# APPENDIX H:
# ENERGY ANALYSIS



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# IRWINDALE BREW YARD SPECIFIC PLAN

## ENERGY ANALYSIS

Prepared By:

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

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# LIST OF ABBREVIATED TERMS

| | |
|---|---|
| % | Percent |
| (1) | Reference |
| APN | Assessor's Parcel Number |
| AQIA | Irwindale Brew Yard Specific Plan Air Quality Impact Analysis |
| BACM | Best Available Control Measures |
| BTU | British Thermal Units |
| CalEEMod | California Emissions Estimator Model |
| CAPCOA | California Air Pollution Control Officers Association |
| CARB | California Air Resources Board |
| CCAP | Community Climate Action Plan |
| CCR | California Code of Regulations |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| City | City of Irwindale |
| CO | Carbon Monoxide |
| CPUC | California Public Utilities Commission |
| DMV | Department of Motor Vehicles |
| EIA | Energy Information Administration |
| EPA | Environmental Protection Agency |
| EMFAC | EMissions FACtor |
| FERC | Federal Energy Regulatory Commission |
| GHG | Greenhouse Gas |
| GHGA | Irwindale Brew Yard Specific Plan Greenhouse Gas Analysis |
| GPM | Gallons Per Minute |
| GWh | Gigawatt Hour |
| HHDT | Heavy-Heavy Duty Trucks |
| hp-hr-gal | Horsepower Hours Per Gallon |
| IEPR | Integrated Energy Policy Report |
| ISO | Independent Service Operator |
| ISTEA | Intermodal Surface Transportation Efficiency Act |
| ITE | Institute of Transportation Engineers |
| kBTU | Kilo British Thermal Units |
| kWh | Kilowatt Hour |
| LDA | Light Duty Auto |
| LDT1/LDT2 | Light-Duty Trucks |
| LHDT1/LHDT2 | Light-Heavy Duty Trucks |
| MDV | Medium Duty Trucks |
| MHDT | Medium-Heavy Duty Trucks |
| MM | Mitigation Measure |
| MMcfd | Million Cubic Feet Per Day |

| | |
|---|---|
| mpg | Miles Per Gallon |
| MPO | Metropolitan Planning Organization |
| $NO_X$ | Nitrogen Oxides |
| PG&E | Pacific Gas and Electric |
| $PM_{10}$ | Particulate Matter 10 microns in diameter or less |
| Project | Irwindale Brew Yard Specific Plan |
| ROG | Reactive Organic Gas |
| SCAB | South Coast Air Basin |
| SCE | Southern California Edison |
| SDAB | San Diego Air Basin |
| sf | Square Feet |
| SoCalGas | Southern California Gas |
| TEA-21 | Transportation Equity Act for the 21st Century |
| TRU | Transportation Refrigeration Unit |
| U.S. | United States |
| VMT | Vehicle Miles Traveled |
| VOC | Volatile Organic Compounds |

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# EXECUTIVE SUMMARY

## ES.1 SUMMARY OF FINDINGS

The results of this *Irwindale Brew Yard Specific Plan Energy Analysis* are summarized below based on the significance criteria in Section 5 of this report consistent with Appendix G of the CEQA Guidelines (CEQA Guidelines) (1). Table ES-1 shows the findings of significance for potential energy impacts under CEQA.

### TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS

| Analysis | Report Section | Significance Findings | |
|---|---|---|---|
| | | Unmitigated | Mitigated |
| Energy Impact #1: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | 5.0 | *Less Than Significant* | *n/a* |
| Energy Impact #2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | 5.0 | *Less Than Significant* | *n/a* |

## ES.2 PROJECT REQUIREMENTS

The Project would be required to comply with regulations imposed by the federal and state agencies that regulate energy use and consumption through various means and programs. Those that are directly and indirectly applicable to the Project and that would assist in the reduction of energy usage include:

- Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)
- The Transportation Equity Act for the 21st Century (TEA-21)
- Integrated Energy Policy Report (IEPR)
- State of California Energy Plan
- California Code Title 24, Part 6, Energy Efficiency Standards
- California Code Title 24, Part 11, California Green Building Standards Code (CALGreen)
- AB 1493 Pavley Regulations and Fuel Efficiency Standards
- California's Renewable Portfolio Standard (RPS)
- Clean Energy and Pollution Reduction Act of 2015 (SB 350)

Consistency with the above regulations is discussed in detail in Section 5 of this report.

