	1.60	2,623.80
Amortized	85.83	0.00	0.00	0.05	87.46

TABLE 3-5: AMORTIZED ANNUAL CONSTRUCTION EMISSIONS – PHASE 3

Year	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
2030	1,273.05	0.06	0.07	0.49	1,296.63
2031	637.03	0.02	0.03	0.28	646.03
Total	1,910.08	0.08	0.10	0.77	1,942.67
Amortized	63.67	0.00	0.00	0.03	64.76

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the Project would result in emissions of CO_2, CH_4, N_2O, and Refrigerant emissions from the following primary sources:

- Mobile Source Emissions;
- Area Source Emissions;
- Energy Source Emissions;
- Water Supply, Treatment, and Distribution;
- Solid Waste;
- Refrigeration;
- Stationary Source Emissions; and
- Cargo Handling Equipment Source Emissions.

3.5.1 Mobile Source Emissions

The Project related operational air quality emissions derived primarily from vehicle trips generated by the Project. Trip characteristics available from the *Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement* were utilized in this analysis (52).

Non-Industrial Fleet Mix and Trip Lengths

Because the Project traffic study does not categorize non-industrial trips by vehicle type, CalEEMod default parameters for trip lengths and fleet mix were used to determine mobile-source emissions from these uses. It should be noted that the CalEEMod default fleet mix includes a small number of truck trips to account for deliveries.

Industrial Fleet Mix and Trip Lengths – Passenger Vehicles

To determine emissions from passenger car vehicles, the CalEEMod defaults were utilized for trip length and trip purpose for the proposed industrial land uses.

This analysis assumes that passenger cars include Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1[4] & LDT2[5]), Medium-Duty-Vehicles (MDV), and Motorcycles (MCY) vehicle types. To account for emissions generated by passenger cars, the following fleet mix was utilized in this analysis:

TABLE 3-6: PASSENGER VEHICLE FLEET MIX

Phase	Land Use	% Vehicle Type				
		LDA	LDT1	LDT2	MDV	MCY
1	Industrial Park Warehousing High-Cube Fulfillment Center (Sort)	53.76	4.06	23.41	16.53	2.24
2	Industrial Park Warehousing High-Cube Fulfillment Center (Sort)	53.53	3.96	23.79	16.49	2.23
3	Industrial Park Warehousing High-Cube Fulfillment Center (Sort) Manufacturing	53.07	3.79	24.49	16.46	2.19

Note: The Project-specific passenger car fleet mix used in this analysis is based on a proportional split utilizing the default CalEEMod percentages assigned to LDA, LDT1, LDT2, MDV, and MCY vehicle types.

Industrial Fleet Mix and Trip Lengths – Trucks

To determine emissions from trucks for the proposed industrial uses, the analysis incorporated truck trip lengths consistent with the Project Vehicle Miles Traveled (VMT) analysis and California Statewide Freight Forecasting Model (CSFFM) estimates (53). As such, the analysis utilized a trip length of 22.60 miles for 2-axle (LHDT1, LHDT2) trucks, 56.06 miles 3-axle (MHDT) trucks and 67.77

[4] Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

[5] Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

miles for 4+-axle (HHDT) trucks and weighted the average trip lengths using traffic trip percentages taken from the *Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement*. The modeled truck trip lengths for each phase and industrial use is presented in Table 3-7. This trip length assumption is higher than the CalEEMod defaults for trucks.

In order to be consistent with the *Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement*, trucks are broken down by truck type. The truck fleet mix is estimated by rationing the trip rates for each truck type based on information provided in the *Eucalyptus Business Park Specific Plan Traffic Study Scoping Agreement*. Heavy trucks are broken down by truck type (or axle type) and are categorized as either Light-Heavy-Duty Trucks (LHDT1[6] & LHDT2[7])/2-axle, Medium-Heavy-Duty Trucks (MHDT)/3-axle, and Heavy-Heavy-Duty Trucks (HHDT)/4+-axle. To account for emissions generated by trucks, the following fleet mix was utilized in this analysis:

TABLE 3-7: TRUCK FLEET MIX

Phase	Land Use	Trip Length (miles)	% Vehicle Type			
			LHDT1	LHDT2	MHDT	HHDT
1	Industrial Park	57.63	13.39	3.68	20.73	62.20
	Warehousing	57.80	13.08	3.59	20.83	62.50
	High-Cube Fulfillment Center (Sort)	57.97	12.77	3.51	20.93	62.79
2	Industrial Park	57.69	13.25	3.64	20.95	62.16
	Warehousing	57.80	13.07	3.60	20.83	62.50
	High-Cube Fulfillment Center (Sort)	57.71	13.24	3.64	20.78	62.34
3	Industrial Park	57.65	13.35	3.67	20.75	62.23
	Warehousing	57.78	13.07	3.60	21.01	62.32
	High-Cube Fulfillment Center (Sort)	57.73	13.07	3.60	21.43	61.90
	Manufacturing	57.87	12.85	3.54	21.31	62.30

Note: Project-specific truck fleet mix is based on the number of trips generated by each truck type (LHDT1, LHDT2, MHDT, and HHDT) relative to the total number of truck trips.

3.5.2 Area Source Emissions

Landscape Maintenance Equipment

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that on October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by January 1, 2024, which is now in effect. However, for purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod, and do not incorporate the emissions reductions that would be realized from implementation of AB 1346.

[6] Vehicles under the LHDT1 category have a GVWR of 8,501 to 10,000 lbs.

[7] Vehicles under the LHDT2 category have a GVWR of 10,001 to 14,000 lbs.

3.5.3 Energy Source Emissions

Combustion Emissions Associated with Electricity and Natural Gas

GHGs are emitted from buildings as a result of activities for which electricity and natural gas are typically used as energy sources. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions. The site is not expected to utilize natural gas for the building envelope and therefore would not generate any emissions from direct energy consumption.

3.5.4 Water Supply, Treatment, and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Unless otherwise noted, CalEEMod default parameters were used.

3.5.5 Solid Waste

The proposed land uses would result in the generation and disposal of solid waste. A percentage of this waste would be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted would be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material. GHG emissions associated with the disposal of solid waste associated with the Project were calculated by CalEEMod using default parameters.

3.5.6 Refrigerants

Air conditioning (A/C) and refrigeration equipment associated with the buildings are anticipated to generate GHG emissions. CalEEMod automatically generates a default A/C and refrigeration equipment inventory for each project land use subtype based on industry data from the USEPA (2016b). CalEEMod quantifies refrigerant emissions from leaks during regular operation and routine servicing over the equipment lifetime and then derives average annual emissions from the lifetime estimate. Note that CalEEMod does not quantify emissions from the disposal of refrigeration and A/C equipment at the end of its lifetime. Per 17 CCR 95371, new facilities with refrigeration equipment containing more than 50 pounds of refrigerant are prohibited from utilizing refrigerants with a GWP of 150 or greater as of January 1, 2022. Additionally, beginning January 1, 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. GHG emissions associated with refrigerants were calculated by CalEEMod using default parameters.

3.5.7 Stationary Source Emissions

The proposed Project was conservatively assumed to include a total of two emergency fire pumps in Phase 1, four emergency fire pumps in Phase 2, and five emergency fire pumps in Phase 3. Each emergency generator was assumed to be diesel-fueled and rated at 220 brake horsepower. Each fire pump was assumed to operate for up to 1 hour per day, 1 day per week for up to 50 hours per year for maintenance and testing purposes. Emissions associated with the stationary diesel-powered fire pumps were calculated using CalEEMod.

3.5.8 On-Site Cargo Handling Equipment Emissions

It is common for industrial buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. The analysis assumed the operation of five pieces of equipment in Phase 1, nine pieces of equipment in Phase 2, and a total of eleven pieces of equipment in Phase 3[8]. Each piece of equipment was modeled as a 175-horsepower natural gas-powered port tractor and assumed to operate 4 hours a day[9] for 365 days of the year. Although MM AQ-8 requires the use of the cleanest technologies available, the analysis conservatively assumed the use of natural gas-powered equipment.

3.5.9 GHG Emissions Summary

The estimated GHG emissions without mitigation for the Project are summarized in Tables 3-8, 3-9, and 3-10 for Phases 1, 2, and 3 (buildout), respectively. Detailed operation model outputs for the Project are presented in Appendix 3.2. As shown below, prior to mitigation construction and operation of the Project would generate approximately 46,846.66 $MTCO_2e/yr$ at buildout.

TABLE 3-8: PROJECT GHG EMISSIONS – PHASE 1 (WITHOUT MITIGATION)

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
Annual construction emissions amortized over 30 years	107.92	0.00	0.01	0.09	110.06
Mobile	15,525.34	0.88	1.77	17.17	16,092.55
Area	35.84	0.00	0.00	0.00	35.97
Energy	1,645.30	0.16	0.02	0.00	1,654.88
Water	395.71	9.21	0.22	0.00	691.97
Waste	111.72	11.17	0.00	0.00	390.88
Refrigeration	0.00	0.00	0.00	5.27	5.27
Stationary	8.38	0.00	0.00	0.00	8.41
Cargo Handling Equipment					236.88
Total CO_2e (All Sources)	19,226.86				

TABLE 3-9: PROJECT GHG EMISSIONS – PHASES 1 AND 2 (WITHOUT MITIGATION)

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
Annual construction emissions amortized over 30 years	193.75	0.01	0.01	0.14	197.52
Mobile	32,016.46	1.71	3.43	33.08	33,115.15
Area	47.72	0.00	0.00	0.00	47.90
Energy	3,251.92	0.31	0.04	0.00	3,270.86

[8] Based on SCAQMD's April 2021 Second Draft Report for Rule 2305, it is estimated that warehouses operate an average of 3.6 yard trucks per million square feet of warehouse space.

[9] Based in Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
Water	757.77	17.62	0.42	0.00	1,324.78
Waste	249.93	24.98	0.00	0.00	874.41
Refrigeration	0.00	0.00	0.00	9.99	9.99
Stationary	16.76	0.00	0.00	0.00	16.81
Cargo Handling Equipment					426.38
Total CO_2e (All Sources)	39,283.80				

TABLE 3-10: PROJECT GHG EMISSIONS – PHASES 1, 2, AND 3 (WITHOUT MITIGATION)

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
Annual construction emissions amortized over 30 years	257.42	0.01	0.01	0.17	262.27
Mobile	38,873.03	1.89	4.24	33.43	40,216.58
Area	59.61	0.00	0.00	0.00	59.82
Energy	3,167.64	0.40	0.05	0.00	3,192.14
Water	766.75	22.05	0.53	0.00	1,475.99
Waste	309.24	30.91	0.00	0.00	1,081.93
Refrigeration	0.00	0.00	0.00	15.78	15.78
Stationary	20.94	0.00	0.00	0.00	21.01
Cargo Handling Equipment					521.13
Total CO_2e (All Sources)	46,846.66				

Applicable GHG Mitigation Measures

As mentioned previously in section ES.3, Project-specific mitigation measures, MM GHG-1 requires the Project to achieve at least 100 Screening Table Points per the City's CCAP. As part of this measure, the Project would install a rooftop solar system with sufficient capacity to offset 45% of the warehouse electrical demand. The emissions presented below assume that 45% of the warehouse electrical demands would be provided by rooftop solar.

The estimated GHG emissions with mitigation for the Project are summarized in Tables 3-11, 3-12, and 3-113 for Phases 1, 2, and 3 (buildout), respectively. Detailed operation model outputs for the Project are presented in Appendix 3.2. As shown below, with mitigation construction and operation of the Project would generate approximately 45,538.89 $MTCO_2e$/yr at buildout.

TABLE 3-11: PROJECT GHG EMISSIONS – PHASE 1 (WITH MITIGATION)

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
Annual construction emissions amortized over 30 years	107.92	0.00	0.01	0.09	110.06
Mobile	15,525.34	0.88	1.77	17.17	16,092.55
Area	35.84	0.00	0.00	0.00	35.97
Energy	938.09	0.09	0.01	0.00	943.55

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
Water	395.71	9.21	0.22	0.00	691.97
Waste	111.72	11.17	0.00	0.00	390.88
Refrigeration	0.00	0.00	0.00	5.27	5.27
Stationary	8.38	0.00	0.00	0.00	8.41
Cargo Handling Equipment					236.88
Total CO_2e (All Sources)	18,515.53				

TABLE 3-12: PROJECT GHG EMISSIONS – PHASES 1 AND 2 (WITH MITIGATION)

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
Annual construction emissions amortized over 30 years	193.75	0.01	0.01	0.14	197.52
Mobile	32,016.46	1.71	3.43	33.08	33,115.15
Area	47.72	0.00	0.00	0.00	47.90
Energy	1,941.40	0.19	0.02	0.00	1,952.72
Water	757.77	17.62	0.42	0.00	1,324.78
Waste	249.93	24.98	0.00	0.00	874.41
Refrigeration	0.00	0.00	0.00	9.99	9.99
Stationary	16.76	0.00	0.00	0.00	16.81
Cargo Handling Equipment					426.38
Total CO_2e (All Sources)	37,965.65				

TABLE 3-13: PROJECT GHG EMISSIONS – PHASES 1, 2, AND 3 (WITH MITIGATION)

Source	Emissions (MT/yr)				
	CO_2T	CH_4	N_2O	R	Total CO_2e
Annual construction emissions amortized over 30 years	257.42	0.01	0.01	0.17	262.27
Mobile	38,873.03	1.89	4.24	33.43	40,216.58
Area	59.61	0.00	0.00	0.00	59.82
Energy	1,869.90	0.24	0.03	0.00	1,884.36
Water	766.75	22.05	0.53	0.00	1,475.99
Waste	309.24	30.91	0.00	0.00	1,081.93
Refrigeration	0.00	0.00	0.00	15.78	15.78
Stationary	20.94	0.00	0.00	0.00	21.01
Cargo Handling Equipment					521.13
Total CO_2e (All Sources)	45,538.89				

3.6 GHG Emissions Findings and Recommendations

3.6.1 GHG Impact 1

Would the Project have the potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment?

The City has determined the development size that would be too small to be able to provide GHG emission reductions. To do this the City determined the GHG emissions allowed by a project such that 90 percent of the emissions on average from all projects would exceed that level and be "captured" and exceed this level and require further mitigation.

A 90 percent emission capture rate means that 90 percent of total emissions from all projects would be subject to a CEQA analysis, including a negative declaration, a mitigated negative declaration, or an environmental impact report, which includes analyzing feasible alternatives and imposing feasible mitigation measures.

A GHG significance threshold based on a 90 percent emission capture rate may be more appropriate to address the long-term adverse impacts associated with global climate change because most projects will be required to implement GHG reduction measures. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial fraction of future stationary source projects that will be constructed to accommodate future statewide population and economic growth, while setting the emission threshold high enough to exclude small projects that will in aggregate contribute a relatively small fraction of the cumulative statewide GHG emissions.

In determining this level of emissions, data available from South Coast Air Quality Management District (SCAQMD) was utilized. SCAQMD used a database of projects kept by the Governor's Office of Planning and Research (OPR). That database contained 798 projects, 60 of which were extremely large General Plan Updates, Master Plans, or Specific Plan Projects. The 60 very large projects were removed from the database in order not to skew the emissions value, leaving a net of 738 projects. In addition, 27 projects were found to be outliers that would skew the emission value too high, leaving 711 as the sample population to use in determining the 90th percentile capture rate.

The SCAQMD analysis of the 711 projects within the sample population combined commercial, residential, and mixed-use projects. It should be noted that the sample of projects included warehouses and other light industrial land uses but did not include industrial processes (i.e., oil refineries, heavy manufacturing, electric generating stations, mining operations, etc.). Emissions from each of these projects were calculated by SCAQMD to provide a consistent method of emissions calculations across the sample population and from projects within the sample population, construction period GHG emissions were amortized over 30 years (the average economic life of a development project). further reduce potential errors in the statistical analysis. In calculating the emissions

The SCAQMD analysis determined that the 90th percentile ranged from 2,983 to 3,143 MT CO_2e per year. Therefore, a 3,000 MT CO_2e per year value is the low-end value within that range rounded to the nearest hundred tons of emissions and is used in defining small projects that are considered less than significant and do not need to provide further analysis.

Lastly, we understand that the 3,000 MT CO_2e per year threshold for residential/commercial uses was proposed a decade ago and was never adopted. However, the 3,000 MT CO_2e per year threshold was developed and recommended by SCAQMD, an expert agency, based on substantial evidence as provided in the Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold (2008) document and subsequent Working Group meetings (latest in 2010). This threshold uses the Executive Order S-3-05 goal as the basis, so it is not tied to only the 2020 target year and is thus not outdated. This threshold is also based on the 90% capture rate methodology, which means that 90% of total emissions from all new or modified projects would be subject to some type of CEQA analysis, which was the approach taken by SCAQMD to establish the stationary/industrial source threshold, as well as by the California Air Resources Board (for interim threshold for stationary source projects) and one of the options suggested by the California Air Pollution Control Officers Association (quantitative threshold based on market capture). Further, this threshold has been used for hundreds, if not thousands of GHG analyses performed for projects located within the SCAQMD jurisdiction.

The Project would result in GHG emissions of approximately 45,538.89 $MTCO_2e/yr$ at buildout with mitigation and would exceed the SCAQMD's numeric threshold of 3,000 $MTCO_2e/yr$. Thus, the Project would result in a potentially significant impact with respect to GHG emissions.

3.6.2 GHG Impact 2

Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

As noted in the AQIA, the Project is not consistent with the current General Plan land use designation or zoning, and thus would require a General Plan and Zone Change Amendment. As such, the Project is not consistent with The Ontario Plan 2050, and the GHG emissions modeling reflected in The Ontario Plan 2050 – 2022 CCAP Update. The 2022 CCAP Update provides guidance on how to analyze GHG emissions and determine significance during the CEQA review of proposed development projects within the City. Because the 2022 CCAP Update addresses GHG emissions reductions and is consistent with the requirements of AB 32, SB 32, and international efforts to reduce GHG emissions, compliance with the 2022 CCAP Update fulfills the description of mitigation found in the State CEQA Guidelines. As substantiated herein, with the application of Mitigation Measure GHG-1, the Project would attain more than 100 Screening Table points. However, because the Project is not consistent with the projections of The Ontario Plan 2050 – 2022 CCAP Update, the Project is therefore determined to be inconsistent with the 2022 CCAP Update and would result in a significant an unavoidable impact GHG impact.

Mitigation Measures

MM GHG-1

Project development proposals pursuant to the EBPSP shall implement CCAP Screening Table Measures that achieve at least 100 points per the Screening Tables. The City shall verify that Screening Table Measures achieving the 100-point performance standard are incorporated in development plans prior to the issuance of building permit(s) and/or site plans (as applicable). The City shall verify implementation of the selected Screening Table Measures prior to the issuance of Certificate(s) of Occupancy. At the discretion of the City, measures that provide GHG reductions

equivalent to GHG emissions reductions achieved via the Screening Table Measures may be implemented. Multiple development proposals may, at the discretion of the City, be allowed to collectively demonstrate achievement of at least 100 points per the Screening Tables.

Appendix 3.3 presents the CCAP Screening Tables with a preliminary estimate of the measures anticipated to be implemented by the Project to achieve at least 100 Screening Table points.

2022 CARB Scoping Plan Consistency

The Project would not impede the State's progress towards carbon neutrality by 2045 under the 2022 Scoping Plan. The Project would be required to comply with applicable current and future regulatory requirements promulgated through the 2022 Scoping Plan. Some of the current transportation sector policies the Project will comply with (through vehicle manufacturer compliance) include: Advanced Clean Cars II, Advanced Clean Trucks, Advanced Clean Fleets, Zero Emission Forklifts, the Off-Road Zero-Emission Targeted Manufacturer rule, Clean Off-Road Fleet Recognition Program, In-use Off-Road Diesel-Fueled Fleets Regulation, and the Low Carbon Fuel Standard. As such, the Project would be consistent with the 2022 Scoping Plan.

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5 CERTIFICATION

The contents of this GHG study report represent an accurate depiction of the GHG impacts associated with the proposed Eucalyptus Business Park Specific Plan Project. The information contained in this GHG report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

Haseeb Qureshi
Principal
URBAN CROSSROADS, INC.
1133 Camelback #8329
Newport Beach, CA 92658
hqureshi@urbanxroads.com

Education

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010
Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

Professional Affiliations

AEP – Association of Environmental Professionals
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

Professional Certifications

Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – CARB • August, 2007
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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS – CONSTRUCTION

16285 Eucalyptus BP Construction Ph1 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Construction Ph1
Construction Start Date	1/11/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.6
Precipitation (days)	19
Location	33.99139661510472, -117.63851888403607
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5259
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.32

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	341	1000sqft	7.8	340,700	340,901	—	—	—
Unrefrigerated Warehouse-No Rail	553	1000sqft	13	553,300	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	326	1000sqft	7.5	326,200	0.00	—	—	HCFC Sort
City Park	34	Acre	34	0.00	0.00	0.00	—	—
Parking Lot	1,367	Space	12	546,800	0.00	—	—	—
Other Non-Asphalt Surfaces	7.8	Acre	7.8	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	53	52	44	97	0.16	0.77	14	15	0.66	4.3	4.7	—	25,001	25,001	1.3	1.5	50	25,533
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	52	52	44	83	0.16	0.77	14	15	0.66	4.3	4.7	—	24,013	24,013	1.3	1.5	1.3	24,498
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18	18	20	42	0.06	0.33	6.4	6.7	0.31	1.9	2.2	—	11,050	11,050	0.47	0.64	8.6	11,260
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.3	3.3	3.7	7.6	0.01	0.06	1.2	1.2	0.06	0.34	0.40	—	1,829	1,829	0.08	0.11	1.4	1,864

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	4.4	3.7	44	74	0.16	0.52	11	11	0.47	4.3	4.7	—	20,303	20,303	1.3	1.5	41	20,792
2028	53	52	39	97	0.11	0.77	14	15	0.66	3.3	4.0	—	25,001	25,001	0.83	1.5	50	25,533
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	4.2	3.5	44	70	0.16	0.58	11	11	0.52	4.3	4.7	—	20,268	20,268	1.3	1.5	1.1	20,739
2028	52	52	40	83	0.11	0.77	14	15	0.66	3.3	4.0	—	24,013	24,013	0.85	1.5	1.3	24,498
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.3	1.9	20	42	0.06	0.33	6.4	6.7	0.31	1.9	2.2	—	11,050	11,050	0.47	0.64	8.6	11,260
2028	18	18	14	30	0.04	0.27	4.8	5.1	0.23	1.2	1.4	—	8,506	8,506	0.30	0.54	7.6	8,683
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.41	0.34	3.7	7.6	0.01	0.06	1.2	1.2	0.06	0.34	0.40	—	1,829	1,829	0.08	0.11	1.4	1,864
2028	3.3	3.3	2.6	5.5	0.01	0.05	0.89	0.93	0.04	0.21	0.26	—	1,408	1,408	0.05	0.09	1.3	1,438

3. Construction Emissions Details

3.1. Demolition (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.87	24	32	0.05	0.56	—	0.56	0.51	—	0.51	—	5,385	5,385	0.22	0.04	—	5,404
Demolition	—	—	—	—	—	—	0.35	0.35	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.3	3.1	< 0.005	0.05	—	0.05	0.05	—	0.05	—	516	516	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.42	0.56	< 0.005	0.01	—	0.01	0.01	—	0.01	—	85	85	< 0.005	< 0.005	—	86
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.13	0.12	0.12	1.5	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	372	372	0.01	0.01	0.03	377
Vendor	0.04	0.01	0.53	0.28	< 0.005	0.01	0.14	0.14	0.01	0.04	0.05	—	477	477	0.03	0.07	0.03	499
Hauling	0.05	0.01	0.51	0.28	< 0.005	0.01	0.12	0.12	0.01	0.03	0.04	—	418	418	0.04	0.07	0.02	440
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36	36	< 0.005	< 0.005	0.05	37
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46	46	< 0.005	0.01	0.05	48
Hauling	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	40	40	< 0.005	0.01	0.03	42
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.0	6.0	< 0.005	< 0.005	0.01	6.1
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.6	7.6	< 0.005	< 0.005	0.01	7.9
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.6	6.6	< 0.005	< 0.005	0.01	7.0

3.3. Site Preparation (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	15	28	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,315
Dust From Material Movement	—	—	—	—	—	—	5.7	5.7	—	2.7	2.7	—	—	—	—	—	—	—

Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.81	1.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.15	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48	48	< 0.005	< 0.005	—	48
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.07	0.88	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	217	217	< 0.005	0.01	0.02	220
Vendor	0.02	0.01	0.30	0.16	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	268	268	0.02	0.04	0.02	280
Hauling	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12	12	< 0.005	< 0.005	0.02	12
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15	15	< 0.005	< 0.005	0.02	15
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.0	2.0	< 0.005	< 0.005	< 0.005	2.0
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.4	2.4	< 0.005	< 0.005	< 0.005	2.5
Hauling	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	0.00

3.5. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.4	1.4	34	63	0.11	0.27	—	0.27	0.27	—	0.27	—	11,437	11,437	0.46	0.09	—	11,477
Dust From Material Movement	—	—	—	—	—	—	7.7	7.7	—	3.6	3.6	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.4	1.4	34	63	0.11	0.27	—	0.27	0.27	—	0.27	—	11,437	11,437	0.46	0.09	—	11,477

Dust From Material Movement	—	—	—	—	—	—	7.7	7.7	—	3.6	3.6	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	5.1	9.5	0.02	0.04	—	0.04	0.04	—	0.04	—	1,723	1,723	0.07	0.01	—	1,729
Dust From Material Movement	—	—	—	—	—	—	1.2	1.2	—	0.54	0.54	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.94	1.7	< 0.005	0.01	—	0.01	0.01	—	0.01	—	285	285	0.01	< 0.005	—	286
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.12	2.3	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	473	473	0.01	0.02	1.5	480
Vendor	0.07	0.02	0.78	0.43	0.01	0.01	0.21	0.23	0.01	0.06	0.07	—	744	744	0.05	0.11	1.8	780
Hauling	0.90	0.12	8.9	5.0	0.05	0.10	2.1	2.2	0.10	0.58	0.69	—	7,648	7,648	0.78	1.2	15	8,055

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.14	0.14	1.8	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	434	434	0.01	0.02	0.04	439
Vendor	0.07	0.01	0.82	0.43	0.01	0.01	0.21	0.23	0.01	0.06	0.07	—	745	745	0.05	0.11	0.05	779
Hauling	0.89	0.11	9.3	5.1	0.05	0.10	2.1	2.2	0.10	0.58	0.69	—	7,651	7,651	0.78	1.2	0.38	8,044
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66	66	< 0.005	< 0.005	0.10	67
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	112	112	0.01	0.02	0.12	117
Hauling	0.14	0.02	1.4	0.76	0.01	0.02	0.32	0.33	0.02	0.09	0.10	—	1,153	1,153	0.12	0.19	0.95	1,213
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11	11	< 0.005	< 0.005	0.02	11
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19	19	< 0.005	< 0.005	0.02	19
Hauling	0.02	< 0.005	0.26	0.14	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	191	191	0.02	0.03	0.16	201

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,931	3,931	0.16	0.03	—	3,945
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,931	3,931	0.16	0.03	—	3,945
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	0.25	7.2	9.1	0.02	0.19	—	0.19	0.17	—	0.17	—	1,623	1,623	0.07	0.01	—	1,629
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	1.3	1.7	< 0.005	0.03	—	0.03	0.03	—	0.03	—	269	269	0.01	< 0.005	—	270
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.4	3.1	2.6	50	0.00	0.00	9.7	9.7	0.00	2.3	2.3	—	10,038	10,038	0.11	0.35	32	10,177
Vendor	0.35	0.08	4.0	2.2	0.03	0.06	1.1	1.1	0.06	0.30	0.36	—	3,780	3,780	0.27	0.57	9.1	3,964
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.2	2.9	2.9	37	0.00	0.00	9.7	9.7	0.00	2.3	2.3	—	9,207	9,207	0.13	0.35	0.82	9,316
Vendor	0.35	0.07	4.2	2.2	0.03	0.06	1.1	1.1	0.06	0.30	0.36	—	3,783	3,783	0.27	0.57	0.23	3,958
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.3	1.2	1.3	16	0.00	0.00	4.0	4.0	0.00	0.93	0.93	—	3,855	3,855	0.05	0.15	5.6	3,905
Vendor	0.14	0.03	1.7	0.90	0.01	0.02	0.44	0.47	0.02	0.12	0.15	—	1,561	1,561	0.11	0.23	1.6	1,635
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.22	0.24	3.0	0.00	0.00	0.72	0.72	0.00	0.17	0.17	—	638	638	0.01	0.02	0.93	647
Vendor	0.03	0.01	0.31	0.16	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	258	258	0.02	0.04	0.27	271
Hauling	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	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,932	3,932	0.16	0.03	—	3,946
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,932	3,932	0.16	0.03	—	3,946
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.22	0.22	6.2	7.9	0.01	0.16	—	0.16	0.15	—	0.15	—	1,400	1,400	0.06	0.01	—	1,405
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.1	1.4	< 0.005	0.03	—	0.03	0.03	—	0.03	—	232	232	0.01	< 0.005	—	233
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.0	2.9	2.6	46	0.00	0.00	9.7	9.7	0.00	2.3	2.3	—	9,847	9,847	0.11	0.35	28	9,983
Vendor	0.35	0.08	3.8	2.1	0.03	0.06	1.1	1.1	0.03	0.30	0.33	—	3,693	3,693	0.24	0.57	8.0	3,876
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.8	2.8	2.6	35	0.00	0.00	9.7	9.7	0.00	2.3	2.3	—	9,034	9,034	0.13	0.35	0.74	9,143
Vendor	0.34	0.07	4.0	2.1	0.03	0.06	1.1	1.1	0.03	0.30	0.33	—	3,696	3,696	0.24	0.57	0.21	3,870
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.00	0.98	1.0	13	0.00	0.00	3.4	3.4	0.00	0.80	0.80	—	3,263	3,263	0.05	0.13	4.4	3,305
Vendor	0.12	0.03	1.4	0.75	0.01	0.02	0.38	0.40	0.01	0.11	0.12	—	1,316	1,316	0.08	0.20	1.2	1,379
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.19	2.4	0.00	0.00	0.62	0.62	0.00	0.15	0.15	—	540	540	0.01	0.02	0.72	547
Vendor	0.02	< 0.005	0.26	0.14	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	218	218	0.01	0.03	0.20	228

Hauling	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	0.00

3.11. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.2	11	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.2	11	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.26	0.26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.5	3.6	< 0.005	0.03	—	0.03	0.03	—	0.03	—	517	517	0.02	< 0.005	—	519
Paving	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.45	0.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86	86	< 0.005	< 0.005	—	86
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.93	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	199	199	< 0.005	0.01	0.57	202
Vendor	0.16	0.04	1.7	0.94	0.01	0.03	0.49	0.51	0.01	0.13	0.15	—	1,658	1,658	0.11	0.25	3.6	1,739
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.70	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	183	183	< 0.005	0.01	0.01	185
Vendor	0.15	0.03	1.8	0.96	0.01	0.03	0.49	0.51	0.01	0.13	0.15	—	1,659	1,659	0.11	0.25	0.09	1,737
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63	63	< 0.005	< 0.005	0.08	64
Vendor	0.05	0.01	0.61	0.32	< 0.005	0.01	0.17	0.17	< 0.005	0.05	0.05	—	568	568	0.04	0.09	0.53	595
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10	10	< 0.005	< 0.005	0.01	11
Vendor	0.01	< 0.005	0.11	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94	94	0.01	0.01	0.09	99
Hauling	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	0.00

3.13. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	4.3	3.9	0.01	0.12	—	0.12	0.11	—	0.11	—	534	534	0.02	< 0.005	—	536
Architectural Coatings	47	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	4.3	3.9	0.01	0.12	—	0.12	0.11	—	0.11	—	534	534	0.02	< 0.005	—	536
Architectural Coatings	47	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	1.5	1.3	< 0.005	0.04	—	0.04	0.04	—	0.04	—	183	183	0.01	< 0.005	—	184

Architect Coatings	16	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.27	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30	30	< 0.005	< 0.005	—	30
Architectural Coatings	3.0	3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.51	9.2	0.00	0.00	1.9	1.9	0.00	0.45	0.45	—	1,969	1,969	0.02	0.07	5.7	1,997
Vendor	0.16	0.04	1.7	0.94	0.01	0.03	0.49	0.51	0.01	0.13	0.15	—	1,658	1,658	0.11	0.25	3.6	1,739
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.55	0.52	6.9	0.00	0.00	1.9	1.9	0.00	0.45	0.45	—	1,807	1,807	0.03	0.07	0.15	1,829
Vendor	0.15	0.03	1.8	0.96	0.01	0.03	0.49	0.51	0.01	0.13	0.15	—	1,659	1,659	0.11	0.25	0.09	1,737
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.19	0.19	0.20	2.5	0.00	0.00	0.66	0.66	0.00	0.15	0.15	—	627	627	0.01	0.02	0.84	636
Vendor	0.05	0.01	0.61	0.32	< 0.005	0.01	0.17	0.17	< 0.005	0.05	0.05	—	568	568	0.04	0.09	0.53	595
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.03	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	0.14	105
Vendor	0.01	< 0.005	0.11	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94	94	0.01	0.01	0.09	99
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2027	2/18/2027	5.0	35	—
Site Preparation	Site Preparation	2/19/2027	3/18/2027	5.0	20	—
Grading	Grading	3/19/2027	6/3/2027	5.0	55	—
Building Construction	Building Construction	6/4/2027	6/30/2028	5.0	281	—
Paving	Paving	1/8/2028	6/30/2028	5.0	125	—
Architectural Coating	Architectural Coating	1/8/2028	6/30/2028	5.0	125	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Excavators	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Demolition	Other Material Handling Equipment	Diesel	Tier 4 Interim	2.0	8.0	93	0.40
Demolition	Off-Highway Trucks	Diesel	Tier 3	2.0	8.0	376	0.38
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	6.0	8.0	84	0.37
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.0	8.0	367	0.40
Site Preparation	Crawler Tractors	Diesel	Tier 4 Interim	4.0	8.0	84	0.37
Grading	Graders	Diesel	Tier 4 Interim	4.0	8.0	148	0.41
Grading	Excavators	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	4.0	8.0	367	0.40
Grading	Off-Highway Trucks	Diesel	Tier 4 Interim	2.0	8.0	376	0.38
Grading	Crawler Tractors	Diesel	Tier 4 Interim	2.0	8.0	87	0.43
Building Construction	Forklifts	Diesel	Tier 4 Interim	3.0	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Interim	2.0	8.0	14	0.74
Building Construction	Cranes	Diesel	Tier 3	2.0	8.0	367	0.29
Building Construction	Welders	Diesel	Tier 4 Interim	2.0	8.0	46	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.0	8.0	84	0.37
Paving	Pavers	Diesel	Tier 4 Interim	2.0	8.0	81	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	2.0	8.0	89	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	3.0	8.0	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	30	19	LDA,LDT1,LDT2

Demolition	Vendor	16	10	HHDT,MHDT
Demolition	Hauling	6.3	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	18	19	LDA,LDT1,LDT2
Site Preparation	Vendor	9.0	10	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	35	19	LDA,LDT1,LDT2
Grading	Vendor	25	10	HHDT,MHDT
Grading	Hauling	115	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	742	19	LDA,LDT1,LDT2
Building Construction	Vendor	127	10	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15	19	LDA,LDT1,LDT2
Paving	Vendor	57	10	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	148	19	LDA,LDT1,LDT2
Architectural Coating	Vendor	57	10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,830,300	610,100	52,437

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	880	0.00
Site Preparation	—	—	70	0.00	0.00
Grading	—	50,595	275	0.00	0.00
Paving	0.00	0.00	0.00	0.00	20

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Industrial Park	0.00	0%
Paving	Unrefrigerated Warehouse-No Rail	0.00	0%
Paving	Unrefrigerated Warehouse-No Rail	0.00	0%
Paving	City Park	0.00	0%
Paving	Parking Lot	12	100%

Paving	Other Non-Asphalt Surfaces	7.8	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	532	0.03	< 0.005
2028	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	18	annual days of extreme heat
Extreme Precipitation	3.0	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	9.1	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77
AQ-PM	93
AQ-DPM	57
Drinking Water	100

Lead Risk Housing	17
Pesticides	85
Toxic Releases	68
Traffic	18
Effect Indicators	—
CleanUp Sites	80
Groundwater	98
Haz Waste Facilities/Generators	87
Impaired Water Bodies	87
Solid Waste	99
Sensitive Population	—
Asthma	17
Cardio-vascular	29
Low Birth Weights	49
Socioeconomic Factor Indicators	—
Education	53
Housing	59
Linguistic	69
Poverty	35
Unemployment	36

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349

Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7

Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1

Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72
Healthy Places Index Score for Project Location (b)	55
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification

Construction: Construction Phases	Construction schedule estimated by Project team.
Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113 limits

16285 Eucalyptus BP Construction Ph2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Construction Ph2
Construction Start Date	7/15/2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.6
Precipitation (days)	19
Location	33.99285819539165, -117.62442182650997
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.32

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	274	1000sqft	6.3	273,700	341,937	—	—	—
Unrefrigerated Warehouse-No Rail	553	1000sqft	13	553,300	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	261	1000sqft	6.0	261,000	0.00	—	—	HCFC Sort
City Park	38	Acre	38	0.00	0.00	0.00	—	—
Parking Lot	1,271	Space	11	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	12	Acre	12	0.00	0.00	—	—	—
Hospital	35	1000sqft	0.80	35,000	0.00	—	—	—
Strip Mall	5.0	1000sqft	0.11	5,000	0.00	—	—	—
Fast Food Restaurant with Drive Thru	5.0	1000sqft	0.11	5,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	51	51	47	73	0.19	0.70	11	12	0.64	4.6	5.0	—	23,409	23,409	1.6	2.0	28	24,052
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	51	50	48	72	0.19	0.70	11	12	0.64	4.6	5.0	—	23,375	23,375	1.6	2.0	0.73	23,997
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18	18	20	39	0.05	0.42	5.5	6.0	0.38	1.3	1.7	—	10,405	10,405	0.35	0.56	7.5	10,588

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.3	3.3	3.7	7.2	0.01	0.08	1.0	1.1	0.07	0.24	0.31	—	1,723	1,723	0.06	0.09	1.2	1,753

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	2.9	1.7	47	72	0.19	0.57	11	12	0.51	4.6	5.0	—	23,409	23,409	1.6	2.0	22	24,052
2029	51	51	35	73	0.09	0.70	8.9	9.6	0.64	2.1	2.8	—	17,909	17,909	0.61	0.97	28	18,243
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	2.8	2.4	48	72	0.19	0.49	11	12	0.43	4.6	5.0	—	23,375	23,375	1.6	2.0	0.60	23,997
2029	51	50	36	64	0.09	0.70	8.9	9.6	0.64	2.1	2.8	—	17,288	17,288	0.62	0.97	0.73	17,595
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.72	0.53	12	18	0.04	0.15	2.5	2.7	0.14	0.95	1.1	—	5,147	5,147	0.30	0.35	2.1	5,260
2029	18	18	20	39	0.05	0.42	5.5	6.0	0.38	1.3	1.7	—	10,405	10,405	0.35	0.56	7.5	10,588
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2028	0.13	0.10	2.1	3.4	0.01	0.03	0.46	0.49	0.03	0.17	0.20	—	852	852	0.05	0.06	0.35	871
2029	3.3	3.3	3.7	7.2	0.01	0.08	1.0	1.1	0.07	0.24	0.31	—	1,723	1,723	0.06	0.09	1.2	1,753

3. Construction Emissions Details

3.1. Demolition (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.87	24	32	0.05	0.56	—	0.56	0.51	—	0.51	—	5,386	5,386	0.22	0.04	—	5,405
Demolition	—	—	—	—	—	—	0.17	0.17	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.3	3.1	< 0.005	0.05	—	0.05	0.05	—	0.05	—	516	516	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.42	0.56	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86	86	< 0.005	< 0.005	—	86
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.12	0.10	1.9	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	398	398	< 0.005	0.01	1.1	404
Vendor	0.03	0.01	0.30	0.16	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	291	291	0.02	0.04	0.63	305
Hauling	0.02	< 0.005	0.23	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	204	204	0.02	0.03	0.37	215
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36	36	< 0.005	< 0.005	0.05	36
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	28	28	< 0.005	< 0.005	0.03	29
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20	20	< 0.005	< 0.005	0.02	21
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.9	5.9	< 0.005	< 0.005	0.01	6.0
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.6	4.6	< 0.005	< 0.005	< 0.005	4.8
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.2	3.2	< 0.005	< 0.005	< 0.005	3.4

3.3. Site Preparation (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.64	15	28	0.05	0.10	—	0.10	0.10	—	0.10	—	5,298	5,298	0.21	0.04	—	5,316

Dust From Material Movement	—	—	—	—	—	—	5.7	5.7	—	2.7	2.7	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.81	1.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.15	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48	48	< 0.005	< 0.005	—	48
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.06	1.1	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	232	232	< 0.005	0.01	0.67	235

Vendor	0.02	< 0.005	0.18	0.10	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	174	174	0.01	0.03	0.38	183
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12	12	< 0.005	< 0.005	0.02	12
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.6	9.6	< 0.005	< 0.005	0.01	10
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.0	2.0	< 0.005	< 0.005	< 0.005	2.0
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.6	1.6	< 0.005	< 0.005	< 0.005	1.7
Hauling	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	0.00

3.5. Grading (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.4	1.4	34	63	0.11	0.27	—	0.27	0.27	—	0.27	—	11,442	11,442	0.46	0.09	—	11,481
Dust From Material Movement	—	—	—	—	—	—	7.7	7.7	—	3.6	3.6	—	—	—	—	—	—	—
Onsite truck	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.4	1.4	34	63	0.11	0.27	—	0.27	0.27	—	0.27	—	11,442	11,442	0.46	0.09	—	11,481
Dust From Material Movement	—	—	—	—	—	—	7.7	7.7	—	3.6	3.6	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	5.1	9.5	0.02	0.04	—	0.04	0.04	—	0.04	—	1,724	1,724	0.07	0.01	—	1,730
Dust From Material Movement	—	—	—	—	—	—	1.2	1.2	—	0.54	0.54	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.94	1.7	< 0.005	0.01	—	0.01	0.01	—	0.01	—	285	285	0.01	< 0.005	—	286
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.14	0.12	2.2	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	464	464	0.01	0.02	1.3	471
Vendor	0.04	0.01	0.48	0.26	< 0.005	0.01	0.14	0.14	< 0.005	0.04	0.04	—	465	465	0.03	0.07	1.0	488
Hauling	1.3	0.18	13	7.2	0.08	0.15	3.1	3.3	0.15	0.86	1.0	—	11,037	11,037	1.1	1.8	20	11,612
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.12	1.6	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	426	426	0.01	0.02	0.03	431
Vendor	0.04	0.01	0.50	0.27	< 0.005	0.01	0.14	0.14	< 0.005	0.04	0.04	—	466	466	0.03	0.07	0.03	488
Hauling	1.2	0.16	13	7.3	0.08	0.15	3.1	3.3	0.15	0.86	1.0	—	11,042	11,042	1.1	1.8	0.51	11,597
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65	65	< 0.005	< 0.005	0.09	66
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	70	70	< 0.005	0.01	0.07	74
Hauling	0.19	0.03	2.0	1.1	0.01	0.02	0.47	0.49	0.02	0.13	0.15	—	1,663	1,663	0.16	0.27	1.3	1,748
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11	11	< 0.005	< 0.005	0.01	11
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12	12	< 0.005	< 0.005	0.01	12
Hauling	0.03	< 0.005	0.37	0.20	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	275	275	0.03	0.04	0.21	289

3.7. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,932	3,932	0.16	0.03	—	3,946
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.0	1.3	< 0.005	0.03	—	0.03	0.02	—	0.02	—	231	231	0.01	< 0.005	—	232
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.19	0.24	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38	38	< 0.005	< 0.005	—	38
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.8	1.8	1.6	22	0.00	0.00	6.2	6.2	0.00	1.4	1.4	—	5,744	5,744	0.08	0.22	0.47	5,813
Vendor	0.22	0.05	2.6	1.4	0.02	0.04	0.70	0.74	0.02	0.19	0.21	—	2,386	2,386	0.15	0.36	0.13	2,499
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.10	0.11	1.4	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	342	342	< 0.005	0.01	0.46	346
Vendor	0.01	< 0.005	0.15	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	140	140	0.01	0.02	0.13	147
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.25	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	57	57	< 0.005	< 0.005	0.08	57
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	23	23	< 0.005	< 0.005	0.02	24
Hauling	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	0.00