## ES.3 PROJECT MITIGATION MEASURES (MMS)

### AQIA Mitigation Measures

The following Project-specific mitigation measures were identified in the Irwindale Brew Yard Specific Plan Air Quality Impact Analysis Report (AQIA) (Urban Crossroads, Inc.) (2). Although these

measures are designed to reduce Project air quality emissions, they would also assist in reducing Project energy consumption.

**MM AQ-1**

The Project shall provide electrical hook ups to the power grid rather than use diesel-fueled generators for electric construction tools such as saws, drills, and compressors, and shall use such electric tools. The Lead Agency shall conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.

**MM AQ-2**

During Project construction, the Project contractors shall keep all equipment maintenance records and data sheets, including design specifications and emission control tier classifications, onsite or at the contractor's office and shall furnish documents to the Lead Agency or other regulators upon request. The Lead Agency shall conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.

**MM AQ-3**

The Project Applicant/Developer shall provide information on transit and ridesharing programs and services to construction employees. The Lead Agency shall conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.

**MM AQ-4**

The Project Applicant/Developer/Contractor shall include a note on grading plans that prohibit grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone in the Project area. Daily Air Quality Index forecasts for the next day of grading shall be checked via the airnow.gov system the day prior by the Project Contractor.

**MM AQ-5**

The Project will require all diesel-dueled offroad equipment of 25 horsepower of greater to comply with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 Final offroad emissions standards or equivalent and shall ensure that all construction equipment is tuned and maintained in accordance with the manufacturer's specifications. The Lead Agency shall conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.

**MM AQ-6**

To further reduce volatile organic compounds (VOC) emissions associated with architectural coating, the Project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g., bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The Lead Agency shall conduct an

on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.

### MM AQ-7

Legible, durable, weather-proof signs shall be placed at construction staging areas within the Project site. At a minimum, each sign shall include: 1) instructions for construction workers to shut off engines when not in use; 2) instructions for operators of heavy-duty diesel construction equipment to restrict idling to no more than three (3) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and 3) telephone numbers of the building facilities manager to report violations. The Lead Agency shall conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.

### MM AQ-8

The Project Applicant/Developer/Owner shall identify a person to act as a community liaison concerning onsite construction activities and provide contact information for the community liaison to the surrounding community. The contact of the community liaison shall be provided to the City Planning Division and be posted on the construction site prior to issuance of a demolition permit. The Lead Agency shall conduct an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.

## ES.3.2 Operational-Source MMs

At buildout, unmitigated Project operational-source reactive organic gas (ROG), nitrogen oxides ($NO_X$), carbon monoxide (CO), and particulate matter 10 microns in diameter or less ($PM_{10}$) emissions would exceed applicable South Coast Air Quality Management District (SCAQMD) regional significance thresholds. The predominance of the Project's operational-source emissions are generated by passenger vehicles and trucks accessing the Project. Neither the Project Applicant nor the City have regulatory authority to control tailpipe emissions, and no feasible MMs beyond the measures identified herein exist that would reduce Project operational-source $NO_X$ emissions to levels that are less-than-significant. Project operational-source $NO_X$ emissions impacts are therefore considered significant and unavoidable.

The following measures are designed to reduce Project operational-source emissions. Even with application of these MMs, Project operational-source emission impacts are considered significant and unavoidable.

### MM AQ-9

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-10

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-11

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 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-12

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 ("HHDT") 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-13

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-14

Water Efficient Fixtures. All water fixtures within the Project shall be water efficient (toilets (1.28 gallons per minute [gpm] or less, wall-mounted urinals 0.125 gpm or less, floor-mounted urinals 0.5 gpm or less), showerheads (1.8 gpm or less), faucets (0.5 gpm or less)). Additionally, the Project shall include water-efficient landscapes that utilize low-water use plant types and drip irrigation where needed.

### MM AQ-15

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. Design buildings that exceed the 2019 Title 24 building envelope energy efficiency standards by at least 50%.

### MM AQ-16

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 operate in compliance with, and to monitor compliance with, all current and applicable air quality regulations for on-road trucks including the CARB's Heavy-Duty (Tractor-Trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation.
5. 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
6. 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.
7. 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.
8. Requirements for the building owner to 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.

### MM AQ-17

The City occupancy permitting shall require that all facility-owned and operated fleet equipment with a gross vehicle weight rating greater than 14,000 pounds accessing the site meet or exceed 2014 model-year emissions equivalent engine standards as currently defined in California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025. Facility operators which own vehicles subject to Section 2025 shall maintain records on-site demonstrating compliance with this requirement and shall make records available for inspection by the local jurisdiction, air district, and state upon request.