3.9. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,931	3,931	0.16	0.03	—	3,945
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,931	3,931	0.16	0.03	—	3,945
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.43	0.43	12	16	0.03	0.33	—	0.33	0.30	—	0.30	—	2,808	2,808	0.11	0.02	—	2,818
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.3	2.9	0.01	0.06	—	0.06	0.05	—	0.05	—	465	465	0.02	< 0.005	—	466
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.8	1.8	1.4	27	0.00	0.00	6.2	6.2	0.00	1.4	1.4	—	6,147	6,147	0.06	0.22	16	6,231
Vendor	0.21	0.05	2.4	1.3	0.02	0.02	0.70	0.72	0.02	0.19	0.21	—	2,322	2,322	0.15	0.35	4.6	2,434
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.7	1.5	1.6	21	0.00	0.00	6.2	6.2	0.00	1.4	1.4	—	5,641	5,641	0.07	0.22	0.42	5,710
Vendor	0.20	0.05	2.4	1.3	0.02	0.02	0.70	0.72	0.02	0.19	0.21	—	2,324	2,324	0.15	0.35	0.12	2,431
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.2	1.1	1.2	16	0.00	0.00	4.4	4.4	0.00	1.0	1.0	—	4,086	4,086	0.05	0.16	5.0	4,139
Vendor	0.15	0.04	1.8	0.93	0.01	0.01	0.50	0.51	0.01	0.14	0.15	—	1,659	1,659	0.11	0.25	1.4	1,737
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.21	2.8	0.00	0.00	0.79	0.79	0.00	0.19	0.19	—	676	676	0.01	0.03	0.82	685
Vendor	0.03	0.01	0.32	0.17	< 0.005	< 0.005	0.09	0.09	< 0.005	0.03	0.03	—	275	275	0.02	0.04	0.23	288

Hauling	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	0.00

3.11. Paving (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.2	11	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.2	11	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.5	3.6	< 0.005	0.03	—	0.03	0.03	—	0.03	—	517	517	0.02	< 0.005	—	519
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.45	0.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86	86	< 0.005	< 0.005	—	86
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.87	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	195	195	< 0.005	0.01	0.51	198
Vendor	0.09	0.02	1.0	0.57	0.01	0.01	0.31	0.32	0.01	0.09	0.09	—	1,019	1,019	0.07	0.15	2.0	1,068
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.66	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	179	179	< 0.005	0.01	0.01	182
Vendor	0.09	0.02	1.1	0.58	0.01	0.01	0.31	0.32	0.01	0.09	0.09	—	1,020	1,020	0.07	0.15	0.05	1,067
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62	62	< 0.005	< 0.005	0.08	63
Vendor	0.03	0.01	0.37	0.20	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	349	349	0.02	0.05	0.30	366
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10	10	< 0.005	< 0.005	0.01	10
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	58	58	< 0.005	0.01	0.05	61
Hauling	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	0.00

3.13. Architectural Coating (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	4.3	3.9	0.01	0.12	—	0.12	0.11	—	0.11	—	534	534	0.02	< 0.005	—	536
Architectural Coatings	47	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	4.3	3.9	0.01	0.12	—	0.12	0.11	—	0.11	—	534	534	0.02	< 0.005	—	536
Architectural Coatings	47	47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	1.5	1.3	< 0.005	0.04	—	0.04	0.04	—	0.04	—	183	183	0.01	< 0.005	—	184

Architect Coatings	16	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.27	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	30	30	< 0.005	< 0.005	—	30
Architectural Coatings	3.0	3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.36	0.35	0.29	5.5	0.00	0.00	1.2	1.2	0.00	0.29	0.29	—	1,229	1,229	0.01	0.04	3.2	1,246
Vendor	0.09	0.02	1.0	0.57	0.01	0.01	0.31	0.32	0.01	0.09	0.09	—	1,019	1,019	0.07	0.15	2.0	1,068
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.34	0.29	0.33	4.1	0.00	0.00	1.2	1.2	0.00	0.29	0.29	—	1,128	1,128	0.01	0.04	0.08	1,142
Vendor	0.09	0.02	1.1	0.58	0.01	0.01	0.31	0.32	0.01	0.09	0.09	—	1,020	1,020	0.07	0.15	0.05	1,067
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.11	1.5	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	392	392	< 0.005	0.02	0.48	397
Vendor	0.03	0.01	0.37	0.20	< 0.005	< 0.005	0.10	0.11	< 0.005	0.03	0.03	—	349	349	0.02	0.05	0.30	366
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.02	0.27	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	65	65	< 0.005	< 0.005	0.08	66
Vendor	0.01	< 0.005	0.07	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	58	58	< 0.005	0.01	0.05	61
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	7/1/2028	8/18/2028	5.0	35	—
Site Preparation	Site Preparation	8/19/2028	9/15/2028	5.0	20	—
Grading	Grading	9/16/2028	12/1/2028	5.0	55	—
Building Construction	Building Construction	12/2/2028	12/31/2029	5.0	281	—
Paving	Paving	7/10/2029	12/31/2029	5.0	125	—
Architectural Coating	Architectural Coating	7/10/2029	12/31/2029	5.0	125	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Tractors/Loaders/Back	Diesel	Tier 4 Interim	6.0	8.0	84	0.37
Demolition	Excavators	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Demolition	Other Material Handling Equipment	Diesel	Tier 4 Interim	2.0	8.0	93	0.40
Demolition	Off-Highway Trucks	Diesel	Tier 3	2.0	8.0	376	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.0	8.0	367	0.40
Site Preparation	Crawler Tractors	Diesel	Tier 4 Interim	4.0	8.0	84	0.37
Grading	Graders	Diesel	Tier 4 Interim	4.0	8.0	148	0.41
Grading	Excavators	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	4.0	8.0	367	0.40
Grading	Off-Highway Trucks	Diesel	Tier 4 Interim	2.0	8.0	376	0.38
Grading	Crawler Tractors	Diesel	Tier 4 Interim	2.0	8.0	87	0.43
Building Construction	Forklifts	Diesel	Tier 4 Interim	3.0	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Interim	2.0	8.0	14	0.74
Building Construction	Cranes	Diesel	Tier 3	2.0	8.0	367	0.29
Building Construction	Welders	Diesel	Tier 4 Interim	2.0	8.0	46	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.0	8.0	84	0.37
Paving	Pavers	Diesel	Tier 4 Interim	2.0	8.0	81	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	2.0	8.0	89	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	3.0	8.0	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	30	19	LDA,LDT1,LDT2
Demolition	Vendor	10.0	10	HHDT,MHDT

Demolition	Hauling	3.1	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	18	19	LDA,LDT1,LDT2
Site Preparation	Vendor	6.0	10	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	35	19	LDA,LDT1,LDT2
Grading	Vendor	16	10	HHDT,MHDT
Grading	Hauling	170	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	472	19	LDA,LDT1,LDT2
Building Construction	Vendor	82	10	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15	19	LDA,LDT1,LDT2
Paving	Vendor	36	10	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	94	19	LDA,LDT1,LDT2
Architectural Coating	Vendor	36	10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,830,300	610,100	52,437

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	440	0.00
Site Preparation	—	—	70	0.00	0.00
Grading	74,738	—	275	0.00	0.00
Paving	0.00	0.00	0.00	0.00	23

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Industrial Park	0.00	0%
Paving	Unrefrigerated Warehouse-No Rail	0.00	0%
Paving	Unrefrigerated Warehouse-No Rail	0.00	0%
Paving	City Park	0.00	0%
Paving	Parking Lot	11	100%
Paving	Other Non-Asphalt Surfaces	12	0%
Paving	Hospital	0.00	0%

Paving	Strip Mall	0.00	0%
Paving	Fast Food Restaurant with Drive Thru	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2028	0.00	532	0.03	< 0.005
2029	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20	annual days of extreme heat
Extreme Precipitation	3.1	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77
AQ-PM	93

AQ-DPM	57
Drinking Water	100
Lead Risk Housing	17
Pesticides	85
Toxic Releases	68
Traffic	18
Effect Indicators	—
CleanUp Sites	80
Groundwater	98
Haz Waste Facilities/Generators	87
Impaired Water Bodies	87
Solid Waste	99
Sensitive Population	—
Asthma	17
Cardio-vascular	29
Low Birth Weights	49
Socioeconomic Factor Indicators	—
Education	53
Housing	59
Linguistic	69
Poverty	35
Unemployment	36

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687

Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6

High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5

Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72
Healthy Places Index Score for Project Location (b)	55
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Construction: Construction Phases	Construction schedule provided by Project team.
Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, Building Construction, Paving, and Architectural Coating.
Construction: Architectural Coatings	Rule 1113 limits
Operations: Vehicle Data	Trip gen based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

16285 Eucalyptus BP Construction Ph3 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Construction Ph3
Construction Start Date	1/1/2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.6
Precipitation (days)	19
Location	33.99285819539165, -117.62442182650997
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.32

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	163	1000sqft	3.7	162,600	157,949	—	—	—
Unrefrigerated Warehouse-No Rail	164	1000sqft	3.8	163,600	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	48	1000sqft	1.1	47,900	0.00	—	—	HCFC Sort
City Park	21	Acre	21	0.00	0.00	0.00	—	—
Parking Lot	1,271	Space	11	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	2.6	Acre	2.6	0.00	0.00	—	—	—
Manufacturing	212	1000sqft	4.9	211,700	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	61	61	46	71	0.19	0.68	11	12	0.62	4.6	5.0	—	22,627	22,627	1.4	1.8	18	23,229
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	61	61	47	71	0.19	0.68	11	12	0.62	4.6	5.0	—	22,596	22,596	1.4	1.8	0.47	23,180
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17	17	18	29	0.06	0.32	3.6	3.9	0.29	1.2	1.5	—	7,689	7,689	0.36	0.44	3.0	7,832
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.1	3.1	3.3	5.4	0.01	0.06	0.66	0.71	0.05	0.22	0.27	—	1,273	1,273	0.06	0.07	0.49	1,297

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	2.7	1.7	46	71	0.19	0.47	11	12	0.42	4.6	5.0	—	22,627	22,627	1.4	1.8	18	23,229
2031	61	61	32	53	0.08	0.68	4.7	5.4	0.62	1.1	1.8	—	11,959	11,959	0.40	0.38	12	12,095
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	2.6	1.7	47	71	0.19	0.57	11	12	0.51	4.6	5.0	—	22,596	22,596	1.4	1.8	0.47	23,180
2031	61	61	32	49	0.08	0.68	4.7	5.4	0.62	1.1	1.8	—	11,640	11,640	0.41	0.51	0.30	11,802
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	1.2	0.95	18	29	0.06	0.32	3.6	3.9	0.29	1.2	1.5	—	7,689	7,689	0.36	0.44	3.0	7,832
2031	17	17	10	16	0.03	0.22	1.6	1.8	0.21	0.38	0.58	—	3,848	3,848	0.13	0.17	1.7	3,902
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2030	0.22	0.17	3.3	5.4	0.01	0.06	0.66	0.71	0.05	0.22	0.27	—	1,273	1,273	0.06	0.07	0.49	1,297
2031	3.1	3.1	1.9	3.0	< 0.005	0.04	0.29	0.33	0.04	0.07	0.11	—	637	637	0.02	0.03	0.28	646

3. Construction Emissions Details

3.1. Demolition (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.87	24	32	0.05	0.56	—	0.56	0.51	—	0.51	—	5,387	5,387	0.22	0.04	—	5,405
Demolition	—	—	—	—	—	—	0.40	0.40	—	0.06	0.06	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	2.3	3.1	< 0.005	0.05	—	0.05	0.05	—	0.05	—	517	517	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.42	0.56	< 0.005	0.01	—	0.01	0.01	—	0.01	—	86	86	< 0.005	< 0.005	—	86
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.09	0.09	1.2	0.00	0.00	0.39	0.39	0.00	0.09	0.09	—	353	353	< 0.005	0.01	0.02	357
Vendor	0.01	< 0.005	0.17	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	165	165	0.01	0.03	0.01	173
Hauling	0.05	0.01	0.51	0.28	< 0.005	0.01	0.13	0.14	0.01	0.04	0.04	—	441	441	0.04	0.07	0.02	464
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34	34	< 0.005	< 0.005	0.04	35
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16	16	< 0.005	< 0.005	0.01	17
Hauling	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	42	42	< 0.005	0.01	0.03	44
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.7	5.7	< 0.005	< 0.005	0.01	5.8
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.6	2.6	< 0.005	< 0.005	< 0.005	2.7
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.0	7.0	< 0.005	< 0.005	< 0.005	7.4

3.3. Site Preparation (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.68	16	30	0.05	0.10	—	0.10	0.10	—	0.10	—	5,531	5,531	0.22	0.04	—	5,550
Dust From Material Movement	—	—	—	—	—	—	5.7	5.7	—	2.7	2.7	—	—	—	—	—	—	—

Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.86	1.6	< 0.005	0.01	—	0.01	0.01	—	0.01	—	303	303	0.01	< 0.005	—	304
Dust From Material Movement	—	—	—	—	—	—	0.31	0.31	—	0.15	0.15	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.16	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50	50	< 0.005	< 0.005	—	50
Dust From Material Movement	—	—	—	—	—	—	0.06	0.06	—	0.03	0.03	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.05	0.71	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	206	206	< 0.005	0.01	0.01	208
Vendor	0.01	< 0.005	0.09	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	83	83	< 0.005	0.01	< 0.005	86
Hauling	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	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11	11	< 0.005	< 0.005	0.01	12
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.5	4.5	< 0.005	< 0.005	< 0.005	4.7
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.9	1.9	< 0.005	< 0.005	< 0.005	1.9
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	< 0.005	0.78
Hauling	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	0.00

3.5. Grading (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.4	1.4	34	63	0.11	0.27	—	0.27	0.27	—	0.27	—	11,437	11,437	0.46	0.09	—	11,477
Dust From Material Movement	—	—	—	—	—	—	7.7	7.7	—	3.6	3.6	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.4	1.4	34	63	0.11	0.27	—	0.27	0.27	—	0.27	—	11,437	11,437	0.46	0.09	—	11,477

Dust From Material Movement	—	—	—	—	—	—	7.7	7.7	—	3.6	3.6	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.21	5.1	9.5	0.02	0.04	—	0.04	0.04	—	0.04	—	1,723	1,723	0.07	0.01	—	1,729
Dust From Material Movement	—	—	—	—	—	—	1.2	1.2	—	0.54	0.54	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.94	1.7	< 0.005	0.01	—	0.01	0.01	—	0.01	—	285	285	0.01	< 0.005	—	286
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.11	0.09	1.9	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	448	448	< 0.005	0.02	1.1	454
Vendor	0.02	0.01	0.25	0.14	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	247	247	0.01	0.04	0.44	260
Hauling	1.1	0.18	12	6.7	0.08	0.15	3.1	3.3	0.15	0.86	1.0	—	10,494	10,494	0.91	1.7	16	11,039

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.10	0.11	1.4	0.00	0.00	0.46	0.46	0.00	0.11	0.11	—	411	411	0.01	0.02	0.03	416
Vendor	0.02	0.01	0.26	0.14	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	248	248	0.01	0.04	0.01	259
Hauling	1.1	0.16	12	6.7	0.08	0.15	3.1	3.3	0.15	0.86	1.0	—	10,499	10,499	0.90	1.7	0.43	11,028
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.23	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63	63	< 0.005	< 0.005	0.07	64
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	37	37	< 0.005	0.01	0.03	39
Hauling	0.16	0.03	1.9	1.0	0.01	0.02	0.47	0.49	0.02	0.13	0.15	—	1,582	1,582	0.14	0.26	1.1	1,662
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10	10	< 0.005	< 0.005	0.01	11
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.2	6.2	< 0.005	< 0.005	< 0.005	6.5
Hauling	0.03	< 0.005	0.34	0.18	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.03	—	262	262	0.02	0.04	0.18	275

3.7. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,931	3,931	0.16	0.03	—	3,945
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,931	3,931	0.16	0.03	—	3,945
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.25	0.25	7.2	9.1	0.02	0.19	—	0.19	0.17	—	0.17	—	1,623	1,623	0.07	0.01	—	1,629
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.05	0.05	1.3	1.7	< 0.005	0.03	—	0.03	0.03	—	0.03	—	269	269	0.01	< 0.005	—	270
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.78	0.64	13	0.00	0.00	3.2	3.2	0.00	0.75	0.75	—	3,150	3,150	0.03	0.12	7.5	3,193
Vendor	0.10	0.03	1.3	0.70	0.01	0.01	0.39	0.40	0.01	0.11	0.12	—	1,265	1,265	0.07	0.19	2.2	1,327
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.73	0.74	10	0.00	0.00	3.2	3.2	0.00	0.75	0.75	—	2,891	2,891	0.04	0.12	0.19	2,927
Vendor	0.10	0.03	1.3	0.71	0.01	0.01	0.39	0.40	0.01	0.11	0.12	—	1,266	1,266	0.07	0.19	0.06	1,325
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.35	0.30	0.31	4.3	0.00	0.00	1.3	1.3	0.00	0.31	0.31	—	1,210	1,210	0.02	0.05	1.3	1,227
Vendor	0.04	0.01	0.55	0.29	< 0.005	< 0.005	0.16	0.17	< 0.005	0.04	0.05	—	522	522	0.03	0.08	0.40	547
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.06	0.79	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	200	200	< 0.005	0.01	0.22	203
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	86	86	0.01	0.01	0.07	91
Hauling	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	0.00

3.9. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,931	3,931	0.16	0.03	—	3,945
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60	0.60	17	22	0.04	0.46	—	0.46	0.41	—	0.41	—	3,931	3,931	0.16	0.03	—	3,945
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.21	0.21	6.2	7.8	0.01	0.16	—	0.16	0.15	—	0.15	—	1,392	1,392	0.06	0.01	—	1,397
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	1.1	1.4	< 0.005	0.03	—	0.03	0.03	—	0.03	—	231	231	0.01	< 0.005	—	231
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.73	0.63	12	0.00	0.00	3.2	3.2	0.00	0.75	0.75	—	3,100	3,100	0.03	0.02	6.6	3,112
Vendor	0.10	0.03	1.2	0.67	0.01	0.01	0.39	0.40	0.01	0.11	0.12	—	1,224	1,224	0.07	0.18	1.9	1,282
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.80	0.69	0.64	9.3	0.00	0.00	3.2	3.2	0.00	0.75	0.75	—	2,846	2,846	0.03	0.12	0.17	2,881
Vendor	0.10	0.03	1.3	0.68	0.01	0.01	0.39	0.40	0.01	0.11	0.12	—	1,225	1,225	0.07	0.18	0.05	1,281
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.29	0.24	0.23	3.5	0.00	0.00	1.1	1.1	0.00	0.26	0.26	—	1,022	1,022	0.01	0.04	1.0	1,036
Vendor	0.04	0.01	0.45	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	434	434	0.03	0.07	0.29	454
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.63	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	169	169	< 0.005	0.01	0.17	171
Vendor	0.01	< 0.005	0.08	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	72	72	< 0.005	0.01	0.05	75

Hauling	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	0.00

3.11. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.2	11	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	7.2	11	0.01	0.09	—	0.09	0.08	—	0.08	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.30	0.30	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	2.0	2.9	< 0.005	0.02	—	0.02	0.02	—	0.02	—	414	414	0.02	< 0.005	—	415
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.36	0.53	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	69	69	< 0.005	< 0.005	—	69
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.75	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	189	189	< 0.005	< 0.005	0.40	190
Vendor	0.04	0.01	0.42	0.23	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	426	426	0.03	0.06	0.67	446
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.57	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	173	173	< 0.005	0.01	0.01	176
Vendor	0.03	0.01	0.44	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	426	426	0.03	0.06	0.02	446
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	48	48	< 0.005	< 0.005	0.05	49
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	117	117	0.01	0.02	0.08	122
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.0	8.0	< 0.005	< 0.005	0.01	8.1
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19	19	< 0.005	< 0.005	0.01	20
Hauling	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	0.00

3.13. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	4.3	3.9	0.01	0.12	—	0.12	0.11	—	0.11	—	534	534	0.02	< 0.005	—	536
Architectural Coatings	59	59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	4.3	3.9	0.01	0.12	—	0.12	0.11	—	0.11	—	534	534	0.02	< 0.005	—	536
Architectural Coatings	59	59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	1.2	1.1	< 0.005	0.03	—	0.03	0.03	—	0.03	—	146	146	0.01	< 0.005	—	147

Architect Coatings	16	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.21	0.19	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24	24	< 0.005	< 0.005	—	24
Architectural Coatings	3.0	3.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.15	0.13	2.5	0.00	0.00	0.64	0.64	0.00	0.15	0.15	—	620	620	0.01	< 0.005	1.3	622
Vendor	0.04	0.01	0.42	0.23	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	426	426	0.03	0.06	0.67	446
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.13	1.9	0.00	0.00	0.64	0.64	0.00	0.15	0.15	—	569	569	0.01	0.02	0.03	576
Vendor	0.03	0.01	0.44	0.24	< 0.005	< 0.005	0.14	0.14	< 0.005	0.04	0.04	—	426	426	0.03	0.06	0.02	446
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.54	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	158	158	< 0.005	0.01	0.16	160
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	117	117	0.01	0.02	0.08	122
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.01	0.10	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26	26	< 0.005	< 0.005	0.03	27
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19	19	< 0.005	< 0.005	0.01	20
Hauling	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	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2030	2/18/2030	5.0	35	—
Site Preparation	Site Preparation	2/19/2030	3/18/2030	5.0	20	—
Grading	Grading	3/19/2030	6/3/2030	5.0	55	—
Building Construction	Building Construction	6/4/2030	6/30/2031	5.0	280	—
Paving	Paving	2/11/2031	6/30/2031	5.0	100	—
Architectural Coating	Architectural Coating	2/11/2031	6/30/2031	5.0	100	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Demolition	Tractors/Loaders/Back	Diesel	Tier 4 Interim	6.0	8.0	84	0.37
Demolition	Excavators	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Demolition	Other Material Handling Equipment	Diesel	Tier 4 Interim	2.0	8.0	93	0.40
Demolition	Off-Highway Trucks	Diesel	Tier 3	2.0	8.0	376	0.38
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.0	8.0	367	0.40
Site Preparation	Crawler Tractors	Diesel	Tier 4 Interim	4.0	8.0	87	0.43
Grading	Graders	Diesel	Tier 4 Interim	4.0	8.0	148	0.41
Grading	Excavators	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	4.0	8.0	367	0.40
Grading	Off-Highway Trucks	Diesel	Tier 4 Interim	2.0	8.0	376	0.38
Grading	Crawler Tractors	Diesel	Tier 4 Interim	2.0	8.0	87	0.43
Building Construction	Forklifts	Diesel	Tier 4 Interim	3.0	8.0	82	0.20
Building Construction	Generator Sets	Diesel	Tier 4 Interim	2.0	8.0	14	0.74
Building Construction	Cranes	Diesel	Tier 3	2.0	8.0	367	0.29
Building Construction	Welders	Diesel	Tier 4 Interim	2.0	8.0	46	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Interim	3.0	8.0	84	0.37
Paving	Pavers	Diesel	Tier 4 Interim	2.0	8.0	81	0.42
Paving	Paving Equipment	Diesel	Tier 4 Interim	2.0	8.0	89	0.36
Paving	Rollers	Diesel	Tier 4 Interim	2.0	8.0	36	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Interim	3.0	8.0	37	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	30	19	LDA,LDT1,LDT2
Demolition	Vendor	6.0	10	HHDT,MHDT

Demolition	Hauling	7.1	20	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	18	19	LDA,LDT1,LDT2
Site Preparation	Vendor	3.0	10	HHDT,MHDT
Site Preparation	Hauling	0.00	20	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	35	19	LDA,LDT1,LDT2
Grading	Vendor	9.0	10	HHDT,MHDT
Grading	Hauling	170	20	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	246	19	LDA,LDT1,LDT2
Building Construction	Vendor	46	10	HHDT,MHDT
Building Construction	Hauling	0.00	20	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15	19	LDA,LDT1,LDT2
Paving	Vendor	16	10	HHDT,MHDT
Paving	Hauling	0.00	20	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	49	19	LDA,LDT1,LDT2
Architectural Coating	Vendor	16	10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,830,300	610,100	52,437

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,000	0.00
Site Preparation	—	—	70	0.00	0.00
Grading	74,738	—	275	0.00	0.00
Paving	0.00	0.00	0.00	0.00	14

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Industrial Park	0.00	0%
Paving	Unrefrigerated Warehouse-No Rail	0.00	0%
Paving	Unrefrigerated Warehouse-No Rail	0.00	0%
Paving	City Park	0.00	0%
Paving	Parking Lot	11	100%
Paving	Other Non-Asphalt Surfaces	2.6	0%
Paving	Manufacturing	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2030	0.00	532	0.03	< 0.005
2031	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20	annual days of extreme heat
Extreme Precipitation	3.1	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77
AQ-PM	93
AQ-DPM	57
Drinking Water	100
Lead Risk Housing	17

Pesticides	85
Toxic Releases	68
Traffic	18
Effect Indicators	—
CleanUp Sites	80
Groundwater	98
Haz Waste Facilities/Generators	87
Impaired Water Bodies	87
Solid Waste	99
Sensitive Population	—
Asthma	17
Cardio-vascular	29
Low Birth Weights	49
Socioeconomic Factor Indicators	—
Education	53
Housing	59
Linguistic	69
Poverty	35
Unemployment	36

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—

Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7

Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6

Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72
Healthy Places Index Score for Project Location (b)	55
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Construction: Construction Phases	Construction schedule provided by Project team.

Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, Building Construction, Paving, and Architectural Coating.
Construction: Architectural Coatings	Rule 1113 limits
Operations: Vehicle Data	Trip gen based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

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APPENDIX 3.2:

CALEEMOD EMISSIONS MODEL OUTPUTS – OPERATIONS

16285 Eucalyptus BP Ops Ph1 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Ops Ph1
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.99285819539165, -117.62442182650997
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	341	1000sqft	7.82	340,700	340,901	—	—	—
Unrefrigerated Warehouse-No Rail	553	1000sqft	12.7	553,300	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	326	1000sqft	7.49	326,200	0.00	—	—	HCFC Sort
City Park	33.8	Acre	33.8	0.00	0.00	0.00	—	—
Parking Lot	1,367	Space	12.3	546,800	0.00	—	—	—
Other Non-Asphalt Surfaces	7.76	Acre	7.76	0.00	0.00	—	—	—
User Defined Industrial	1,220	User Defined Unit	0.00	0.00	0.00	—	—	PC

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	61.9	54.5	79.1	253	1.01	1.51	57.7	59.2	1.41	15.0	16.4	1,216	120,571	121,787	130	13.5	303	129,379
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	47.7	41.4	82.2	150	0.98	1.37	57.7	59.1	1.31	15.0	16.3	1,216	117,729	118,945	130	13.6	38.9	126,289
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54.4	48.2	72.3	190	0.87	1.22	50.9	52.1	1.15	13.2	14.4	1,216	105,828	107,044	129	12.2	136	114,036
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.94	8.79	13.2	34.7	0.16	0.22	9.29	9.51	0.21	2.41	2.62	201	17,521	17,722	21.4	2.01	22.4	18,880

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	18.1	11.8	76.4	175	1.00	1.26	57.7	59.0	1.20	15.0	16.2	—	108,099	108,099	6.02	12.1	271	112,123
Area	43.0	42.0	0.65	76.9	< 0.005	0.14	—	0.14	0.10	—	0.10	—	316	316	0.01	< 0.005	—	317
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	9,938	9,938	0.95	0.11	—	9,996
Water	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	55.6	1.34	—	4,180
Waste	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67.4	0.00	—	2,361
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.9	31.9
Stationary	0.79	0.72	2.02	1.84	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Total	61.9	54.5	79.1	253	1.01	1.51	57.7	59.2	1.41	15.0	16.4	1,216	120,571	121,787	130	13.5	303	129,379
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	17.6	11.3	80.2	148	0.98	1.26	57.7	59.0	1.21	15.0	16.2	—	105,573	105,573	6.05	12.1	7.04	109,351
Area	29.3	29.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	9,938	9,938	0.95	0.11	—	9,996
Water	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	55.6	1.34	—	4,180
Waste	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67.4	0.00	—	2,361
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.9	31.9
Stationary	0.79	0.72	2.02	1.84	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Total	47.7	41.4	82.2	150	0.98	1.37	57.7	59.1	1.31	15.0	16.3	1,216	117,729	118,945	130	13.6	38.9	126,289
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.6	10.1	71.6	137	0.87	1.11	50.9	52.0	1.06	13.2	14.3	—	93,774	93,774	5.34	10.7	104	97,200

Area	38.7	38.0	0.44	52.6	< 0.005	0.09	—	0.09	0.07	—	0.07	—	216	216	0.01	< 0.005	—	217
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	9,938	9,938	0.95	0.11	—	9,996
Water	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	55.6	1.34	—	4,180
Waste	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67.4	0.00	—	2,361
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.9	31.9
Stationary	0.11	0.10	0.28	0.25	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	50.6	50.6	< 0.005	< 0.005	0.00	50.8
Total	54.4	48.2	72.3	190	0.87	1.22	50.9	52.1	1.15	13.2	14.4	1,216	105,828	107,044	129	12.2	136	114,036
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.85	1.84	13.1	25.0	0.16	0.20	9.29	9.49	0.19	2.41	2.60	—	15,525	15,525	0.88	1.77	17.2	16,093
Area	7.07	6.93	0.08	9.61	< 0.005	0.02	—	0.02	0.01	—	0.01	—	35.8	35.8	< 0.005	< 0.005	—	36.0
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,645	1,645	0.16	0.02	—	1,655
Water	—	—	—	—	—	—	—	—	—	—	—	89.5	306	396	9.21	0.22	—	692
Waste	—	—	—	—	—	—	—	—	—	—	—	112	0.00	112	11.2	0.00	—	391
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.27	5.27
Stationary	0.02	0.02	0.05	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	8.38	8.38	< 0.005	< 0.005	0.00	8.41
Total	9.94	8.79	13.2	34.7	0.16	0.22	9.29	9.51	0.21	2.41	2.62	201	17,521	17,722	21.4	2.01	22.4	18,880

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industria Park	2.23	0.46	23.4	13.3	0.23	0.38	8.37	8.74	0.36	2.25	2.61	—	25,243	25,243	1.71	3.79	61.9	26,477
Unrefrig erated Wareho use-No Rail	4.39	0.92	46.8	26.1	0.46	0.76	16.7	17.5	0.72	4.49	5.21	—	50,562	50,562	3.37	7.60	123	53,035
City Park	0.39	0.34	0.39	4.01	0.01	0.01	1.01	1.02	0.01	0.26	0.26	—	1,138	1,138	0.04	0.05	3.22	1,157
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	11.1	10.1	5.90	131	0.31	0.12	31.6	31.8	0.11	7.99	8.10	—	31,155	31,155	0.90	0.65	82.8	31,455
Total	18.1	11.8	76.4	175	1.00	1.26	57.7	59.0	1.20	15.0	16.2	—	108,099	108,099	6.02	12.1	271	112,123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industria l Park	2.22	0.45	24.4	13.3	0.23	0.38	8.37	8.74	0.36	2.25	2.61	—	25,246	25,246	1.71	3.79	1.61	26,420
Unrefrig erated Wareho use-No Rail	4.37	0.90	48.8	26.1	0.46	0.76	16.7	17.5	0.73	4.49	5.21	—	50,569	50,569	3.37	7.60	3.20	52,922
City Park	0.37	0.32	0.42	3.27	0.01	0.01	1.01	1.02	0.01	0.26	0.26	—	1,067	1,067	0.04	0.05	0.08	1,083
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00

User Defined Industrial	10.6	9.62	6.57	106	0.28	0.12	31.6	31.8	0.11	7.99	8.10	—	28,691	28,691	0.93	0.70	2.15	28,926
Total	17.6	11.3	80.2	148	0.98	1.26	57.7	59.0	1.21	15.0	16.2	—	105,573	105,573	6.05	12.1	7.04	109,351
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.39	0.08	4.30	2.31	0.04	0.07	1.44	1.51	0.06	0.39	0.45	—	3,985	3,985	0.27	0.60	4.22	4,174
Unrefrigerated Warehouse-No Rail	0.67	0.14	7.60	4.01	0.07	0.12	2.54	2.66	0.11	0.68	0.80	—	7,053	7,053	0.47	1.06	7.43	7,389
City Park	0.03	0.03	0.04	0.30	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	86.1	86.1	< 0.005	< 0.005	0.11	87.5
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	1.76	1.59	1.13	18.4	0.05	0.02	5.21	5.23	0.02	1.32	1.34	—	4,401	4,401	0.14	0.11	5.41	4,443
Total	2.85	1.84	13.1	25.0	0.16	0.20	9.29	9.49	0.19	2.41	2.60	—	15,525	15,525	0.88	1.77	17.2	16,093

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	5,640	5,640	0.54	0.07	—	5,672
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,853	3,853	0.37	0.04	—	3,875
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	445	445	0.04	0.01	—	448
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,938	9,938	0.95	0.11	—	9,996
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	5,640	5,640	0.54	0.07	—	5,672
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,853	3,853	0.37	0.04	—	3,875
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	445	445	0.04	0.01	—	448
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	9,938	9,938	0.95	0.11	—	9,996
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	934	934	0.09	0.01	—	939
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	638	638	0.06	0.01	—	642
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	73.7	73.7	0.01	< 0.005	—	74.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,645	1,645	0.16	0.02	—	1,655

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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

Unrefrig Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	26.2	26.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.17	3.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	13.7	12.6	0.65	76.9	< 0.005	0.14	—	0.14	0.10	—	0.10	—	316	316	0.01	< 0.005	—	317
Total	43.0	42.0	0.65	76.9	< 0.005	0.14	—	0.14	0.10	—	0.10	—	316	316	0.01	< 0.005	—	317
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	26.2	26.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.17	3.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	29.3	29.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.78	4.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.58	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.71	1.58	0.08	9.61	< 0.005	0.02	—	0.02	0.01	—	0.01	—	35.8	35.8	< 0.005	< 0.005	—	36.0
Total	7.07	6.93	0.08	9.61	< 0.005	0.02	—	0.02	0.01	—	0.01	—	35.8	35.8	< 0.005	< 0.005	—	36.0

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	151	536	687	15.5	0.37	—	1,187
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	390	1,313	1,703	40.1	0.96	—	2,993
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	55.6	1.34	—	4,180
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	151	536	687	15.5	0.37	—	1,187
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	390	1,313	1,703	40.1	0.96	—	2,993
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	55.6	1.34	—	4,180
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	25.0	88.8	114	2.57	0.06	—	197
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	64.5	217	282	6.64	0.16	—	495
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	89.5	306	396	9.21	0.22	—	692

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	228	0.00	228	22.8	0.00	—	797
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	446	0.00	446	44.5	0.00	—	1,559
City Park	—	—	—	—	—	—	—	—	—	—	—	1.57	0.00	1.57	0.16	0.00	—	5.48
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67.4	0.00	—	2,361
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	228	0.00	228	22.8	0.00	—	797
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	446	0.00	446	44.5	0.00	—	1,559
City Park	—	—	—	—	—	—	—	—	—	—	—	1.57	0.00	1.57	0.16	0.00	—	5.48

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67.4	0.00	—	2,361
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	37.7	0.00	37.7	3.77	0.00	—	132
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	73.8	0.00	73.8	7.37	0.00	—	258
City Park	—	—	—	—	—	—	—	—	—	—	—	0.26	0.00	0.26	0.03	0.00	—	0.91
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	112	0.00	112	11.2	0.00	—	391

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.9	31.9
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.9	31.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.9	31.9
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31.9	31.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.27	5.27
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.27	5.27

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.79	0.72	2.02	1.84	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Total	0.79	0.72	2.02	1.84	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.79	0.72	2.02	1.84	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Total	0.79	0.72	2.02	1.84	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Fire Pump	0.02	0.02	0.05	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	8.38	8.38	< 0.005	< 0.005	0.00	8.41
Total	0.02	0.02	0.05	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	8.38	8.38	< 0.005	< 0.005	0.00	8.41

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	164	149	125	57,026	9,444	8,580	7,226	3,286,401
Unrefrigerated Warehouse-No Rail	240	81.3	72.5	70,626	13,880	4,701	4,189	4,082,204
Unrefrigerated Warehouse-No Rail	86.1	69.8	68.8	29,681	4,992	4,047	3,990	1,720,590
City Park	26.0	77.1	87.1	15,340	426	1,265	1,428	251,507
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	2,767	2,012	1,863	923,576	45,373	32,989	30,548	15,142,326

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	1,830,300	610,100	52,437

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00

Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	5,945,858	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	2,555,528	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	1,506,621	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Parking Lot	469,465	346	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	78,786,875	5,474,571
Unrefrigerated Warehouse-No Rail	127,950,625	0.00
Unrefrigerated Warehouse-No Rail	75,433,750	0.00
City Park	0.00	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	422	—
Unrefrigerated Warehouse-No Rail	520	—
Unrefrigerated Warehouse-No Rail	307	—
City Park	2.91	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—
CleanUp Sites	80.3
Groundwater	98.1
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719

Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction schedule provided by Project team.
Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113 limits
Operations: Vehicle Data	Trip gen based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

16285 Eucalyptus BP Ops Ph2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Ops Ph2
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.99285819539165, -117.62442182650997
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	614	1000sqft	14.1	614,400	682,838	—	—	—
Unrefrigerated Warehouse-No Rail	1,107	1000sqft	25.4	1,106,600	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	587	1000sqft	13.5	587,200	0.00	—	—	HCFC Sort
City Park	71.5	Acre	71.5	0.00	0.00	0.00	—	—
Parking Lot	2,638	Space	23.7	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	19.6	Acre	19.6	0.00	0.00	—	—	—
User Defined Industrial	2,308	User Defined Unit	0.00	0.00	0.00	—	—	PC
Hospital	35.0	1000sqft	0.80	35,000	0.00	—	—	—
Strip Mall	5.00	1000sqft	0.11	5,000	0.00	—	—	—
Fast Food Restaurant with Drive Thru	5.00	1000sqft	0.11	5,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	120	106	151	500	2.08	2.87	128	131	2.70	33.2	35.9	2,544	246,021	248,566	271	26.2	578	263,706
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	99.9	87.9	157	339	2.01	2.69	128	131	2.57	33.2	35.8	2,544	239,606	242,151	271	26.3	73.8	256,827
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	107	95.8	139	387	1.81	2.34	115	117	2.20	29.7	31.9	2,544	216,954	219,499	270	23.5	260	233,508
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	19.6	17.5	25.3	70.6	0.33	0.43	21.0	21.4	0.40	5.43	5.83	421	35,919	36,341	44.6	3.90	43.1	38,660

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	43.3	31.4	146	394	2.07	2.47	128	131	2.35	33.2	35.6	—	221,678	221,678	11.5	23.4	517	229,442
Area	74.8	73.4	0.86	102	0.01	0.18	—	0.18	0.14	—	0.14	—	421	421	0.02	< 0.005	—	422
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,642	19,642	1.87	0.23	—	19,756
Water	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.56	—	8,002
Waste	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Stationary	1.59	1.44	4.04	3.68	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Total	120	106	151	500	2.08	2.87	128	131	2.70	33.2	35.9	2,544	246,021	248,566	271	26.2	578	263,706
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.7	29.8	153	335	2.01	2.47	128	131	2.36	33.2	35.6	—	215,684	215,684	11.6	23.5	13.4	222,986
Area	56.6	56.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,642	19,642	1.87	0.23	—	19,756
Water	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.56	—	8,002
Waste	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Stationary	1.59	1.44	4.04	3.68	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741

Total	99.9	87.9	157	339	2.01	2.69	128	131	2.57	33.2	35.8	2,544	239,606	242,151	271	26.3	73.8	256,827
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	38.0	27.4	137	316	1.80	2.19	115	117	2.08	29.7	31.8	—	193,381	193,381	10.3	20.7	200	200,017
Area	69.1	68.1	0.59	70.1	< 0.005	0.12	—	0.12	0.09	—	0.09	—	288	288	0.01	< 0.005	—	289
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,642	19,642	1.87	0.23	—	19,756
Water	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.56	—	8,002
Waste	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Stationary	0.22	0.20	0.55	0.50	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	101	101	< 0.005	< 0.005	0.00	102
Total	107	95.8	139	387	1.81	2.34	115	117	2.20	29.7	31.9	2,544	216,954	219,499	270	23.5	260	233,508
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.94	5.01	25.1	57.7	0.33	0.40	21.0	21.4	0.38	5.43	5.81	—	32,016	32,016	1.71	3.43	33.1	33,115
Area	12.6	12.4	0.11	12.8	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.7	47.7	< 0.005	< 0.005	—	47.9
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,252	3,252	0.31	0.04	—	3,271
Water	—	—	—	—	—	—	—	—	—	—	—	171	586	758	17.6	0.42	—	1,325
Waste	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.0	0.00	—	874
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.99	9.99
Stationary	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	16.8	16.8	< 0.005	< 0.005	0.00	16.8
Total	19.6	17.5	25.3	70.6	0.33	0.43	21.0	21.4	0.40	5.43	5.83	421	35,919	36,341	44.6	3.90	43.1	38,660

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	3.66	0.78	40.1	22.2	0.40	0.67	15.1	15.8	0.64	4.06	4.70	—	44,448	44,448	2.79	6.68	102	46,610
Unrefrigerated Warehouse-No Rail	7.88	1.68	86.2	47.7	0.86	1.44	32.4	33.8	1.38	8.70	10.1	—	95,484	95,484	6.01	14.4	218	100,131
City Park	0.78	0.68	0.78	8.16	0.02	0.01	2.15	2.17	0.01	0.55	0.56	—	2,374	2,374	0.09	0.10	6.06	2,412
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	19.4	17.7	10.1	230	0.55	0.21	57.8	58.0	0.19	14.6	14.8	—	55,858	55,858	1.57	1.15	132	56,374
Hospital	3.17	2.78	3.21	33.5	0.10	0.06	8.86	8.91	0.05	2.25	2.30	—	9,760	9,760	0.36	0.41	24.9	9,915
Strip Mall	0.90	0.83	0.58	5.48	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,390	1,390	0.07	0.07	3.47	1,415
Fast Food Restaurant with Drive Thru	7.50	6.92	5.02	48.0	0.12	0.08	11.0	11.1	0.07	2.79	2.86	—	12,362	12,362	0.61	0.59	30.9	12,585
Total	43.3	31.4	146	394	2.07	2.47	128	131	2.35	33.2	35.6	—	221,678	221,678	11.5	23.4	517	229,442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	3.64	0.77	41.9	22.2	0.40	0.67	15.1	15.8	0.64	4.06	4.70	—	44,454	44,454	2.79	6.68	2.64	46,518
Unrefrigerated Warehouse-No Rail	7.83	1.64	90.0	47.7	0.86	1.44	32.4	33.8	1.38	8.70	10.1	—	95,497	95,497	6.00	14.4	5.65	99,933
City Park	0.74	0.64	0.84	6.66	0.02	0.01	2.15	2.17	0.01	0.55	0.56	—	2,226	2,226	0.09	0.10	0.16	2,258
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	18.6	16.9	11.2	185	0.51	0.21	57.8	58.0	0.19	14.6	14.8	—	51,449	51,449	1.63	1.24	3.43	51,862
Hospital	3.01	2.62	3.45	27.3	0.09	0.06	8.86	8.91	0.05	2.25	2.30	—	9,148	9,148	0.37	0.42	0.65	9,283
Strip Mall	0.84	0.78	0.62	4.76	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,305	1,305	0.07	0.07	0.09	1,328
Fast Food Restaurant with Drive Thru	7.05	6.47	5.37	41.4	0.11	0.08	11.0	11.1	0.07	2.79	2.87	—	11,605	11,605	0.64	0.61	0.80	11,804
Total	41.7	29.8	153	335	2.01	2.47	128	131	2.36	33.2	35.6	—	215,684	215,684	11.6	23.5	13.4	222,986
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.64	0.13	7.37	3.86	0.07	0.12	2.60	2.72	0.11	0.70	0.81	—	7,015	7,015	0.44	1.05	6.93	7,347
Unrefrigerated Warehouse-No Rail	1.20	0.25	14.0	7.30	0.13	0.22	4.92	5.14	0.21	1.32	1.53	—	13,272	13,272	0.83	2.00	13.1	13,900

City Park	0.06	0.06	0.08	0.61	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	181	181	0.01	0.01	0.21	184
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	3.07	2.78	1.92	32.1	0.09	0.03	9.49	9.52	0.03	2.40	2.43	—	7,868	7,868	0.25	0.19	8.63	7,940
Hospital	0.54	0.47	0.64	5.16	0.02	0.01	1.59	1.60	0.01	0.40	0.41	—	1,524	1,524	0.06	0.07	1.77	1,548
Strip Mall	0.15	0.14	0.11	0.89	< 0.005	< 0.005	0.22	0.22	< 0.005	0.06	0.06	—	218	218	0.01	0.01	0.25	222
Fast Food Restaurant with Drive Thru	1.27	1.17	0.99	7.79	0.02	0.01	1.98	2.00	0.01	0.50	0.52	—	1,940	1,940	0.11	0.10	2.21	1,975
Total	6.94	5.01	25.1	57.7	0.33	0.40	21.0	21.4	0.38	5.43	5.81	—	32,016	32,016	1.71	3.43	33.1	33,115

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	10,170	10,170	0.97	0.12	—	10,229