# 1 INTRODUCTION

This report presents the results of the energy analysis prepared by Urban Crossroads, Inc., for the proposed Irwindale Brew Yard Specific Plan (Project). The purpose of this report is to ensure that energy implication is considered by the City of Irwindale (Lead Agency), as the lead agency, and to quantify anticipated energy usage associated with construction and operation of the proposed Project, determine if the usage amounts are efficient, typical, or wasteful for the land use type, and to emphasize avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

## 1.1 SITE LOCATION

The Project site is located in the northwest portion of the City of Irwindale immediately south of the I-210 Freeway and west of Irwindale Avenue, as shown in Exhibit 1-A. The site includes an abandoned rail spur and two quarries that have been depleted and ceased operations in the late 1950s.

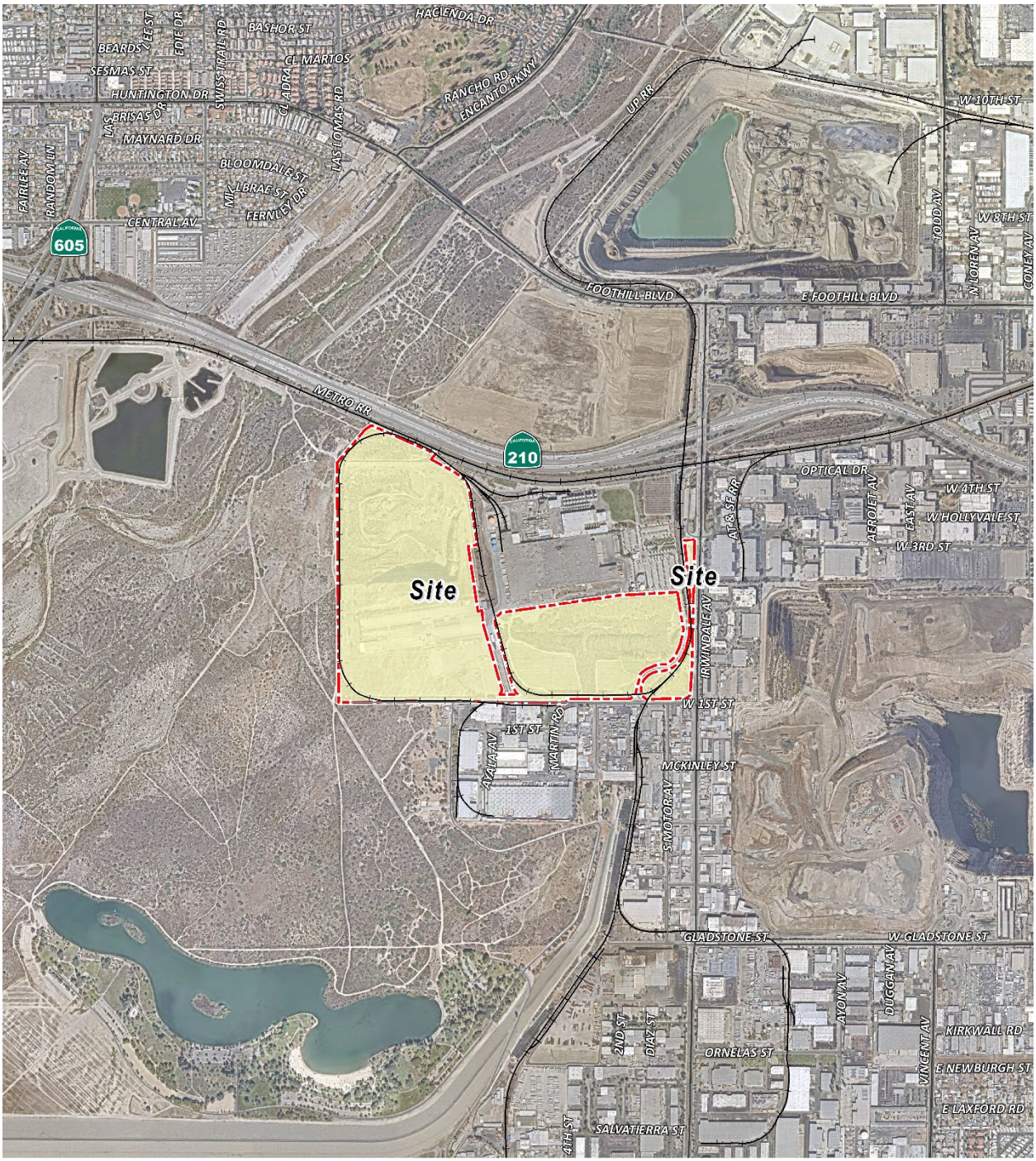
## 1.2 PROJECT DESCRIPTION

The Project is to consist of the development of up to 3,000,000 square feet (SF) of new industrial/business park uses within Planning Area 1, and 12,000 SF of commercial uses within Planning Area 2. Based on the empirical analysis of other comparable, similarly situated industrial parks prepared by Kimley-Horn and Associates, Inc., which analysis was reviewed and approved based on specific experience of other projects in the City of Irwindale by the City Engineer, the Project would reasonably be expected to include the following mix of industrial uses:

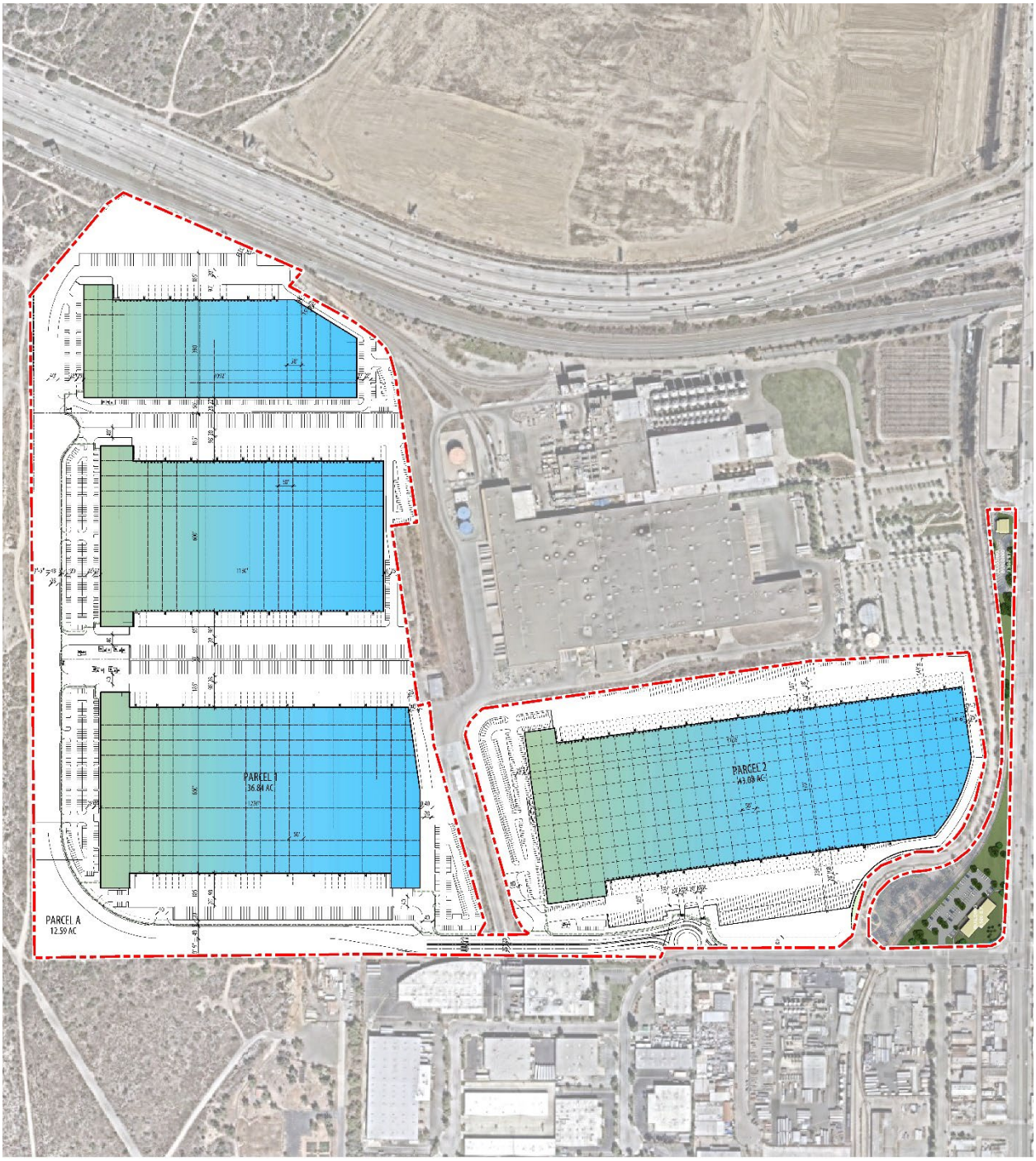
- Planning Area 1:
  - 535,000 SF High-Cube Cold Storage
  - 1,555,500 SF High-Cube Fulfillment Center Warehouse (Sort)
  - 454,750 SF Warehousing
  - 454,750 SF High-Cube Short-Term Storage Warehouse
- Planning Area 2:
  - 12,000 SF Strip Retail

Buildout of the proposed Project is anticipated to occur in 2031. However, it should be noted that for analytical purposes, this analysis assumes that Project buildout would occur in 2030, consistent with the Project traffic study. This assumption of an earlier buildout year is conservative, as it is a base assumption of the modeling that vehicles and equipment become cleaner and more efficient each year as fleet turnover occurs and new emission standards take effect. A preliminary site plan is presented in Exhibit 1-B.