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,420	7,420	0.71	0.09	—	7,463
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	859	859	0.08	0.01	—	864
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	980	980	0.09	0.01	—	986
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	46.1	46.1	< 0.005	< 0.005	—	46.4
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	166	166	0.02	< 0.005	—	167
Total	—	—	—	—	—	—	—	—	—	—	—	—	19,642	19,642	1.87	0.23	—	19,756
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	10,170	10,170	0.97	0.12	—	10,229
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	7,420	7,420	0.71	0.09	—	7,463
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	859	859	0.08	0.01	—	864
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	980	980	0.09	0.01	—	986
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	46.1	46.1	< 0.005	< 0.005	—	46.4
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	166	166	0.02	< 0.005	—	167
Total	—	—	—	—	—	—	—	—	—	—	—	—	19,642	19,642	1.87	0.23	—	19,756
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	1,684	1,684	0.16	0.02	—	1,694
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,228	1,228	0.12	0.01	—	1,236
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	142	142	0.01	< 0.005	—	143
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Hospital	—	—	—	—	—	—	—	—	—	—	—	—	162	162	0.02	< 0.005	—	163
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	7.64	7.64	< 0.005	< 0.005	—	7.68
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	27.5	27.5	< 0.005	< 0.005	—	27.7
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,252	3,252	0.31	0.04	—	3,271

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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

Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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

Fast Food Restaurant with Drive Thru	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	50.5	50.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.12	6.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	18.2	16.8	0.86	102	0.01	0.18	—	0.18	0.14	—	0.14	—	421	421	0.02	< 0.005	—	422
Total	74.8	73.4	0.86	102	0.01	0.18	—	0.18	0.14	—	0.14	—	421	421	0.02	< 0.005	—	422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	50.5	50.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.12	6.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	56.6	56.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	9.22	9.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.12	1.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.28	2.10	0.11	12.8	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.7	47.7	< 0.005	< 0.005	—	47.9
Total	12.6	12.4	0.11	12.8	< 0.005	0.02	—	0.02	0.02	—	0.02	—	47.7	47.7	< 0.005	< 0.005	—	47.9

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	272	973	1,245	28.0	0.67	—	2,146
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	751	2,529	3,280	77.2	1.86	—	5,763
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	8.42	28.4	36.8	0.87	0.02	—	64.6
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.71	2.39	3.10	0.07	< 0.005	—	5.45
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.91	9.80	12.7	0.30	0.01	—	22.3
Total	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.56	—	8,002
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	272	973	1,245	28.0	0.67	—	2,146
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	751	2,529	3,280	77.2	1.86	—	5,763
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Hospital	—	—	—	—	—	—	—	—	—	—	—	8.42	28.4	36.8	0.87	0.02	—	64.6
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.71	2.39	3.10	0.07	< 0.005	—	5.45
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.91	9.80	12.7	0.30	0.01	—	22.3
Total	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.56	—	8,002
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	45.1	161	206	4.64	0.11	—	355
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	124	419	543	12.8	0.31	—	954
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	1.39	4.69	6.09	0.14	< 0.005	—	10.7
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.12	0.40	0.51	0.01	< 0.005	—	0.90

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.48	1.62	2.10	0.05	< 0.005	—	3.70
Total	—	—	—	—	—	—	—	—	—	—	—	171	586	758	17.6	0.42	—	1,325

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	—	1,437
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	858	0.00	858	85.8	0.00	—	3,002
City Park	—	—	—	—	—	—	—	—	—	—	—	3.31	0.00	3.31	0.33	0.00	—	11.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20.4	0.00	—	713

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.83	0.00	2.83	0.28	0.00	—	9.90
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	31.0	0.00	31.0	3.10	0.00	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41.0	0.00	—	1,437
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	858	0.00	858	85.8	0.00	—	3,002
City Park	—	—	—	—	—	—	—	—	—	—	—	3.31	0.00	3.31	0.33	0.00	—	11.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20.4	0.00	—	713
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.83	0.00	2.83	0.28	0.00	—	9.90

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	31.0	0.00	31.0	3.10	0.00	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	68.0	0.00	68.0	6.79	0.00	—	238
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14.2	0.00	—	497
City Park	—	—	—	—	—	—	—	—	—	—	—	0.55	0.00	0.55	0.05	0.00	—	1.92
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	33.7	0.00	33.7	3.37	0.00	—	118
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.47	0.00	0.47	0.05	0.00	—	1.64
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.14	0.00	5.14	0.51	0.00	—	18.0
Total	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25.0	0.00	—	874

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	57.4	57.4
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.81	2.81
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	57.4	57.4
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.81	2.81
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60.3	60.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.51	9.51
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.99	9.99

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.59	1.44	4.04	3.68	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Total	1.59	1.44	4.04	3.68	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.59	1.44	4.04	3.68	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Total	1.59	1.44	4.04	3.68	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	16.8	16.8	< 0.005	< 0.005	0.00	16.8
Total	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	16.8	16.8	< 0.005	< 0.005	0.00	16.8

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	296	269	226	103,030	17,084	15,525	13,044	5,943,778

Unrefrigerated Warehouse-No Rail	480	163	145	141,253	27,759	9,402	8,379	8,164,409
Unrefrigerated Warehouse-No Rail	154	125	123	53,061	8,878	7,218	7,116	3,062,179
City Park	56.0	164	185	32,816	918	2,692	3,037	538,024
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	5,090	3,652	3,377	1,693,411	82,837	59,432	54,962	27,561,676
Hospital	753	743	740	273,659	12,487	12,324	12,273	4,538,103
Strip Mall	272	272	269	99,126	1,739	1,737	1,722	633,667
Fast Food Restaurant with Drive Thru	2,241	2,243	2,241	818,046	15,500	15,511	15,500	5,658,065

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	3,529,800	1,176,600	113,174

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	10,722,440	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	5,111,057	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	2,712,102	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Parking Lot	905,960	346	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Hospital	1,033,091	346	0.0330	0.0040	0.00
Strip Mall	48,642	346	0.0330	0.0040	0.00
Fast Food Restaurant with Drive Thru	175,333	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	142,080,000	10,965,780
Unrefrigerated Warehouse-No Rail	255,901,250	0.00
Unrefrigerated Warehouse-No Rail	135,790,000	0.00
City Park	0.00	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

User Defined Industrial	0.00	0.00
Hospital	4,391,819	0.00
Strip Mall	370,363	0.00
Fast Food Restaurant with Drive Thru	1,517,669	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	762	—
Unrefrigerated Warehouse-No Rail	1,040	—
Unrefrigerated Warehouse-No Rail	552	—
City Park	6.15	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—
User Defined Industrial	0.00	—
Hospital	378	—
Strip Mall	5.25	—
Fast Food Restaurant with Drive Thru	57.6	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0

City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Hospital	Chillers	R-134a	1,430	< 0.005	2.00	2.00	23.0
Hospital	Household refrigerators and/or freezers	R-134a	1,430	< 0.005	0.60	0.00	1.00
Hospital	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Hospital	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Strip Mall	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—
CleanUp Sites	80.3
Groundwater	98.1
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719

Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction schedule provided by Project team.
Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113 limits
Operations: Vehicle Data	Trip gen based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

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4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Ops Ph3
Operational Year	2031
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.60
Precipitation (days)	18.8
Location	33.99285819539165, -117.62442182650997
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	777	1000sqft	17.8	777,000	840,786	—	—	—
Unrefrigerated Warehouse-No Rail	1,270	1000sqft	29.2	1,270,200	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	635	1000sqft	14.6	635,100	0.00	—	—	HCFC Sort
City Park	92.5	Acre	92.5	0.00	0.00	0.00	—	—
Parking Lot	3,325	Space	29.9	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	22.2	Acre	22.2	0.00	0.00	—	—	—
User Defined Industrial	2,894	User Defined Unit	0.00	0.00	0.00	—	—	PC
Hospital	35.0	1000sqft	0.80	35,000	0.00	—	—	—
Strip Mall	5.00	1000sqft	0.11	5,000	0.00	—	—	—
Fast Food Restaurant with Drive Thru	5.00	1000sqft	0.11	5,000	0.00	—	—	—
Manufacturing	212	1000sqft	4.86	211,700	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	143	128	177	581	2.52	3.51	161	165	3.32	41.7	45.0	3,162	292,703	295,866	335	32.1	618	314,417
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	119	105	184	385	2.44	3.29	161	164	3.15	41.7	44.8	3,162	285,076	288,239	335	32.2	109	306,326

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	128	115	163	442	2.19	2.88	143	146	2.72	37.0	39.7	3,162	257,751	260,914	334	29.1	297	278,225
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23.4	21.0	29.8	80.7	0.40	0.53	26.1	26.6	0.50	6.75	7.24	524	42,674	43,197	55.2	4.82	49.2	46,063

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	47.5	34.4	171	449	2.50	3.02	161	164	2.88	41.7	44.5	—	268,785	268,785	12.6	28.6	523	278,137
Area	93.5	91.7	1.08	128	0.01	0.23	—	0.23	0.17	—	0.17	—	526	526	0.02	< 0.005	—	528
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,133	19,133	2.42	0.29	—	19,281
Water	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.20	—	8,915
Waste	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95.3	95.3
Stationary	1.98	1.80	5.05	4.60	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Total	143	128	177	581	2.52	3.51	161	165	3.32	41.7	45.0	3,162	292,703	295,866	335	32.1	618	314,417
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	45.9	32.8	179	381	2.43	3.02	161	164	2.88	41.7	44.6	—	261,683	261,683	12.7	28.7	13.6	270,573
Area	70.7	70.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,133	19,133	2.42	0.29	—	19,281
Water	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.20	—	8,915
Waste	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95.3	95.3
Stationary	1.98	1.80	5.05	4.60	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Total	119	105	184	385	2.44	3.29	161	164	3.15	41.7	44.8	3,162	285,076	288,239	335	32.2	109	306,326
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41.4	29.7	162	354	2.19	2.69	143	146	2.56	37.0	39.5	—	234,795	234,795	11.4	25.6	202	242,910
Area	86.3	85.1	0.74	87.6	0.01	0.16	—	0.16	0.12	—	0.12	—	360	360	0.02	< 0.005	—	361
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	19,133	19,133	2.42	0.29	—	19,281
Water	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.20	—	8,915
Waste	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95.3	95.3
Stationary	0.27	0.25	0.69	0.63	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	127	127	0.01	< 0.005	0.00	127
Total	128	115	163	442	2.19	2.88	143	146	2.72	37.0	39.7	3,162	257,751	260,914	334	29.1	297	278,225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.55	5.41	29.6	64.6	0.40	0.49	26.1	26.6	0.47	6.75	7.22	—	38,873	38,873	1.89	4.24	33.4	40,217
Area	15.8	15.5	0.13	16.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	59.6	59.6	< 0.005	< 0.005	—	59.8
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,168	3,168	0.40	0.05	—	3,192
Water	—	—	—	—	—	—	—	—	—	—	—	214	552	767	22.0	0.53	—	1,476
Waste	—	—	—	—	—	—	—	—	—	—	—	309	0.00	309	30.9	0.00	—	1,082
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8	15.8
Stationary	0.05	0.05	0.13	0.12	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	20.9	20.9	< 0.005	< 0.005	0.00	21.0
Total	23.4	21.0	29.8	80.7	0.40	0.53	26.1	26.6	0.50	6.75	7.24	524	42,674	43,197	55.2	4.82	49.2	46,063

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	3.97	0.88	46.3	25.0	0.48	0.81	19.1	19.9	0.78	5.13	5.91	—	53,175	53,175	2.99	8.01	105	55,741
Unrefrigerated Warehouse-No Rail	7.62	1.68	88.9	47.8	0.92	1.56	36.7	38.3	1.49	9.86	11.3	—	102,283	102,283	5.75	15.4	202	107,220
City Park	0.91	0.80	0.90	9.76	0.03	0.02	2.78	2.80	0.02	0.71	0.72	—	2,957	2,957	0.10	0.12	6.03	3,001
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	23.2	21.2	11.7	277	0.70	0.24	75.1	75.3	0.22	19.0	19.2	—	70,337	70,337	1.87	1.40	130	70,932
Hospital	2.88	2.53	2.86	31.0	0.09	0.05	8.85	8.91	0.05	2.25	2.30	—	9,412	9,412	0.33	0.39	19.2	9,555
Strip Mall	0.81	0.75	0.52	5.07	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,340	1,340	0.07	0.06	2.68	1,364
Fast Food Restaurant with Drive Thru	6.81	6.28	4.54	44.4	0.12	0.07	11.0	11.1	0.06	2.79	2.86	—	11,923	11,923	0.56	0.56	23.9	12,129
Manufacturing	1.29	0.28	15.1	8.10	0.16	0.26	6.22	6.49	0.25	1.67	1.92	—	17,357	17,357	0.97	2.62	34.2	18,195

Total	47.5	34.4	171	449	2.50	3.02	161	164	2.88	41.7	44.5	—	268,785	268,785	12.6	28.6	523	278,137
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	3.95	0.86	48.4	25.0	0.48	0.81	19.1	19.9	0.78	5.13	5.91	—	53,183	53,183	2.99	8.01	2.73	55,647
Unrefrigerated Warehouse-No Rail	7.57	1.64	92.9	47.9	0.92	1.56	36.7	38.3	1.49	9.86	11.3	—	102,298	102,298	5.74	15.4	5.24	107,040
City Park	0.87	0.76	0.97	7.96	0.03	0.02	2.78	2.80	0.02	0.71	0.72	—	2,771	2,771	0.11	0.13	0.16	2,811
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	22.3	20.3	13.0	224	0.64	0.24	75.1	75.3	0.22	19.0	19.2	—	64,800	64,800	1.94	1.51	3.37	65,301
Hospital	2.75	2.39	3.07	25.3	0.09	0.05	8.85	8.91	0.05	2.25	2.30	—	8,821	8,821	0.33	0.40	0.50	8,949
Strip Mall	0.77	0.71	0.56	4.40	0.01	0.01	1.23	1.24	0.01	0.31	0.32	—	1,258	1,258	0.07	0.07	0.07	1,280
Fast Food Restaurant with Drive Thru	6.43	5.91	4.86	38.3	0.11	0.07	11.0	11.1	0.06	2.79	2.86	—	11,192	11,192	0.59	0.58	0.62	11,381
Manufacturing	1.28	0.28	15.7	8.11	0.16	0.26	6.22	6.49	0.25	1.67	1.92	—	17,360	17,360	0.97	2.62	0.89	18,165
Total	45.9	32.8	179	381	2.43	3.02	161	164	2.88	41.7	44.6	—	261,683	261,683	12.7	28.7	13.6	270,573
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial Park	0.69	0.15	8.51	4.34	0.08	0.14	3.30	3.44	0.14	0.89	1.02	—	8,394	8,394	0.47	1.26	7.18	8,789
Unrefrigerated Warehouse-No Rail	1.16	0.25	14.4	7.31	0.14	0.24	5.56	5.80	0.23	1.49	1.72	—	14,193	14,193	0.80	2.14	12.1	14,862
City Park	0.08	0.07	0.09	0.73	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	224	224	0.01	0.01	0.21	228
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	3.60	3.27	2.17	37.9	0.11	0.04	12.1	12.1	0.04	3.05	3.08	—	9,695	9,695	0.29	0.23	8.29	9,778
Hospital	0.50	0.43	0.57	4.78	0.02	0.01	1.59	1.60	0.01	0.40	0.41	—	1,469	1,469	0.05	0.07	1.37	1,492
Strip Mall	0.14	0.13	0.10	0.83	< 0.005	< 0.005	0.22	0.22	< 0.005	0.06	0.06	—	210	210	0.01	0.01	0.19	214
Fast Food Restaurant with Drive Thru	1.16	1.07	0.90	7.21	0.02	0.01	1.98	1.99	0.01	0.50	0.52	—	1,871	1,871	0.10	0.10	1.71	1,904
Manufacturing	0.23	0.05	2.85	1.45	0.03	0.05	1.10	1.15	0.05	0.30	0.34	—	2,817	2,817	0.16	0.42	2.39	2,950
Total	7.55	5.41	29.6	64.6	0.40	0.49	26.1	26.6	0.47	6.75	7.22	—	38,873	38,873	1.89	4.24	33.4	40,217

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	9,689	9,689	1.23	0.15	—	9,763
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	6,288	6,288	0.80	0.10	—	6,336
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	816	816	0.10	0.01	—	822
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	738	738	0.09	0.01	—	744
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	34.8	34.8	< 0.005	< 0.005	—	35.0
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	125	125	0.02	< 0.005	—	126
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	1,443	1,443	0.18	0.02	—	1,454
Total	—	—	—	—	—	—	—	—	—	—	—	—	19,133	19,133	2.42	0.29	—	19,281

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	9,689	9,689	1.23	0.15	—	9,763
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	6,288	6,288	0.80	0.10	—	6,336
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	816	816	0.10	0.01	—	822
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	738	738	0.09	0.01	—	744
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	34.8	34.8	< 0.005	< 0.005	—	35.0
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	125	125	0.02	< 0.005	—	126
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	1,443	1,443	0.18	0.02	—	1,454
Total	—	—	—	—	—	—	—	—	—	—	—	—	19,133	19,133	2.42	0.29	—	19,281
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	1,604	1,604	0.20	0.02	—	1,616

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	1,041	1,041	0.13	0.02	—	1,049
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	135	135	0.02	< 0.005	—	136
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	122	122	0.02	< 0.005	—	123
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	5.75	5.75	< 0.005	< 0.005	—	5.80
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	20.7	20.7	< 0.005	< 0.005	—	20.9
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	239	239	0.03	< 0.005	—	241
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,168	3,168	0.40	0.05	—	3,192

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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

Unrefrig Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Manufacturing	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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

City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Manufacturing	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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

Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Manufacturing	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
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	63.1	63.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.64	7.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	22.8	21.0	1.08	128	0.01	0.23	—	0.23	0.17	—	0.17	—	526	526	0.02	< 0.005	—	528
Total	93.5	91.7	1.08	128	0.01	0.23	—	0.23	0.17	—	0.17	—	526	526	0.02	< 0.005	—	528
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	63.1	63.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.64	7.64	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	70.7	70.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.5	11.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.39	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.85	2.63	0.13	16.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	59.6	59.6	< 0.005	< 0.005	—	59.8
Total	15.8	15.5	0.13	16.0	< 0.005	0.03	—	0.03	0.02	—	0.02	—	59.6	59.6	< 0.005	< 0.005	—	59.8

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	344	925	1,269	35.4	0.85	—	2,409
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	844	2,143	2,987	86.8	2.09	—	5,781
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	8.42	21.4	29.8	0.87	0.02	—	57.6
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.71	1.80	2.51	0.07	< 0.005	—	4.86
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.91	7.38	10.3	0.30	0.01	—	19.9
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	93.8	238	332	9.65	0.23	—	642
Total	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.20	—	8,915

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	344	925	1,269	35.4	0.85	—	2,409
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	844	2,143	2,987	86.8	2.09	—	5,781
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	8.42	21.4	29.8	0.87	0.02	—	57.6
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.71	1.80	2.51	0.07	< 0.005	—	4.86
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.91	7.38	10.3	0.30	0.01	—	19.9
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	93.8	238	332	9.65	0.23	—	642
Total	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.20	—	8,915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	57.0	153	210	5.86	0.14	—	399

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	140	355	495	14.4	0.35	—	957
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	1.39	3.54	4.93	0.14	< 0.005	—	9.54
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.12	0.30	0.42	0.01	< 0.005	—	0.80
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.48	1.22	1.70	0.05	< 0.005	—	3.30
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	15.5	39.4	55.0	1.60	0.04	—	106
Total	—	—	—	—	—	—	—	—	—	—	—	214	552	767	22.0	0.53	—	1,476

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	519	0.00	519	51.9	0.00	—	1,817
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	965	0.00	965	96.5	0.00	—	3,377
City Park	—	—	—	—	—	—	—	—	—	—	—	4.29	0.00	4.29	0.43	0.00	—	15.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20.4	0.00	—	713
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.83	0.00	2.83	0.28	0.00	—	9.90
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	31.0	0.00	31.0	3.10	0.00	—	109
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14.1	0.00	—	495
Total	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	519	0.00	519	51.9	0.00	—	1,817

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	965	0.00	965	96.5	0.00	—	3,377
City Park	—	—	—	—	—	—	—	—	—	—	—	4.29	0.00	4.29	0.43	0.00	—	15.0
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20.4	0.00	—	713
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.83	0.00	2.83	0.28	0.00	—	9.90
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	31.0	0.00	31.0	3.10	0.00	—	109
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14.1	0.00	—	495
Total	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	86.0	0.00	86.0	8.59	0.00	—	301
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16.0	0.00	—	559
City Park	—	—	—	—	—	—	—	—	—	—	—	0.71	0.00	0.71	0.07	0.00	—	2.48

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	33.7	0.00	33.7	3.37	0.00	—	118
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.47	0.00	0.47	0.05	0.00	—	1.64
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.14	0.00	5.14	0.51	0.00	—	18.0
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	23.4	0.00	23.4	2.34	0.00	—	81.9
Total	—	—	—	—	—	—	—	—	—	—	—	309	0.00	309	30.9	0.00	—	1,082

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.6	72.6
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.81	2.81
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19.8	19.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95.3	95.3
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	72.6	72.6
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.81	2.81
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	19.8	19.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95.3	95.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12.0	12.0

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.28	3.28
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.8	15.8

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.98	1.80	5.05	4.60	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Total	1.98	1.80	5.05	4.60	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.98	1.80	5.05	4.60	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Total	1.98	1.80	5.05	4.60	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.05	0.05	0.13	0.12	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	20.9	20.9	< 0.005	< 0.005	0.00	21.0
Total	0.05	0.05	0.13	0.12	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	20.9	20.9	< 0.005	< 0.005	0.00	21.0

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	376	342	287	130,863	21,680	19,709	16,574	7,544,278
Unrefrigerated Warehouse-No Rail	553	187	168	162,533	31,926	10,789	9,688	9,391,155
Unrefrigerated Warehouse-No Rail	168	136	135	57,986	9,716	7,846	7,773	3,347,531
City Park	72.0	212	239	42,285	1,180	3,474	3,922	693,278

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	6,607	4,274	3,936	2,150,647	107,687	69,668	64,150	35,053,111
Hospital	753	743	740	273,659	12,487	12,324	12,273	4,538,103
Strip Mall	272	272	269	99,126	1,739	1,737	1,722	633,667
Fast Food Restaurant with Drive Thru	2,241	2,243	2,241	818,046	15,500	15,511	15,500	5,658,065
Manufacturing	122	117	109	43,625	7,057	6,799	6,334	2,524,562

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	4,408,500	1,469,500	136,260

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	13,560,117	261	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	5,866,677	261	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	2,933,338	261	0.0330	0.0040	0.00
City Park	0.00	261	0.0330	0.0040	0.00
Parking Lot	1,141,895	261	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00
User Defined Industrial	0.00	261	0.0330	0.0040	0.00
Hospital	1,033,091	261	0.0330	0.0040	0.00
Strip Mall	48,642	261	0.0330	0.0040	0.00
Fast Food Restaurant with Drive Thru	175,333	261	0.0330	0.0040	0.00
Manufacturing	2,019,136	261	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	179,681,250	13,502,286
Unrefrigerated Warehouse-No Rail	293,733,750	0.00
Unrefrigerated Warehouse-No Rail	146,866,875	0.00
City Park	0.00	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