## EXHIBIT 1-A: PROJECT LOCATION



## EXHIBIT 1-B: SITE PLAN



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# 2 EXISTING CONDITIONS

This section provides an overview of the existing energy conditions in the Project region.

## 2.1 OVERVIEW

The most recent data for California's estimated total energy consumption and natural gas consumption is from 2023, released by the United States (U.S.) Energy Information Administration's (EIA) California State Profile and Energy Estimates and includes (3):

- As of 2023, approximately 6,817 trillion British Thermal Unit (BTU) of energy was consumed
- As of 2023, approximately 648 million barrels of petroleum
- As of 2023, approximately 2,085 billion cubic feet of natural gas
- As of 2023, approximately 1,277 thousand short tons of coal

According to the EIA, in 2023 the U.S. petroleum consumption comprised about 89% of all transportation energy use, excluding fuel consumed for aviation and most marine vessels (4). In 2024, about 251,265 million gallons (or about 5,983 million barrels) of finished petroleum products were consumed in the U.S., an average of about 687 million gallons per day (or about 16.4 million barrels per day) (5). In 2021, California consumed approximately 12,147 million gallons in motor gasoline (33.31 million gallons per day) and approximately 3,541 million gallons of diesel fuel (9.7 million gallons per day) (6).

The most recent data provided by the EIA for energy use in California is reported from 2023, which shows approximate energy usage by each of the following sectors:

- 44.5% for transportation uses
- 21.4% for industrial uses
- 17.1% for residential uses
- 17.0% for commercial uses (7)

According to the EIA, California used approximately 239,480 million kilowatt hours (kWh) of electricity in 2023 (8). By sector in 2023, residential uses utilized 34.6% of the state's electricity, followed by 47.2% for commercial uses, 18.0% for industrial uses, and 0.3% for transportation. Electricity usage in California for differing land uses varies substantially by the type of uses in a building, type of construction materials used in a building, and the efficiency of all electricity-consuming devices within a building (8).

According to the EIA, California used approximately 21,292 million therms of natural gas in 2023 (9). In 2023 (the most recent year for which data is available), by sector, industrial uses utilized 31.6% of the state's natural gas, followed by 31.3% used as fuel in the electric power sector, 22.8% from residential, 12.7% from commercial, 1.5% from transportation uses and the remaining 3% was utilized for the operations, processing and production of natural gas itself (9). While the supply of natural gas in the United States and production in the lower 48 states has increased greatly since 2008, California produces little, and imports 90% of its supply of natural gas (9).

In 2023, total system electric generation for California was 281,140 gigawatt hours (GWh). California's massive electricity in-state generation system generated approximately 215,623 GWh which accounted for approximately 76% of the electricity it uses; the rest was imported from the

Pacific Northwest (6%) and the U.S. Southwest (18%) (10). Natural gas is the main source for electricity generation at 43.68% of the total in-state electric generation system power as shown in Table 2-1.

An updated summary of, and context for energy consumption and energy demands within the State is presented in "U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts" excerpted below (11):

- In 2024, California was the fourth-largest electricity producer in the nation. It is also the nation's third-largest electricity consumer and imports the second largest amount of electricity of any state.
- In 2024, California was the eighth-largest producer of crude oil among the 50 states, and the state ranked third in crude oil refining capacity.
- California is the largest consumer of jet fuel and second-largest consumer of motor gasoline among the 50 states.
- California is the second-largest total energy consumer among the states, but its per capita energy consumption is the third-lowest in the nation.
- In 2024, renewable resources, including hydroelectric power and small-scale solar power, supplied 57% of California's in-state electricity generation. Natural gas fueled another 35% and nuclear power provided almost all the rest.

As indicated below, California is one of the nation's leading energy-producing states, and California's per capita energy use is among the nation's most efficient. Given the nature of the Project, the remainder of this discussion will focus on the three sources of energy that are most relevant to the Project—namely, electricity, natural gas, and transportation fuel for vehicle trips associated with the uses planned for the Project.

## TABLE 2-1: TOTAL ELECTRICITY SYSTEM POWER (CALIFORNIA 2024)

| Fuel Type | California In-State Generation (GWh) | % of California In-State Generation | Northwest Imports (GWh) | Southwest Imports (GWh) | Total Imports (GWh) | Total California Energy Mix (GWh) | Total California Power Mix |
|---|---|---|---|---|---|---|---|
| Coal | 263 | 0.12% | 124 | 5,775 | 5,899 | 6,162 | 2.21% |
| Natural Gas | 86,479 | 40.00% | 84 | 8,091 | 8,176 | 94,655 | 34.01% |
| Oil | 36 | 0.02% | - | 0 | 0 | 36 | 0.01% |
| Other (Waste Heat/Petroleum Coke) | 198 | 0.09% | 13 | 9 | 22 | 220 | 0.08% |
| Unspecified | - | 0.00% | 80 | 3,971 | 4,051 | 4,051 | 1.46% |
| *Total Thermal and Unspecified* | *86,976* | *40.23%* | *301* | *17,846* | *18,147* | *105,123* | *37.77%* |
| Nuclear | 18,379 | 8.50% | 208 | 9,026 | 9,234 | 27,613 | 9.92% |
| Large Hydro | 25,222 | 11.67% | 4,479 | 1,079 | 5,558 | 30,780 | 11.06% |
| Biomass | 4,754 | 2.20% | 614 | 26 | 640 | 5,394 | 1.94% |
| Geothermal | 10,453 | 4.84% | 212 | 2,139 | 2,351 | 12,803 | 4.60% |
| Small Hydro | 3,969 | 1.84% | 269 | 2 | 270 | 4,240 | 1.52% |
| Solar | 50,666 | 23.44% | 536 | 8,081 | 8,616 | 59,283 | 21.30% |
| Wind | 15,761 | 7.29% | 9,195 | 8,145 | 17,341 | 33,102 | 11.89% |
| *Total Non-GHG and Renewable Resources* | *129,205* | *59.77%* | *15,512* | *28,498* | *44,010* | *173,215* | *62.23%* |
| *System Totals* | *216,181* | *100.00%* | *15,813* | *46,344* | *62,157* | *278,338* | *100.00%* |

Source: CECs 2024 Total System Electric Generation

## 2.2 ELECTRICITY

The usage associated with electricity use was calculated using CalEEMod Version 2022.1. The Southern California region's electricity reliability has been of concern for the past several years due to the planned retirement of aging facilities that depend upon once-through cooling technologies, as well as the June 2013 retirement of the San Onofre Nuclear Generating Station (San Onofre). While the once-through cooling phase-out has been ongoing since the May 2010 adoption of the State Water Resources Control Board's once-through cooling policy, the retirement of San Onofre complicated the situation. California Independent Service Operator (ISO) studies revealed the extent to which the Mojave Desert Air Basin (MDAB) and the San Diego Air Basin (SDAB) region were vulnerable to low-voltage and post-transient voltage instability concerns. A preliminary plan to address these issues was detailed in the 2013 Integrative Energy Policy Report (IEPR) after a collaborative process with other energy agencies, utilities, and air districts. Similarly, the subsequent 2024 IEPR provides information and policy recommendations on advancing a clean, reliable, and affordable energy system (12).

California's electricity industry is an organization of traditional utilities, private generating companies, and state agencies, each with a variety of roles and responsibilities to ensure that electrical power is provided to consumers. The California ISO is a nonprofit public benefit corporation and is the impartial operator of the State's wholesale power grid and is charged with maintaining grid reliability, and to direct uninterrupted electrical energy supplies to California's homes and communities. While utilities still own transmission assets, the ISO routes electrical power along these assets, maximizing the use of the transmission system and its power generation resources. The ISO matches buyers and sellers of electricity to ensure that enough power is available to meet demand. To these ends, every five minutes the ISO forecasts electrical demands, accounts for operating reserves, and assigns the lowest cost power plant unit to meet demands while ensuring adequate system transmission capacities and capabilities (13).

Part of the ISO's charge is to plan and coordinate grid enhancements to ensure that electrical power is provided to California consumers. To this end, utilities file annual transmission expansion/modification plans to accommodate the State's growing electrical needs. The ISO reviews and either approves or denies the proposed additions. In addition, and perhaps most importantly, the ISO works with other areas in the western United States electrical grid to ensure that adequate power supplies are available to the State. In this manner, continuing reliable and affordable electrical power is assured to existing and new consumers throughout the State.

Electricity is currently provided to the Project site by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles. Based on SCE's 2024 Power Content Label Mix, SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers (14).