Hospital	4,391,819	0.00
Strip Mall	370,363	0.00
Fast Food Restaurant with Drive Thru	1,517,669	0.00
Manufacturing	48,955,625	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	963	—
Unrefrigerated Warehouse-No Rail	1,194	—
Unrefrigerated Warehouse-No Rail	597	—
City Park	7.95	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—
User Defined Industrial	0.00	—
Hospital	378	—
Strip Mall	5.25	—
Fast Food Restaurant with Drive Thru	57.6	—
Manufacturing	263	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0

City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Hospital	Chillers	R-134a	1,430	< 0.005	2.00	2.00	23.0
Hospital	Household refrigerators and/or freezers	R-134a	1,430	< 0.005	0.60	0.00	1.00
Hospital	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Hospital	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Strip Mall	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	User Defined	750	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Manufacturing	Other commercial A/C and heat pumps	User Defined	750	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73
Fire Pump	Diesel	1.00	1.00	50.0	220	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	19.8	annual days of extreme heat
Extreme Precipitation	3.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.78	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77.1
AQ-PM	93.4
AQ-DPM	57.1
Drinking Water	100.0
Lead Risk Housing	17.5
Pesticides	84.9
Toxic Releases	67.6
Traffic	18.1
Effect Indicators	—
CleanUp Sites	80.3
Groundwater	98.1
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	87.0
Solid Waste	98.9
Sensitive Population	—
Asthma	16.5
Cardio-vascular	29.1
Low Birth Weights	49.0
Socioeconomic Factor Indicators	—
Education	52.9
Housing	59.3
Linguistic	68.9
Poverty	35.4
Unemployment	36.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719

Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	55.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction schedule provided by Project team.
Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113 limits
Operations: Vehicle Data	Trip gen based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

16285 Eucalyptus BP Ops Ph1 Mitigated Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Ops Ph1 Mitigated
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.6
Precipitation (days)	19
Location	33.99285819539165, -117.62442182650997
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.35

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	341	1000sqft	7.8	340,700	340,901	—	—	—
Unrefrigerated Warehouse-No Rail	553	1000sqft	13	553,300	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	326	1000sqft	7.5	326,200	0.00	—	—	HCFC Sort
City Park	34	Acre	34	0.00	0.00	0.00	—	—
Parking Lot	1,367	Space	12	546,800	0.00	—	—	—
Other Non-Asphalt Surfaces	7.8	Acre	7.8	0.00	0.00	—	—	—
User Defined Industrial	1,220	User Defined Unit	0.00	0.00	0.00	—	—	PC

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	62	55	79	253	1.0	1.5	58	59	1.4	15	16	1,216	116,300	117,515	130	14	303	125,083
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	48	41	82	150	0.98	1.4	58	59	1.3	15	16	1,216	113,457	114,673	130	14	39	121,993
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	54	48	72	190	0.87	1.2	51	52	1.1	13	14	1,216	101,557	102,772	129	12	136	109,739
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.9	8.8	13	35	0.16	0.22	9.3	9.5	0.21	2.4	2.6	201	16,814	17,015	21	2.0	22	18,169

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	18	12	76	175	1.0	1.3	58	59	1.2	15	16	—	108,099	108,099	6.0	12	271	112,123
Area	43	42	0.65	77	< 0.005	0.14	—	0.14	0.10	—	0.10	—	316	316	0.01	< 0.005	—	317
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,666	5,666	0.54	0.07	—	5,699
Water	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	56	1.3	—	4,180
Waste	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67	0.00	—	2,361
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32
Stationary	0.79	0.72	2.0	1.8	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Total	62	55	79	253	1.0	1.5	58	59	1.4	15	16	1,216	116,300	117,515	130	14	303	125,083
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	18	11	80	148	0.98	1.3	58	59	1.2	15	16	—	105,573	105,573	6.1	12	7.0	109,351
Area	29	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,666	5,666	0.54	0.07	—	5,699
Water	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	56	1.3	—	4,180
Waste	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67	0.00	—	2,361
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32
Stationary	0.79	0.72	2.0	1.8	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Total	48	41	82	150	0.98	1.4	58	59	1.3	15	16	1,216	113,457	114,673	130	14	39	121,993
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	16	10	72	137	0.87	1.1	51	52	1.1	13	14	—	93,774	93,774	5.3	11	104	97,200

Area	39	38	0.44	53	< 0.005	0.09	—	0.09	0.07	—	0.07	—	216	216	0.01	< 0.005	—	217
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	5,666	5,666	0.54	0.07	—	5,699
Water	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	56	1.3	—	4,180
Waste	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67	0.00	—	2,361
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32
Stationary	0.11	0.10	0.28	0.25	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	51	51	< 0.005	< 0.005	0.00	51
Total	54	48	72	190	0.87	1.2	51	52	1.1	13	14	1,216	101,557	102,772	129	12	136	109,739
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.8	1.8	13	25	0.16	0.20	9.3	9.5	0.19	2.4	2.6	—	15,525	15,525	0.88	1.8	17	16,093
Area	7.1	6.9	0.08	9.6	< 0.005	0.02	—	0.02	0.01	—	0.01	—	36	36	< 0.005	< 0.005	—	36
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	938	938	0.09	0.01	—	944
Water	—	—	—	—	—	—	—	—	—	—	—	90	306	396	9.2	0.22	—	692
Waste	—	—	—	—	—	—	—	—	—	—	—	112	0.00	112	11	0.00	—	391
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	5.3
Stationary	0.02	0.02	0.05	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	8.4	8.4	< 0.005	< 0.005	0.00	8.4
Total	9.9	8.8	13	35	0.16	0.22	9.3	9.5	0.21	2.4	2.6	201	16,814	17,015	21	2.0	22	18,169

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industria Park	2.2	0.46	23	13	0.23	0.38	8.4	8.7	0.36	2.2	2.6	—	25,243	25,243	1.7	3.8	62	26,477
Unrefrigerated Warehouse-No Rail	4.4	0.92	47	26	0.46	0.76	17	17	0.72	4.5	5.2	—	50,562	50,562	3.4	7.6	123	53,035
City Park	0.39	0.34	0.39	4.0	0.01	0.01	1.0	1.0	0.01	0.26	0.26	—	1,138	1,138	0.04	0.05	3.2	1,157
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	11	10	5.9	131	0.31	0.12	32	32	0.11	8.0	8.1	—	31,155	31,155	0.90	0.65	83	31,455
Total	18	12	76	175	1.0	1.3	58	59	1.2	15	16	—	108,099	108,099	6.0	12	271	112,123
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	2.2	0.45	24	13	0.23	0.38	8.4	8.7	0.36	2.2	2.6	—	25,246	25,246	1.7	3.8	1.6	26,420
Unrefrigerated Warehouse-No Rail	4.4	0.90	49	26	0.46	0.76	17	17	0.73	4.5	5.2	—	50,569	50,569	3.4	7.6	3.2	52,922
City Park	0.37	0.32	0.42	3.3	0.01	0.01	1.0	1.0	0.01	0.26	0.26	—	1,067	1,067	0.04	0.05	0.08	1,083
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00

User Defined Industrial	11	9.6	6.6	106	0.28	0.12	32	32	0.11	8.0	8.1	—	28,691	28,691	0.93	0.70	2.1	28,926
Total	18	11	80	148	0.98	1.3	58	59	1.2	15	16	—	105,573	105,573	6.1	12	7.0	109,351
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.39	0.08	4.3	2.3	0.04	0.07	1.4	1.5	0.06	0.39	0.45	—	3,985	3,985	0.27	0.60	4.2	4,174
Unrefrigerated Warehouse-No Rail	0.67	0.14	7.6	4.0	0.07	0.12	2.5	2.7	0.11	0.68	0.80	—	7,053	7,053	0.47	1.1	7.4	7,389
City Park	0.03	0.03	0.04	0.30	< 0.005	< 0.005	0.09	0.09	< 0.005	0.02	0.02	—	86	86	< 0.005	< 0.005	0.11	87
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	1.8	1.6	1.1	18	0.05	0.02	5.2	5.2	0.02	1.3	1.3	—	4,401	4,401	0.14	0.11	5.4	4,443
Total	2.8	1.8	13	25	0.16	0.20	9.3	9.5	0.19	2.4	2.6	—	15,525	15,525	0.88	1.8	17	16,093

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	3,102	3,102	0.30	0.04	—	3,120
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,119	2,119	0.20	0.02	—	2,131
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	445	445	0.04	0.01	—	448
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,666	5,666	0.54	0.07	—	5,699
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	3,102	3,102	0.30	0.04	—	3,120
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	2,119	2,119	0.20	0.02	—	2,131
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	445	445	0.04	0.01	—	448
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	5,666	5,666	0.54	0.07	—	5,699
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	514	514	0.05	0.01	—	517
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	351	351	0.03	< 0.005	—	353
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	74	74	0.01	< 0.005	—	74
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	938	938	0.09	0.01	—	944

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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

Unrefrig Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industria Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	26	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.2	3.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	14	13	0.65	77	< 0.005	0.14	—	0.14	0.10	—	0.10	—	316	316	0.01	< 0.005	—	317
Total	43	42	0.65	77	< 0.005	0.14	—	0.14	0.10	—	0.10	—	316	316	0.01	< 0.005	—	317
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	26	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	3.2	3.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	29	29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.8	4.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.58	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.7	1.6	0.08	9.6	< 0.005	0.02	—	0.02	0.01	—	0.01	—	36	36	< 0.005	< 0.005	—	36
Total	7.1	6.9	0.08	9.6	< 0.005	0.02	—	0.02	0.01	—	0.01	—	36	36	< 0.005	< 0.005	—	36

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	151	536	687	16	0.37	—	1,187
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	390	1,313	1,703	40	0.96	—	2,993
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	56	1.3	—	4,180
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	151	536	687	16	0.37	—	1,187
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	390	1,313	1,703	40	0.96	—	2,993
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	541	1,849	2,390	56	1.3	—	4,180
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	25	89	114	2.6	0.06	—	197
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	65	217	282	6.6	0.16	—	495
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	90	306	396	9.2	0.22	—	692

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	228	0.00	228	23	0.00	—	797
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	446	0.00	446	45	0.00	—	1,559
City Park	—	—	—	—	—	—	—	—	—	—	—	1.6	0.00	1.6	0.16	0.00	—	5.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67	0.00	—	2,361
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	228	0.00	228	23	0.00	—	797
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	446	0.00	446	45	0.00	—	1,559
City Park	—	—	—	—	—	—	—	—	—	—	—	1.6	0.00	1.6	0.16	0.00	—	5.5

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	675	0.00	675	67	0.00	—	2,361
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	38	0.00	38	3.8	0.00	—	132
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	74	0.00	74	7.4	0.00	—	258
City Park	—	—	—	—	—	—	—	—	—	—	—	0.26	0.00	0.26	0.03	0.00	—	0.91
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	112	0.00	112	11	0.00	—	391

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	32	32
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	5.3
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.3	5.3

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.79	0.72	2.0	1.8	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Total	0.79	0.72	2.0	1.8	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.79	0.72	2.0	1.8	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Total	0.79	0.72	2.0	1.8	< 0.005	0.11	0.00	0.11	0.11	0.00	0.11	0.00	369	369	0.01	< 0.005	0.00	371
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Fire Pump	0.02	0.02	0.05	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	8.4	8.4	< 0.005	< 0.005	0.00	8.4
Total	0.02	0.02	0.05	0.05	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	8.4	8.4	< 0.005	< 0.005	0.00	8.4

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	164	149	125	57,026	9,444	8,580	7,226	3,286,401
Unrefrigerated Warehouse-No Rail	240	81	72	70,626	13,880	4,701	4,189	4,082,204
Unrefrigerated Warehouse-No Rail	86	70	69	29,681	4,992	4,047	3,990	1,720,590
City Park	26	77	87	15,340	426	1,265	1,428	251,507
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	2,767	2,012	1,863	923,576	45,373	32,989	30,548	15,142,326

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Industrial Park	Wood Fireplaces	0	0
Industrial Park	Gas Fireplaces	0	0
Industrial Park	Propane Fireplaces	0	0
Industrial Park	Electric Fireplaces	0	0
Industrial Park	No Fireplaces	0	0
Industrial Park	Conventional Wood Stoves	0	0
Industrial Park	Catalytic Wood Stoves	0	0
Industrial Park	Non-Catalytic Wood Stoves	0	0
Industrial Park	Pellet Wood Stoves	0	0

Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0
City Park	Wood Fireplaces	0	0
City Park	Gas Fireplaces	0	0
City Park	Propane Fireplaces	0	0
City Park	Electric Fireplaces	0	0
City Park	No Fireplaces	0	0
City Park	Conventional Wood Stoves	0	0
City Park	Catalytic Wood Stoves	0	0
City Park	Non-Catalytic Wood Stoves	0	0
City Park	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0

Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0
Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0
Other Non-Asphalt Surfaces	Electric Fireplaces	0	0
Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0
User Defined Industrial	Wood Fireplaces	0	0
User Defined Industrial	Gas Fireplaces	0	0
User Defined Industrial	Propane Fireplaces	0	0
User Defined Industrial	Electric Fireplaces	0	0
User Defined Industrial	No Fireplaces	0	0
User Defined Industrial	Conventional Wood Stoves	0	0
User Defined Industrial	Catalytic Wood Stoves	0	0
User Defined Industrial	Non-Catalytic Wood Stoves	0	0
User Defined Industrial	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
undefined	0.00	0.00	1,830,300	610,100	52,437

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	3,270,222	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	1,405,541	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	828,642	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Parking Lot	469,465	346	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	78,786,875	5,474,571

Unrefrigerated Warehouse-No Rail	127,950,625	0.00
Unrefrigerated Warehouse-No Rail	75,433,750	0.00
City Park	0.00	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	422	0.00
Unrefrigerated Warehouse-No Rail	520	0.00
Unrefrigerated Warehouse-No Rail	307	0.00
City Park	2.9	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.0	4.0	18
City Park	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.0	4.0	18
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50	220	0.73
Fire Pump	Diesel	1.00	1.00	50	220	0.73

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20	annual days of extreme heat
Extreme Precipitation	3.1	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77
AQ-PM	93
AQ-DPM	57
Drinking Water	100
Lead Risk Housing	17
Pesticides	85
Toxic Releases	68
Traffic	18
Effect Indicators	—
CleanUp Sites	80
Groundwater	98
Haz Waste Facilities/Generators	87
Impaired Water Bodies	87
Solid Waste	99
Sensitive Population	—
Asthma	17
Cardio-vascular	29
Low Birth Weights	49
Socioeconomic Factor Indicators	—
Education	53
Housing	59
Linguistic	69
Poverty	35
Unemployment	36

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—

Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7

English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72
Healthy Places Index Score for Project Location (b)	55
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Construction: Construction Phases	Construction schedule provided by Project team.
Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113 limits
Operations: Vehicle Data	Trip gen based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas. Project will install solar to offset 45% of the industrial electrical demand.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

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7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Ops Ph2 Mitigated
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.6
Precipitation (days)	19
Location	33.99285819539165, -117.62442182650997
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.35

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	614	1000sqft	14	614,400	682,838	—	—	—
Unrefrigerated Warehouse-No Rail	1,107	1000sqft	25	1,106,600	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	587	1000sqft	13	587,200	0.00	—	—	HCFC Sort
City Park	72	Acre	72	0.00	0.00	0.00	—	—
Parking Lot	2,638	Space	24	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	20	Acre	20	0.00	0.00	—	—	—
User Defined Industrial	2,308	User Defined Unit	0.00	0.00	0.00	—	—	PC
Hospital	35	1000sqft	0.80	35,000	0.00	—	—	—
Strip Mall	5.0	1000sqft	0.11	5,000	0.00	—	—	—
Fast Food Restaurant with Drive Thru	5.0	1000sqft	0.11	5,000	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	120	106	151	500	2.1	2.9	128	131	2.7	33	36	2,544	238,106	240,650	270	26	578	255,744
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	100	88	157	339	2.0	2.7	128	131	2.6	33	36	2,544	231,691	234,235	270	26	74	248,865
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	107	96	139	387	1.8	2.3	115	117	2.2	30	32	2,544	209,039	211,583	269	23	260	225,546
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	20	17	25	71	0.33	0.43	21	21	0.40	5.4	5.8	421	34,609	35,030	44	3.9	43	37,342

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	43	31	146	394	2.1	2.5	128	131	2.4	33	36	—	221,678	221,678	11	23	517	229,442
Area	75	73	0.86	102	0.01	0.18	—	0.18	0.14	—	0.14	—	421	421	0.02	< 0.005	—	422
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	11,726	11,726	1.1	0.14	—	11,795
Water	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.6	—	8,002
Waste	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	60
Stationary	1.6	1.4	4.0	3.7	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Total	120	106	151	500	2.1	2.9	128	131	2.7	33	36	2,544	238,106	240,650	270	26	578	255,744
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	42	30	153	335	2.0	2.5	128	131	2.4	33	36	—	215,684	215,684	12	23	13	222,986
Area	57	57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	11,726	11,726	1.1	0.14	—	11,795
Water	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.6	—	8,002
Waste	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	60
Stationary	1.6	1.4	4.0	3.7	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741

Total	100	88	157	339	2.0	2.7	128	131	2.6	33	36	2,544	231,691	234,235	270	26	74	248,865
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	38	27	137	316	1.8	2.2	115	117	2.1	30	32	—	193,381	193,381	10	21	200	200,017
Area	69	68	0.59	70	< 0.005	0.12	—	0.12	0.09	—	0.09	—	288	288	0.01	< 0.005	—	289
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	11,726	11,726	1.1	0.14	—	11,795
Water	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.6	—	8,002
Waste	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	60
Stationary	0.22	0.20	0.55	0.50	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	0.00	101	101	< 0.005	< 0.005	0.00	102
Total	107	96	139	387	1.8	2.3	115	117	2.2	30	32	2,544	209,039	211,583	269	23	260	225,546
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.9	5.0	25	58	0.33	0.40	21	21	0.38	5.4	5.8	—	32,016	32,016	1.7	3.4	33	33,115
Area	13	12	0.11	13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48	48	< 0.005	< 0.005	—	48
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,941	1,941	0.19	0.02	—	1,953
Water	—	—	—	—	—	—	—	—	—	—	—	171	586	758	18	0.42	—	1,325
Waste	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25	0.00	—	874
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.0	10.0
Stationary	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17	17	< 0.005	< 0.005	0.00	17
Total	20	17	25	71	0.33	0.43	21	21	0.40	5.4	5.8	421	34,609	35,030	44	3.9	43	37,342

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	3.7	0.78	40	22	0.40	0.67	15	16	0.64	4.1	4.7	—	44,448	44,448	2.8	6.7	102	46,610
Unrefrigerated Warehouse-No Rail	7.9	1.7	86	48	0.86	1.4	32	34	1.4	8.7	10	—	95,484	95,484	6.0	14	218	100,131
City Park	0.78	0.68	0.78	8.2	0.02	0.01	2.2	2.2	0.01	0.55	0.56	—	2,374	2,374	0.09	0.10	6.1	2,412
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	19	18	10	230	0.55	0.21	58	58	0.19	15	15	—	55,858	55,858	1.6	1.2	132	56,374
Hospital	3.2	2.8	3.2	33	0.10	0.06	8.9	8.9	0.05	2.2	2.3	—	9,760	9,760	0.36	0.41	25	9,915
Strip Mall	0.90	0.83	0.58	5.5	0.01	0.01	1.2	1.2	0.01	0.31	0.32	—	1,390	1,390	0.07	0.07	3.5	1,415
Fast Food Restaurant with Drive Thru	7.5	6.9	5.0	48	0.12	0.08	11	11	0.07	2.8	2.9	—	12,362	12,362	0.61	0.59	31	12,585
Total	43	31	146	394	2.1	2.5	128	131	2.4	33	36	—	221,678	221,678	11	23	517	229,442
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial	3.6	0.77	42	22	0.40	0.67	15	16	0.64	4.1	4.7	—	44,454	44,454	2.8	6.7	2.6	46,518
Unrefrigerated Warehouse-No Rail	7.8	1.6	90	48	0.86	1.4	32	34	1.4	8.7	10	—	95,497	95,497	6.0	14	5.7	99,933
City Park	0.74	0.64	0.84	6.7	0.02	0.01	2.2	2.2	0.01	0.55	0.56	—	2,226	2,226	0.09	0.10	0.16	2,258
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	19	17	11	185	0.51	0.21	58	58	0.19	15	15	—	51,449	51,449	1.6	1.2	3.4	51,862
Hospital	3.0	2.6	3.4	27	0.09	0.06	8.9	8.9	0.05	2.2	2.3	—	9,148	9,148	0.37	0.42	0.65	9,283
Strip Mall	0.84	0.78	0.62	4.8	0.01	0.01	1.2	1.2	0.01	0.31	0.32	—	1,305	1,305	0.07	0.07	0.09	1,328
Fast Food Restaurant with Drive Thru	7.1	6.5	5.4	41	0.11	0.08	11	11	0.07	2.8	2.9	—	11,605	11,605	0.64	0.61	0.80	11,804
Total	42	30	153	335	2.0	2.5	128	131	2.4	33	36	—	215,684	215,684	12	23	13	222,986
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	0.64	0.13	7.4	3.9	0.07	0.12	2.6	2.7	0.11	0.70	0.81	—	7,015	7,015	0.44	1.1	6.9	7,347
Unrefrigerated Warehouse-No Rail	1.2	0.25	14	7.3	0.13	0.22	4.9	5.1	0.21	1.3	1.5	—	13,272	13,272	0.83	2.0	13	13,900

City Park	0.06	0.06	0.08	0.61	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	181	181	0.01	0.01	0.21	184
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	3.1	2.8	1.9	32	0.09	0.03	9.5	9.5	0.03	2.4	2.4	—	7,868	7,868	0.25	0.19	8.6	7,940
Hospital	0.54	0.47	0.64	5.2	0.02	0.01	1.6	1.6	0.01	0.40	0.41	—	1,524	1,524	0.06	0.07	1.8	1,548
Strip Mall	0.15	0.14	0.11	0.89	< 0.005	< 0.005	0.22	0.22	< 0.005	0.06	0.06	—	218	218	0.01	0.01	0.25	222
Fast Food Restaurant with Drive Thru	1.3	1.2	0.99	7.8	0.02	0.01	2.0	2.0	0.01	0.50	0.52	—	1,940	1,940	0.11	0.10	2.2	1,975
Total	6.9	5.0	25	58	0.33	0.40	21	21	0.38	5.4	5.8	—	32,016	32,016	1.7	3.4	33	33,115