Table 2-2, SCE's specific proportional shares of electricity sources in 2024. As indicated in Table 2-2, the 2024 SCE Power Mix has renewable energy at 35% of the overall energy resources. Biomass and

waste resources are at 0%, geothermal resources are at 4%, eligible hydroelectric resources are at 1%, solar energy is at 19%, and wind power is at 11% (15).

**TABLE 2-2: SCE 2024 POWER CONTENT MIX**

| Energy Resources | 2024 SCE Power Mix |
|---|---|
| *Eligible Renewable* | 35% |
| Biomass & Waste | 0% |
| Geothermal | 4% |
| Eligible Hydroelectric | 1% |
| Solar | 19% |
| Wind | 11% |
| *Large Hydroelectric* | 5% |
| *Nuclear* | 9% |
| *Emerging Technologies* | 0% |
| *Other* | 0% |
| *Natural Gas* | 8% |
| *Unspecified Power (primarily fossil fuels)** | 43% |
| *Total* | 100% |

* "Unspecified sources of power" means electricity from transactions that are not traceable to specific generation sources

## 2.3 NATURAL GAS

The following summary of natural gas customers and volumes, supplies, delivery of supplies, storage, service options, and operations is excerpted from information provided by the California Public Utilities Commission (CPUC).

> *"The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), Southern California Gas (SoCalGas), San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities. The CPUC also regulates independent storage operators: Lodi Gas Storage, Wild Goose Storage, Central Valley Storage and Gill Ranch Storage.*
>
> *California's natural gas utilities provide service to over 11 million gas meters. SoCalGas and PG&E provide service to about 5.9 million and 4.3 million customers, respectively, while SDG&E provides service to over 800, 000 customers. In 2018, California gas utilities forecasted that they would deliver about 4740 million cubic feet per day (MMcfd) of gas to their customers, on average, under normal weather conditions.*
>
> *The overwhelming majority of natural gas utility customers in California are residential and small commercial customers, referred to as "core" customers. Larger volume gas customers, like electric generators and industrial customers, are called "noncore" customers. Although very small in number relative to core customers, noncore*

*customers consume about 65% of the natural gas delivered by the state's natural gas utilities, while core customers consume about 35%.*

*A significant amount of gas (about 19%, or 1131 MMcfd, of the total forecasted California consumption in 2018) is also directly delivered to some California large volume consumers, without being transported over the regulated utility pipeline system. Those customers, referred to as "bypass" customers, take service directly from interstate pipelines or directly from California producers.*

*SDG&E and Southwest Gas' southern division are wholesale customers of SoCalGas, i.e., they receive deliveries of gas from SoCalGas and in turn deliver that gas to their own customers. (Southwest Gas also provides natural gas distribution service in the Lake Tahoe area.) Similarly, West Coast Gas, a small gas utility, is a wholesale customer of PG&E. Some other wholesale customers are municipalities like the cities of Palo Alto, Long Beach, and Vernon, which are not regulated by the CPUC.*

*Natural gas from out-of-state production basins is delivered into California via the interstate natural gas pipeline system. The major interstate pipelines are Gas Transmission Northwest Pipeline, Kern River Pipeline, Transwestern Pipeline, El Paso Pipeline, Ruby Pipeline, Mojave Pipeline, and Tuscarora. Another pipeline, the North Baja - Baja Norte Pipeline takes gas off the El Paso Pipeline at the California/Arizona border and delivers that gas through California into Mexico. While the Federal Energy Regulatory Commission (FERC) regulates the transportation of natural gas on the interstate pipelines, and authorizes rates for that service, the CPUC may participate in FERC regulatory proceedings to represent the interests of California natural gas consumers.*

*The gas transported to California gas utilities via the interstate pipelines, as well as some of the California-produced gas, is delivered into the PG&E and SoCalGas intrastate natural gas transmission pipelines systems (commonly referred to as California's "backbone" pipeline system). Natural gas on the utilities' backbone pipeline systems is then delivered to the local transmission and distribution pipeline systems, or to natural gas storage fields. Some large volume noncore customers take natural gas delivery directly off the high-pressure backbone and local transmission pipeline systems, while core customers and other noncore customers take delivery off the utilities' distribution pipeline systems. The state's natural gas utilities operate over 100,000 miles of transmission and distribution pipelines, and thousands more miles of service lines.*

*Bypass customers take most of their deliveries directly off the Kern/Mojave pipeline system, but they also take a significant amount of gas from California production.*