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	5,594	5,594	0.53	0.06	—	5,626

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,081	4,081	0.39	0.05	—	4,105
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	859	859	0.08	0.01	—	864
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	980	980	0.09	0.01	—	986
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	46	46	< 0.005	< 0.005	—	46
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	166	166	0.02	< 0.005	—	167
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,726	11,726	1.1	0.14	—	11,795
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	5,594	5,594	0.53	0.06	—	5,626
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	4,081	4,081	0.39	0.05	—	4,105
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	859	859	0.08	0.01	—	864
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	980	980	0.09	0.01	—	986
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	46	46	< 0.005	< 0.005	—	46
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	166	166	0.02	< 0.005	—	167
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,726	11,726	1.1	0.14	—	11,795
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	926	926	0.09	0.01	—	931
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	676	676	0.06	0.01	—	680
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	142	142	0.01	< 0.005	—	143
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Hospital	—	—	—	—	—	—	—	—	—	—	—	—	162	162	0.02	< 0.005	—	163
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	7.6	7.6	< 0.005	< 0.005	—	7.7
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	28	28	< 0.005	< 0.005	—	28
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,941	1,941	0.19	0.02	—	1,953

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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

Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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

Fast Food Restaurant with Drive Thru	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	51	51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.1	6.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	18	17	0.86	102	0.01	0.18	—	0.18	0.14	—	0.14	—	421	421	0.02	< 0.005	—	422
Total	75	73	0.86	102	0.01	0.18	—	0.18	0.14	—	0.14	—	421	421	0.02	< 0.005	—	422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	51	51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	6.1	6.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	57	57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Consumer Product	9.2	9.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.1	1.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.3	2.1	0.11	13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48	48	< 0.005	< 0.005	—	48
Total	13	12	0.11	13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	48	48	< 0.005	< 0.005	—	48

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	272	973	1,245	28	0.67	—	2,146
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	751	2,529	3,280	77	1.9	—	5,763
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	8.4	28	37	0.87	0.02	—	65
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.71	2.4	3.1	0.07	< 0.005	—	5.4
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.9	9.8	13	0.30	0.01	—	22
Total	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.6	—	8,002
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	272	973	1,245	28	0.67	—	2,146
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	751	2,529	3,280	77	1.9	—	5,763
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Hospital	—	—	—	—	—	—	—	—	—	—	—	8.4	28	37	0.87	0.02	—	65
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.71	2.4	3.1	0.07	< 0.005	—	5.4
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.9	9.8	13	0.30	0.01	—	22
Total	—	—	—	—	—	—	—	—	—	—	—	1,035	3,542	4,577	106	2.6	—	8,002
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	45	161	206	4.6	0.11	—	355
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	124	419	543	13	0.31	—	954
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	1.4	4.7	6.1	0.14	< 0.005	—	11
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.12	0.40	0.51	0.01	< 0.005	—	0.90

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.48	1.6	2.1	0.05	< 0.005	—	3.7
Total	—	—	—	—	—	—	—	—	—	—	—	171	586	758	18	0.42	—	1,325

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41	0.00	—	1,437
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	858	0.00	858	86	0.00	—	3,002
City Park	—	—	—	—	—	—	—	—	—	—	—	3.3	0.00	3.3	0.33	0.00	—	12
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20	0.00	—	713

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.8	0.00	2.8	0.28	0.00	—	9.9
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	31	0.00	31	3.1	0.00	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	411	0.00	411	41	0.00	—	1,437
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	858	0.00	858	86	0.00	—	3,002
City Park	—	—	—	—	—	—	—	—	—	—	—	3.3	0.00	3.3	0.33	0.00	—	12
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20	0.00	—	713
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.8	0.00	2.8	0.28	0.00	—	9.9

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	31	0.00	31	3.1	0.00	—	109
Total	—	—	—	—	—	—	—	—	—	—	—	1,510	0.00	1,510	151	0.00	—	5,282
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	68	0.00	68	6.8	0.00	—	238
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	142	0.00	142	14	0.00	—	497
City Park	—	—	—	—	—	—	—	—	—	—	—	0.55	0.00	0.55	0.05	0.00	—	1.9
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	34	0.00	34	3.4	0.00	—	118
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.47	0.00	0.47	0.05	0.00	—	1.6
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.1	0.00	5.1	0.51	0.00	—	18
Total	—	—	—	—	—	—	—	—	—	—	—	250	0.00	250	25	0.00	—	874

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	57	57
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.8	2.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	60
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	57	57
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.8	2.8
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	60	60
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9.5	9.5
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10.0	10.0

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.6	1.4	4.0	3.7	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Total	1.6	1.4	4.0	3.7	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	1.6	1.4	4.0	3.7	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Total	1.6	1.4	4.0	3.7	0.01	0.21	0.00	0.21	0.21	0.00	0.21	0.00	739	739	0.03	0.01	0.00	741
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17	17	< 0.005	< 0.005	0.00	17
Total	0.04	0.04	0.10	0.09	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	17	17	< 0.005	< 0.005	0.00	17

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	296	269	226	103,030	17,084	15,525	13,044	5,943,778

Unrefrigerated Warehouse-No Rail	480	163	145	141,253	27,759	9,402	8,379	8,164,409
Unrefrigerated Warehouse-No Rail	154	125	123	53,061	8,878	7,218	7,116	3,062,179
City Park	56	164	185	32,816	918	2,692	3,037	538,024
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	5,090	3,652	3,377	1,693,411	82,837	59,432	54,962	27,561,676
Hospital	753	743	740	273,659	12,487	12,324	12,273	4,538,103
Strip Mall	272	272	269	99,126	1,739	1,737	1,722	633,667
Fast Food Restaurant with Drive Thru	2,241	2,243	2,241	818,046	15,500	15,511	15,500	5,658,065

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Industrial Park	Wood Fireplaces	0	0
Industrial Park	Gas Fireplaces	0	0
Industrial Park	Propane Fireplaces	0	0
Industrial Park	Electric Fireplaces	0	0
Industrial Park	No Fireplaces	0	0
Industrial Park	Conventional Wood Stoves	0	0
Industrial Park	Catalytic Wood Stoves	0	0
Industrial Park	Non-Catalytic Wood Stoves	0	0
Industrial Park	Pellet Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0

Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0
City Park	Wood Fireplaces	0	0
City Park	Gas Fireplaces	0	0
City Park	Propane Fireplaces	0	0
City Park	Electric Fireplaces	0	0
City Park	No Fireplaces	0	0
City Park	Conventional Wood Stoves	0	0
City Park	Catalytic Wood Stoves	0	0
City Park	Non-Catalytic Wood Stoves	0	0
City Park	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0

Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0
Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0
Other Non-Asphalt Surfaces	Electric Fireplaces	0	0
Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0
User Defined Industrial	Wood Fireplaces	0	0
User Defined Industrial	Gas Fireplaces	0	0
User Defined Industrial	Propane Fireplaces	0	0
User Defined Industrial	Electric Fireplaces	0	0
User Defined Industrial	No Fireplaces	0	0
User Defined Industrial	Conventional Wood Stoves	0	0
User Defined Industrial	Catalytic Wood Stoves	0	0
User Defined Industrial	Non-Catalytic Wood Stoves	0	0
User Defined Industrial	Pellet Wood Stoves	0	0
Hospital	Wood Fireplaces	0	0
Hospital	Gas Fireplaces	0	0
Hospital	Propane Fireplaces	0	0

Hospital	Electric Fireplaces	0	0
Hospital	No Fireplaces	0	0
Hospital	Conventional Wood Stoves	0	0
Hospital	Catalytic Wood Stoves	0	0
Hospital	Non-Catalytic Wood Stoves	0	0
Hospital	Pellet Wood Stoves	0	0
Strip Mall	Wood Fireplaces	0	0
Strip Mall	Gas Fireplaces	0	0
Strip Mall	Propane Fireplaces	0	0
Strip Mall	Electric Fireplaces	0	0
Strip Mall	No Fireplaces	0	0
Strip Mall	Conventional Wood Stoves	0	0
Strip Mall	Catalytic Wood Stoves	0	0
Strip Mall	Non-Catalytic Wood Stoves	0	0
Strip Mall	Pellet Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Wood Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Gas Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Propane Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Electric Fireplaces	0	0
Fast Food Restaurant with Drive Thru	No Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Conventional Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Catalytic Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Non-Catalytic Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

undefined	0.00	0.00	3,529,800	1,176,600	113,174

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	5,897,342	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	2,811,081	346	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	1,491,656	346	0.0330	0.0040	0.00
City Park	0.00	346	0.0330	0.0040	0.00
Parking Lot	905,960	346	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	346	0.0330	0.0040	0.00
User Defined Industrial	0.00	346	0.0330	0.0040	0.00
Hospital	1,033,091	346	0.0330	0.0040	0.00
Strip Mall	48,642	346	0.0330	0.0040	0.00
Fast Food Restaurant with Drive Thru	175,333	346	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	142,080,000	10,965,780
Unrefrigerated Warehouse-No Rail	255,901,250	0.00
Unrefrigerated Warehouse-No Rail	135,790,000	0.00
City Park	0.00	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
Hospital	4,391,819	0.00
Strip Mall	370,363	0.00
Fast Food Restaurant with Drive Thru	1,517,669	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	762	0.00
Unrefrigerated Warehouse-No Rail	1,040	0.00
Unrefrigerated Warehouse-No Rail	552	0.00
City Park	6.1	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
Hospital	378	0.00
Strip Mall	5.3	0.00
Fast Food Restaurant with Drive Thru	58	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.0	4.0	18
City Park	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.0	4.0	18
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Hospital	Chillers	R-134a	1,430	< 0.005	2.0	2.0	23
Hospital	Household refrigerators and/or freezers	R-134a	1,430	< 0.005	0.60	0.00	1.00
Hospital	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Hospital	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20
Strip Mall	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.0	4.0	18
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	User Defined	750	1.8	4.0	4.0	18
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50	220	0.73
Fire Pump	Diesel	1.00	1.00	50	220	0.73
Fire Pump	Diesel	1.00	1.00	50	220	0.73
Fire Pump	Diesel	1.00	1.00	50	220	0.73

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20	annual days of extreme heat
Extreme Precipitation	3.1	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77
AQ-PM	93
AQ-DPM	57
Drinking Water	100
Lead Risk Housing	17
Pesticides	85
Toxic Releases	68
Traffic	18
Effect Indicators	—
CleanUp Sites	80
Groundwater	98
Haz Waste Facilities/Generators	87
Impaired Water Bodies	87
Solid Waste	99
Sensitive Population	—
Asthma	17
Cardio-vascular	29
Low Birth Weights	49
Socioeconomic Factor Indicators	—
Education	53
Housing	59
Linguistic	69
Poverty	35
Unemployment	36

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635
Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719

Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1
Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72
Healthy Places Index Score for Project Location (b)	55
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Construction: Construction Phases	Construction schedule provided by Project team.
Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113 limits
Operations: Vehicle Data	Trip gen based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas. Project will install solar to offset 45% of the industrial electrical demand.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

16285 Eucalyptus BP Ops Ph3 Mitigated Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	16285 Eucalyptus BP Ops Ph3 Mitigated
Operational Year	2031
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.6
Precipitation (days)	19
Location	33.99285819539165, -117.62442182650997
County	San Bernardino-South Coast
City	Ontario
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5260
EDFZ	10
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.35

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	777	1000sqft	18	777,000	840,786	—	—	—
Unrefrigerated Warehouse-No Rail	1,270	1000sqft	29	1,270,200	0.00	—	—	Warehousing

Unrefrigerated Warehouse-No Rail	635	1000sqft	15	635,100	0.00	—	—	HCFC Sort
City Park	93	Acre	93	0.00	0.00	0.00	—	—
Parking Lot	3,325	Space	30	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	22	Acre	22	0.00	0.00	—	—	—
User Defined Industrial	2,894	User Defined Unit	0.00	0.00	0.00	—	—	PC
Hospital	35	1000sqft	0.80	35,000	0.00	—	—	—
Strip Mall	5.0	1000sqft	0.11	5,000	0.00	—	—	—
Fast Food Restaurant with Drive Thru	5.0	1000sqft	0.11	5,000	0.00	—	—	—
Manufacturing	212	1000sqft	4.9	211,700	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	143	128	177	581	2.5	3.5	161	165	3.3	42	45	3,162	284,865	288,027	334	32	618	306,518
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	119	105	184	385	2.4	3.3	161	164	3.1	42	45	3,162	277,238	280,400	334	32	109	298,427

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	128	115	163	442	2.2	2.9	143	146	2.7	37	40	3,162	249,913	253,075	333	29	297	270,326
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	23	21	30	81	0.40	0.53	26	27	0.50	6.7	7.2	524	41,376	41,899	55	4.8	49	44,755

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	48	34	171	449	2.5	3.0	161	164	2.9	42	45	—	268,785	268,785	13	29	523	278,137
Area	93	92	1.1	128	0.01	0.23	—	0.23	0.17	—	0.17	—	526	526	0.02	< 0.005	—	528
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	11,294	11,294	1.4	0.17	—	11,382
Water	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.2	—	8,915
Waste	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95	95
Stationary	2.0	1.8	5.0	4.6	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Total	143	128	177	581	2.5	3.5	161	165	3.3	42	45	3,162	284,865	288,027	334	32	618	306,518
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	46	33	179	381	2.4	3.0	161	164	2.9	42	45	—	261,683	261,683	13	29	14	270,573
Area	71	71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	11,294	11,294	1.4	0.17	—	11,382
Water	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.2	—	8,915
Waste	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95	95
Stationary	2.0	1.8	5.0	4.6	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Total	119	105	184	385	2.4	3.3	161	164	3.1	42	45	3,162	277,238	280,400	334	32	109	298,427
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	41	30	162	354	2.2	2.7	143	146	2.6	37	40	—	234,795	234,795	11	26	202	242,910
Area	86	85	0.74	88	0.01	0.16	—	0.16	0.12	—	0.12	—	360	360	0.02	< 0.005	—	361
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	11,294	11,294	1.4	0.17	—	11,382
Water	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.2	—	8,915
Waste	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95	95
Stationary	0.27	0.25	0.69	0.63	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	127	127	0.01	< 0.005	0.00	127
Total	128	115	163	442	2.2	2.9	143	146	2.7	37	40	3,162	249,913	253,075	333	29	297	270,326
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.6	5.4	30	65	0.40	0.49	26	27	0.47	6.7	7.2	—	38,873	38,873	1.9	4.2	33	40,217
Area	16	16	0.13	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60	60	< 0.005	< 0.005	—	60
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	1,870	1,870	0.24	0.03	—	1,884
Water	—	—	—	—	—	—	—	—	—	—	—	214	552	767	22	0.53	—	1,476
Waste	—	—	—	—	—	—	—	—	—	—	—	309	0.00	309	31	0.00	—	1,082
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16
Stationary	0.05	0.05	0.13	0.12	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	21	21	< 0.005	< 0.005	0.00	21
Total	23	21	30	81	0.40	0.53	26	27	0.50	6.7	7.2	524	41,376	41,899	55	4.8	49	44,755

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	4.0	0.88	46	25	0.48	0.81	19	20	0.78	5.1	5.9	—	53,175	53,175	3.0	8.0	105	55,741
Unrefrigerated Warehouse-No Rail	7.6	1.7	89	48	0.92	1.6	37	38	1.5	9.9	11	—	102,283	102,283	5.7	15	202	107,220
City Park	0.91	0.80	0.90	9.8	0.03	0.02	2.8	2.8	0.02	0.71	0.72	—	2,957	2,957	0.10	0.12	6.0	3,001
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	23	21	12	277	0.70	0.24	75	75	0.22	19	19	—	70,337	70,337	1.9	1.4	130	70,932
Hospital	2.9	2.5	2.9	31	0.09	0.05	8.9	8.9	0.05	2.2	2.3	—	9,412	9,412	0.33	0.39	19	9,555
Strip Mall	0.81	0.75	0.52	5.1	0.01	0.01	1.2	1.2	0.01	0.31	0.32	—	1,340	1,340	0.07	0.06	2.7	1,364
Fast Food Restaurant with Drive Thru	6.8	6.3	4.5	44	0.12	0.07	11	11	0.06	2.8	2.9	—	11,923	11,923	0.56	0.56	24	12,129
Manufacturing	1.3	0.28	15	8.1	0.16	0.26	6.2	6.5	0.25	1.7	1.9	—	17,357	17,357	0.97	2.6	34	18,195

Total	48	34	171	449	2.5	3.0	161	164	2.9	42	45	—	268,785	268,785	13	29	523	278,137
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	3.9	0.86	48	25	0.48	0.81	19	20	0.78	5.1	5.9	—	53,183	53,183	3.0	8.0	2.7	55,647
Unrefrigerated Warehouse-No Rail	7.6	1.6	93	48	0.92	1.6	37	38	1.5	9.9	11	—	102,298	102,298	5.7	15	5.2	107,040
City Park	0.87	0.76	0.97	8.0	0.03	0.02	2.8	2.8	0.02	0.71	0.72	—	2,771	2,771	0.11	0.13	0.16	2,811
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	22	20	13	224	0.64	0.24	75	75	0.22	19	19	—	64,800	64,800	1.9	1.5	3.4	65,301
Hospital	2.7	2.4	3.1	25	0.09	0.05	8.9	8.9	0.05	2.2	2.3	—	8,821	8,821	0.33	0.40	0.50	8,949
Strip Mall	0.77	0.71	0.56	4.4	0.01	0.01	1.2	1.2	0.01	0.31	0.32	—	1,258	1,258	0.07	0.07	0.07	1,280
Fast Food Restaurant with Drive Thru	6.4	5.9	4.9	38	0.11	0.07	11	11	0.06	2.8	2.9	—	11,192	11,192	0.59	0.58	0.62	11,381
Manufacturing	1.3	0.28	16	8.1	0.16	0.26	6.2	6.5	0.25	1.7	1.9	—	17,360	17,360	0.97	2.6	0.89	18,165
Total	46	33	179	381	2.4	3.0	161	164	2.9	42	45	—	261,683	261,683	13	29	14	270,573
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industrial Park	0.69	0.15	8.5	4.3	0.08	0.14	3.3	3.4	0.14	0.89	1.0	—	8,394	8,394	0.47	1.3	7.2	8,789
Unrefrigerated Warehouse-No Rail	1.2	0.25	14	7.3	0.14	0.24	5.6	5.8	0.23	1.5	1.7	—	14,193	14,193	0.80	2.1	12	14,862
City Park	0.08	0.07	0.09	0.73	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	224	224	0.01	0.01	0.21	228
Parking Lot	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	0.00
Other Non-Asphalt Surfaces	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	0.00
User Defined Industrial	3.6	3.3	2.2	38	0.11	0.04	12	12	0.04	3.0	3.1	—	9,695	9,695	0.29	0.23	8.3	9,778
Hospital	0.50	0.43	0.57	4.8	0.02	0.01	1.6	1.6	0.01	0.40	0.41	—	1,469	1,469	0.05	0.07	1.4	1,492
Strip Mall	0.14	0.13	0.10	0.83	< 0.005	< 0.005	0.22	0.22	< 0.005	0.06	0.06	—	210	210	0.01	0.01	0.19	214
Fast Food Restaurant with Drive Thru	1.2	1.1	0.90	7.2	0.02	0.01	2.0	2.0	0.01	0.50	0.52	—	1,871	1,871	0.10	0.10	1.7	1,904
Manufacturing	0.23	0.05	2.8	1.4	0.03	0.05	1.1	1.1	0.05	0.30	0.34	—	2,817	2,817	0.16	0.42	2.4	2,950
Total	7.6	5.4	30	65	0.40	0.49	26	27	0.47	6.7	7.2	—	38,873	38,873	1.9	4.2	33	40,217

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	5,329	5,329	0.67	0.08	—	5,370
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,458	3,458	0.44	0.05	—	3,485
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	816	816	0.10	0.01	—	822
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	738	738	0.09	0.01	—	744
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	35	35	< 0.005	< 0.005	—	35
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	125	125	0.02	< 0.005	—	126
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	793	793	0.10	0.01	—	800
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,294	11,294	1.4	0.17	—	11,382

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	5,329	5,329	0.67	0.08	—	5,370
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	3,458	3,458	0.44	0.05	—	3,485
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	816	816	0.10	0.01	—	822
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	738	738	0.09	0.01	—	744
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	35	35	< 0.005	< 0.005	—	35
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	125	125	0.02	< 0.005	—	126
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	793	793	0.10	0.01	—	800
Total	—	—	—	—	—	—	—	—	—	—	—	—	11,294	11,294	1.4	0.17	—	11,382
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	882	882	0.11	0.01	—	889

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	573	573	0.07	0.01	—	577
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	135	135	0.02	< 0.005	—	136
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	122	122	0.02	< 0.005	—	123
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	5.8	5.8	< 0.005	< 0.005	—	5.8
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	21	21	< 0.005	< 0.005	—	21
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	131	131	0.02	< 0.005	—	132
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,870	1,870	0.24	0.03	—	1,884

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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

Unrefrig Warehouse-No Rail	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
City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Manufacturing	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
Total	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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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

City Park	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
Parking Lot	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
Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Manufacturing	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
Total	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	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
Unrefrigerated Warehouse-No Rail	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
City Park	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
Parking Lot	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

Other Non-Asphalt Surfaces	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
User Defined Industrial	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
Hospital	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
Strip Mall	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
Fast Food Restaurant with Drive Thru	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
Manufacturing	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
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	63	63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.6	7.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landsca Equipment	23	21	1.1	128	0.01	0.23	—	0.23	0.17	—	0.17	—	526	526	0.02	< 0.005	—	528
Total	93	92	1.1	128	0.01	0.23	—	0.23	0.17	—	0.17	—	526	526	0.02	< 0.005	—	528
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	63	63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	7.6	7.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	71	71	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.4	1.4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.8	2.6	0.13	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60	60	< 0.005	< 0.005	—	60
Total	16	16	0.13	16	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60	60	< 0.005	< 0.005	—	60

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	344	925	1,269	35	0.85	—	2,409
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	844	2,143	2,987	87	2.1	—	5,781
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	8.4	21	30	0.87	0.02	—	58
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.71	1.8	2.5	0.07	< 0.005	—	4.9
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.9	7.4	10	0.30	0.01	—	20
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	94	238	332	9.6	0.23	—	642
Total	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.2	—	8,915

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	344	925	1,269	35	0.85	—	2,409
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	844	2,143	2,987	87	2.1	—	5,781
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	8.4	21	30	0.87	0.02	—	58
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.71	1.8	2.5	0.07	< 0.005	—	4.9
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.9	7.4	10	0.30	0.01	—	20
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	94	238	332	9.6	0.23	—	642
Total	—	—	—	—	—	—	—	—	—	—	—	1,294	3,337	4,631	133	3.2	—	8,915
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	57	153	210	5.9	0.14	—	399

Unrefrig Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	140	355	495	14	0.35	—	957
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	1.4	3.5	4.9	0.14	< 0.005	—	9.5
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.12	0.30	0.42	0.01	< 0.005	—	0.80
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.48	1.2	1.7	0.05	< 0.005	—	3.3
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	16	39	55	1.6	0.04	—	106
Total	—	—	—	—	—	—	—	—	—	—	—	214	552	767	22	0.53	—	1,476

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Industria Park	—	—	—	—	—	—	—	—	—	—	—	519	0.00	519	52	0.00	—	1,817
Unrefrig erated Wareho use-No Rail	—	—	—	—	—	—	—	—	—	—	—	965	0.00	965	96	0.00	—	3,377
City Park	—	—	—	—	—	—	—	—	—	—	—	4.3	0.00	4.3	0.43	0.00	—	15
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20	0.00	—	713
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.8	0.00	2.8	0.28	0.00	—	9.9
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	31	0.00	31	3.1	0.00	—	109
Manufac turing	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14	0.00	—	495
Total	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	519	0.00	519	52	0.00	—	1,817

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	965	0.00	965	96	0.00	—	3,377
City Park	—	—	—	—	—	—	—	—	—	—	—	4.3	0.00	4.3	0.43	0.00	—	15
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	204	0.00	204	20	0.00	—	713
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	2.8	0.00	2.8	0.28	0.00	—	9.9
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	31	0.00	31	3.1	0.00	—	109
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	141	0.00	141	14	0.00	—	495
Total	—	—	—	—	—	—	—	—	—	—	—	1,868	0.00	1,868	187	0.00	—	6,535
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	86	0.00	86	8.6	0.00	—	301
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	160	0.00	160	16	0.00	—	559
City Park	—	—	—	—	—	—	—	—	—	—	—	0.71	0.00	0.71	0.07	0.00	—	2.5

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	34	0.00	34	3.4	0.00	—	118
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	0.47	0.00	0.47	0.05	0.00	—	1.6
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	5.1	0.00	5.1	0.51	0.00	—	18
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	23	0.00	23	2.3	0.00	—	82
Total	—	—	—	—	—	—	—	—	—	—	—	309	0.00	309	31	0.00	—	1,082

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	73	73
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.8	2.8
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	20
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95	95
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	73	73
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.8	2.8
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	20	20
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	95	95
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12	12

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Hospital	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.47	0.47
Manufacturing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.3	3.3
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	16	16

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	2.0	1.8	5.0	4.6	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Total	2.0	1.8	5.0	4.6	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	2.0	1.8	5.0	4.6	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Total	2.0	1.8	5.0	4.6	0.01	0.27	0.00	0.27	0.27	0.00	0.27	0.00	923	923	0.04	0.01	0.00	927
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Fire Pump	0.05	0.05	0.13	0.12	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	21	21	< 0.005	< 0.005	0.00	21
Total	0.05	0.05	0.13	0.12	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	0.00	21	21	< 0.005	< 0.005	0.00	21

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Industrial Park	376	342	287	130,863	21,680	19,709	16,574	7,544,278
Unrefrigerated Warehouse-No Rail	553	187	168	162,533	31,926	10,789	9,688	9,391,155
Unrefrigerated Warehouse-No Rail	168	136	135	57,986	9,716	7,846	7,773	3,347,531
City Park	72	212	239	42,285	1,180	3,474	3,922	693,278

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	6,607	4,274	3,936	2,150,647	107,687	69,668	64,150	35,053,111
Hospital	753	743	740	273,659	12,487	12,324	12,273	4,538,103
Strip Mall	272	272	269	99,126	1,739	1,737	1,722	633,667
Fast Food Restaurant with Drive Thru	2,241	2,243	2,241	818,046	15,500	15,511	15,500	5,658,065
Manufacturing	122	117	109	43,625	7,057	6,799	6,334	2,524,562

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Industrial Park	Wood Fireplaces	0	0
Industrial Park	Gas Fireplaces	0	0
Industrial Park	Propane Fireplaces	0	0
Industrial Park	Electric Fireplaces	0	0
Industrial Park	No Fireplaces	0	0
Industrial Park	Conventional Wood Stoves	0	0
Industrial Park	Catalytic Wood Stoves	0	0
Industrial Park	Non-Catalytic Wood Stoves	0	0
Industrial Park	Pellet Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0

Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Wood Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Gas Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Propane Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Electric Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	No Fireplaces	0	0
Unrefrigerated Warehouse-No Rail	Conventional Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Non-Catalytic Wood Stoves	0	0
Unrefrigerated Warehouse-No Rail	Pellet Wood Stoves	0	0
City Park	Wood Fireplaces	0	0
City Park	Gas Fireplaces	0	0
City Park	Propane Fireplaces	0	0
City Park	Electric Fireplaces	0	0
City Park	No Fireplaces	0	0
City Park	Conventional Wood Stoves	0	0
City Park	Catalytic Wood Stoves	0	0
City Park	Non-Catalytic Wood Stoves	0	0
City Park	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0

Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0
Other Non-Asphalt Surfaces	Wood Fireplaces	0	0
Other Non-Asphalt Surfaces	Gas Fireplaces	0	0
Other Non-Asphalt Surfaces	Propane Fireplaces	0	0
Other Non-Asphalt Surfaces	Electric Fireplaces	0	0
Other Non-Asphalt Surfaces	No Fireplaces	0	0
Other Non-Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Non-Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Non-Asphalt Surfaces	Pellet Wood Stoves	0	0
User Defined Industrial	Wood Fireplaces	0	0
User Defined Industrial	Gas Fireplaces	0	0
User Defined Industrial	Propane Fireplaces	0	0
User Defined Industrial	Electric Fireplaces	0	0
User Defined Industrial	No Fireplaces	0	0
User Defined Industrial	Conventional Wood Stoves	0	0
User Defined Industrial	Catalytic Wood Stoves	0	0
User Defined Industrial	Non-Catalytic Wood Stoves	0	0
User Defined Industrial	Pellet Wood Stoves	0	0
Hospital	Wood Fireplaces	0	0
Hospital	Gas Fireplaces	0	0
Hospital	Propane Fireplaces	0	0
Hospital	Electric Fireplaces	0	0
Hospital	No Fireplaces	0	0
Hospital	Conventional Wood Stoves	0	0
Hospital	Catalytic Wood Stoves	0	0

Hospital	Non-Catalytic Wood Stoves	0	0
Hospital	Pellet Wood Stoves	0	0
Strip Mall	Wood Fireplaces	0	0
Strip Mall	Gas Fireplaces	0	0
Strip Mall	Propane Fireplaces	0	0
Strip Mall	Electric Fireplaces	0	0
Strip Mall	No Fireplaces	0	0
Strip Mall	Conventional Wood Stoves	0	0
Strip Mall	Catalytic Wood Stoves	0	0
Strip Mall	Non-Catalytic Wood Stoves	0	0
Strip Mall	Pellet Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Wood Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Gas Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Propane Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Electric Fireplaces	0	0
Fast Food Restaurant with Drive Thru	No Fireplaces	0	0
Fast Food Restaurant with Drive Thru	Conventional Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Catalytic Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Non-Catalytic Wood Stoves	0	0
Fast Food Restaurant with Drive Thru	Pellet Wood Stoves	0	0
Manufacturing	Wood Fireplaces	0	0
Manufacturing	Gas Fireplaces	0	0
Manufacturing	Propane Fireplaces	0	0
Manufacturing	Electric Fireplaces	0	0
Manufacturing	No Fireplaces	0	0
Manufacturing	Conventional Wood Stoves	0	0
Manufacturing	Catalytic Wood Stoves	0	0
Manufacturing	Non-Catalytic Wood Stoves	0	0

Manufacturing	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

—	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
undefined	0.00	0.00	4,408,500	1,469,500	136,260

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Industrial Park	7,458,064	261	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	3,226,672	261	0.0330	0.0040	0.00
Unrefrigerated Warehouse-No Rail	1,613,336	261	0.0330	0.0040	0.00
City Park	0.00	261	0.0330	0.0040	0.00
Parking Lot	1,141,895	261	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	261	0.0330	0.0040	0.00
User Defined Industrial	0.00	261	0.0330	0.0040	0.00
Hospital	1,033,091	261	0.0330	0.0040	0.00
Strip Mall	48,642	261	0.0330	0.0040	0.00

Fast Food Restaurant with Drive Thru	175,333	261	0.0330	0.0040	0.00
Manufacturing	1,110,525	261	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Industrial Park	179,681,250	13,502,286
Unrefrigerated Warehouse-No Rail	293,733,750	0.00
Unrefrigerated Warehouse-No Rail	146,866,875	0.00
City Park	0.00	0.00
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
Hospital	4,391,819	0.00
Strip Mall	370,363	0.00
Fast Food Restaurant with Drive Thru	1,517,669	0.00
Manufacturing	48,955,625	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Industrial Park	963	0.00
Unrefrigerated Warehouse-No Rail	1,194	0.00
Unrefrigerated Warehouse-No Rail	597	0.00
City Park	8.0	0.00

Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00
Hospital	378	0.00
Strip Mall	5.3	0.00
Fast Food Restaurant with Drive Thru	58	0.00
Manufacturing	263	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Industrial Park	Other commercial A/C and heat pumps	User Defined	750	0.30	4.0	4.0	18
City Park	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.0	4.0	18
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Hospital	Chillers	R-134a	1,430	< 0.005	2.0	2.0	23
Hospital	Household refrigerators and/or freezers	R-134a	1,430	< 0.005	0.60	0.00	1.00
Hospital	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Hospital	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20
Strip Mall	Other commercial A/C and heat pumps	User Defined	750	< 0.005	4.0	4.0	18
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	User Defined	750	1.8	4.0	4.0	18
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.5	7.5	20
Manufacturing	Other commercial A/C and heat pumps	User Defined	750	0.30	4.0	4.0	18

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Fire Pump	Diesel	1.00	1.00	50	220	0.73
Fire Pump	Diesel	1.00	1.00	50	220	0.73
Fire Pump	Diesel	1.00	1.00	50	220	0.73
Fire Pump	Diesel	1.00	1.00	50	220	0.73
Fire Pump	Diesel	1.00	1.00	50	220	0.73

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20	annual days of extreme heat
Extreme Precipitation	3.1	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	6.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	77
AQ-PM	93
AQ-DPM	57
Drinking Water	100
Lead Risk Housing	17
Pesticides	85
Toxic Releases	68
Traffic	18
Effect Indicators	—
CleanUp Sites	80
Groundwater	98
Haz Waste Facilities/Generators	87
Impaired Water Bodies	87
Solid Waste	99

Sensitive Population	—
Asthma	17
Cardio-vascular	29
Low Birth Weights	49
Socioeconomic Factor Indicators	—
Education	53
Housing	59
Linguistic	69
Poverty	35
Unemployment	36

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.60451687
Employed	6.274862056
Median HI	76.55588349
Education	—
Bachelor's or higher	64.85307327
High school enrollment	100
Preschool enrollment	66.93186193
Transportation	—
Auto Access	63.41588605
Active commuting	24.5989991
Social	—
2-parent households	66.95752598
Voting	70.69164635

Neighborhood	—
Alcohol availability	97.0101373
Park access	52.77813422
Retail density	10.02181445
Supermarket access	6.557166688
Tree canopy	8.238162453
Housing	—
Homeownership	60.78532016
Housing habitability	61.41408957
Low-inc homeowner severe housing cost burden	71.53856025
Low-inc renter severe housing cost burden	18.38829719
Uncrowded housing	64.30129603
Health Outcomes	—
Insured adults	73.78416528
Arthritis	95.7
Asthma ER Admissions	84.6
High Blood Pressure	97.7
Cancer (excluding skin)	89.7
Asthma	34.7
Coronary Heart Disease	98.7
Chronic Obstructive Pulmonary Disease	94.6
Diagnosed Diabetes	96.0
Life Expectancy at Birth	75.7
Cognitively Disabled	56.3
Physically Disabled	69.8
Heart Attack ER Admissions	68.4
Mental Health Not Good	54.9
Chronic Kidney Disease	97.1

Obesity	68.0
Pedestrian Injuries	19.6
Physical Health Not Good	86.2
Stroke	97.8
Health Risk Behaviors	—
Binge Drinking	28.2
Current Smoker	59.6
No Leisure Time for Physical Activity	76.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	9.0
Elderly	91.7
English Speaking	35.1
Foreign-born	48.1
Outdoor Workers	88.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	78.1
Traffic Density	21.6
Traffic Access	23.0
Other Indices	—
Hardship	45.2
Other Decision Support	—
2016 Voting	74.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72

Healthy Places Index Score for Project Location (b)	55
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Construction: Construction Phases	Construction schedule provided by Project team.
Construction: Off-Road Equipment	Construction equipment list provided by Project team.
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Demolition, Site Preparation, Grading, and Building Construction
Construction: Architectural Coatings	Rule 1113 limits
Operations: Vehicle Data	Trip gen based on Project traffic study.
Operations: Fleet Mix	Fleet mix adjusted to separate passenger vehicles and trucks.
Operations: Energy Use	Project will not use natural gas. Project will install solar to offset 45% of the industrial electrical demand.
Operations: Refrigerants	Beginning 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater.

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APPENDIX 3.3:

CCAP SCREENING TABLES

Table 5. Screening Table for Implementing GHG Performance Standards for Warehouse Non-residential Development, 2030 (Circle Applicable Project Points, 100 points minimum)

Description	Feature	Project Points
Reduction Measure 1: Building Electrification		
Replacement of gas appliance with electric appliance (select all that apply)	Electric space heater	5
	Electric water heater	8
	Electric stove (if applicable)	2
Lack of natural gas infrastructure	Project site does not have any natural gas infrastructure	8
	Total for measure	*23*
Reduction Measure 2: Solar Energy Systems for New Warehouse Development only ***(solar energy system required for warehouse development)***		
Installation of rooftop solar energy systems at new warehouse/logistics facilities. (select one option)	Installation of rooftop solar energy system which generates enough electricity to meet 45% of annual warehouse electricity demand.	22
	Installation of rooftop solar energy system which generates enough electricity to meet 90% of annual warehouse electricity demand.	44
	Installation of rooftop solar energy system which generates enough electricity to meet 100% of annual warehouse electricity demand.	48
Installation of battery storage at new warehouse/logistics facilities (select one option)	Solar battery storage installation with a capacity of 200-599 kW (DC).	3
	Solar battery storage installation with a capacity of 600-799 kW (DC).	6
	Solar battery storage installation with a capacity of 800-1200 kW (DC).	11
	Total for measure	*59*
Reduction Measure 3: Green Roofs		
Installation of a roof with a planted layer of vegetation over a waterproof surface for non-residential buildings (select one option)	Medium Green Roof – Total vegetated area makes up 50% of combined non-residential floor area (in square feet).	1
	Large Green Roof – Total vegetated area makes up 100% or more of combined non-residential floor area (in square feet).	2
	Total for measure	*2*
Reduction Measure 4: Urban Cooling		
On-site tree planting	1 tree per each required on-site employee/visitor vehicle parking space.	4
	2 trees per each required on-site employee/visitor vehicle parking space.	8

Description	Feature	Project Points
(select one option)[13]	3 trees per each required on-site employee/visitor vehicle parking space.	15
	Total for measure	*15*
Reduction Measure 5: Transit Oriented Communities (TOCs)		
New development is located in a transit-oriented community (TOC)	The development site is located within ½ mile radius of one or more of the following: a Bus Rapid Transit (BRT) stop, bus transit center, light rail station, the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods, and/or High-Quality Transit Corridor defined as a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.[14]	7
	Total for measure	*7*
Reduction Measure 6: Increase Transit Ridership		
Provision of free transit passes in a quantity equivalent to the expected number of employees at the non-residential building. Transit passes shall be provided for a period of 5 years after completion of construction. [15]	One free annual transit pass for every employee.	6

[13] This strategy specifies the ratio of additional trees per required employee/visitor vehicle parking spaces. Based upon total on-site vehicle parking spaces required per the City of Ontario Development Code for the project, the Applicant will calculate the number of trees required to meet this measure and obtain points. The landscape plan will show onsite trees and the tree matrix shall identify all trees associated with the Urban Cooling Measure compliance. The City code requires trees onsite and within paved areas to reduce the associated heat build-up from development. The Landscape Planning Division will consider these trees and/or potential upsizing of trees on-site to be counted toward the Urban Cooling Measure.

[14] A project shall be considered to be within one-half mile of a major transit stop or high-quality transit corridor if all parcels within the project have no more than 25 percent of their area farther than one-half mile from the stop or corridor and if not more than 10 percent of the residential units or 100 units, whichever is less, in the project are farther than one-half mile from the stop or corridor.

[15] Provision for annual transit passes to be incorporated into CC&R's bylaws, as appropriate.

Description	Feature	Project Points
	Total for measure	*6*
Reduction Measure 7: Vehicle Electrification[16]		
Installation of EV charging stations for truck parking spaces (select one option)[17]	Installation of Level 2 or higher EV charging stations at a rate of 5-9% of planned truck parking spaces.	2
	Installation of Level 2 or higher EV charging stations at a rate of 10-19% of planned truck parking spaces.	4
	Installation of Level 2 or higher EV charging stations at a rate of 20-29% of planned truck parking spaces.	6
	Installation of Level 2 or higher EV charging stations at a rate of 30-49% of planned truck parking spaces.	10
	Installation of Level 2 or higher EV charging stations at a rate of 50% or more of planned truck parking spaces.	15
	Total for measure	*15*
Reduction Measure 8: Active Transportation		
Installation or improvement of bicycle facilities (select all that apply)	Bicycle parking facilities with 1:20 ratio of bicycle parking to employee vehicle parking space.	2
	Construct or improve a single bicycle lane facility (only Class I, II, or IV) that 1) connects to a larger existing bikeway network or 2) closes an existing bikeway network gap that is at least 0.5 miles long.	3
Installation or improvement of pedestrian facilities (select one option)	Two or three pedestrian infrastructure improvements to street design on private streets, including, but not limited to curb extensions, raised crosswalks, speed humps/bumps, street tree plantings in parkways or street medians, and elevated pavement markings.	2
	Four or more pedestrian infrastructure improvements to street design on private streets, including, but not limited to private property curb extensions, raised crosswalks, speed humps/bumps, elevated pavement markings, and public property street tree plantings in parkways or street medians.	4
	Total for measure	*9*

[16] EV charging station levels 1-3 are defined in the California Green Building Standards or CALGreen Code, accessed at https://www.dgs.ca.gov/BSC/CALGreen.

[17] Reduction Measure 7 refers to EV charging stations for two-axle trucks.

Description	Feature	Project Points
Reduction Measure 9: Parking Policy		
Require that employee vehicle parking spaces be purchased at an additional cost. This does not include client/visitor vehicle parking spaces [18]	Unbundle, or separate, 100% of non-residential project's parking costs from property costs, requiring those who wish to purchase parking spaces to do so at an additional cost.	1
	Total for measure	*1*
Reduction Measure 10: Electric construction equipment[19]		
Use electric construction equipment for a portion of the construction project (select one option)	One-third (33%) of construction equipment used for construction (during building phase, not including grading phase), measured by number of hours of operation, is zero emission equipment.	3
	Half (50%) of construction equipment used for construction (during the building phase, not including the grading phase), measured by the number of hours of operation, is zero emission equipment.	5
	Two-thirds (66%) or more of construction equipment used for construction (during the building phase, not including the grading phase), measured by number of hours of operation, is zero emission equipment.	8
	Total for measure	*8*
Reduction Measure 11: Waste diversion		
Site design for non-residential warehouse development includes site(s) for green waste/ organics and recycling collection bins	Site design allocates sufficient space for storage and collection of green waste, organic waste, and recyclables.	20
	Total for measure	*20*
Reduction Measure 12: Water conservation		
Implement indoor water efficiency measures (select all	Install water-efficient faucets and showerheads.	1
	Install on-demand water circulators on commercial sinks or dishwashing equipment.[20]	2

[18] Provision for unbundling parking to be incorporated into CC&R's bylaws or separate parking agreement, as appropriate.

[19] Electric construction equipment includes electric compact excavators, electric motors, electric generators, and mobile charging equipment.

[20] According to CALGreen, a hot water recirculation system is one which includes "a thermostat that will automatically shut off the recirculation pump when the water temperature reaches a preset level at the point of use."

Description	Feature	Project Points
that apply)		
Incorporate outdoor water efficiency measures	Design and plan outdoor landscapes planted with drought-tolerant, low maintenance plants with a 1) drip irrigation system or 2) sprinkler irrigation system with a weather-based irrigation controller.	4
	Total for measure	*7*
	Warehouse Total for measures	***172***
	Warehouse Project Points Subtotal	
Additional Recommended Measures		
AR-1: Charging stations for large trucks (select one option)	Installation of conduit for charging stations for zero emission trucks larger than two-axles (class 8 and 9, and semi-trucks) so that facilities are prepared for the transition to electric trucks.	4
	Installation of 1-4 charging stations for zero emission trucks larger than two-axles (class 8 and 9, and semi-trucks)	8
	Installation of 5-9 charging stations for zero emission trucks larger than two-axles (class 8 and 9, and semi-trucks)	12
	Installation of 10 or more charging stations zero emission trucks larger than two-axles (class 8 and 9, and semi-trucks)	24
AR-2: Meet CalGreen voluntary tiers (select one option)	CalGreen Tier 1 compliance	5
	CalGreen Tier 2 compliance	10
AR-3: Installation of EV charging stations for employee vehicle parking spaces (select one option)	Installation of Level 2 or higher EV charging stations at a rate of 5-9% of planned employee vehicle parking spaces.	4
	Installation of Level 2 or higher EV charging stations at a rate of 10-19% of planned employee vehicle parking spaces with Level 2 EV charging stations.	6
	Installation of Level 2 or higher EV charging stations at a rate of 20% or more of planned employee vehicle parking spaces Level 2 EV charging stations.	12
AR-4: Recycled Water	Use recycled water for at least 80% of outdoor water needs.	2
AR-5: Reflective Paving	Use high-reflectivity pavement for all hardscaped areas, including parking areas, walking paths, and patios.	4
AR-6: Zero Emission Cargo Equipment	Use of zero emission cargo handling equipment for a minimum of 50% of all operations.	4
AR-7: Alternative Fueling	Installation of alternative fuel facilities, such as CNG, biofuels, or hydrogen fueling stations.	10
	Total additional recommended measures	***66***

Description	Feature	Project Points
	Warehouse Project Points Subtotal	
	Total Warehouse Points Possible	***238***
	WAREHOUSE PROJECT POINTS TOTAL	101

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