*PG&E and SoCalGas own and operate several natural gas storage fields that are located within their service territories in northern and southern California, respectively. These storage fields, and four independently owned storage utilities - Lodi Gas Storage, Wild Goose Storage, Central Valley Storage, and Gill Ranch Storage - help meet peak seasonal and daily natural gas demand and allow California natural gas customers to secure natural gas supplies more efficiently. PG&E is a 25% owner of the Gill Ranch Storage field. These storage fields provide a significant amount of infrastructure*

*capacity to help meet California's natural gas requirements, and without these storage fields, California would need much more pipeline capacity in order to meet peak gas requirements.*

*Prior to the late 1980s, California regulated utilities provided virtually all natural gas services to all their customers. Since then, the Commission has gradually restructured the California gas industry in order to give customers more options while assuring regulatory protections for those customers that wish to, or are required to, continue receiving utility-provided services.*

*The option to purchase natural gas from independent suppliers is one of the results of this restructuring process. Although the regulated utilities procure natural gas supplies for most core customers, core customers have the option to purchase natural gas from independent natural gas marketers, called "core transport agents" (CTA). Contact information for core transport agents can be found on the utilities' web sites. Noncore customers, on the other hand, make natural gas supply arrangements directly with producers or with marketers.*

*Another option resulting from the restructuring process occurred in 1993, when the Commission removed the utilities' storage service responsibility for noncore customers, along with the cost of this service from noncore customers' transportation rates. The Commission also encouraged the development of independent storage fields, and in subsequent years, all the independent storage fields in California were established. Noncore customers and marketers may now take storage service from the utility or from an independent storage provider (if available), and pay for that service, or may opt to take no storage service at all. For core customers, the Commission assures that the utility has adequate storage capacity set aside to meet core requirements, and core customers pay for that service.*

*In a 1997 decision, the Commission adopted PG&E's "Gas Accord", which unbundled PG&E's backbone transmission costs from noncore transportation rates. This decision gave customers and marketers the opportunity to obtain pipeline capacity rights on PG&E's backbone transmission pipeline system, if desired, and pay for that service at rates authorized by the Commission. The Gas Accord also required PG&E to set aside a certain amount of backbone transmission capacity in order to deliver gas to its core customers. Subsequent Commission decisions modified and extended the initial terms of the Gas Accord. The "Gas Accord" framework is still in place today for PG&E's backbone and storage rates and services and is now simply referred to as PG&E Gas Transmission and Storage (GT&S).*

*In a 2006 decision, the Commission adopted a similar gas transmission framework for Southern California, called the "firm access rights" system. SoCalGas and SDG&E implemented the firm access rights (FAR) system in 2008, and it is now referred to as the backbone transmission system (BTS) framework. As under the PG&E backbone transmission system, SoCalGas backbone transmission costs are unbundled from noncore transportation rates. Noncore customers and marketers may obtain, and pay for, firm backbone transmission capacity at various receipt points on the SoCalGas*

*system. A certain amount of backbone transmission capacity is obtained for core customers to assure meeting their requirements.*

*Many if not most noncore customers now use a marketer to provide for several of the services formerly provided by the utility. That is, a noncore customer may simply arrange for a marketer to procure its supplies, and obtain any needed storage and backbone transmission capacity, in order to assure that it will receive its needed deliveries of natural gas supplies. Core customers still mainly rely on the utilities for procurement service, but they have the option to take procurement service from a CTA. Backbone transmission and storage capacity is either set aside or obtained for core customers in amounts to assure very high levels of service.*

*In order [to] properly operate their natural gas transmission pipeline and storage systems, PG&E and SoCalGas must balance the amount of gas received into the pipeline system and delivered to customers or to storage fields. Some of these utilities' storage capacity is dedicated to this service, and under most circumstances, customers do not need to precisely match their deliveries with their consumption. However, when too much or too little gas is expected to be delivered into the utilities' systems, relative to the amount being consumed, the utilities require customers to more precisely match up their deliveries with their consumption. And, if customers do not meet certain delivery requirements, they could face financial penalties. The utilities do not profit from these financial penalties - the amounts are then returned to customers as a whole. If the utilities find that they are unable to deliver all the gas that is expected to be consumed, they may even call for a curtailment of some gas deliveries. These curtailments are typically required for just the largest, noncore customers. It has been many years since there has been a significant curtailment of core customers in California."* (16)

As indicated in the preceding discussions, natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the State in response to market supply and demand. The CPUC oversees utility purchases and transmission of natural gas to ensure reliable and affordable natural gas deliveries to existing and new consumers throughout the State.

## 2.4 TRANSPORTATION ENERGY RESOURCES

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline and diesel fuel. On January 1, 2024, the Department of Motor Vehicles (DMV) reported 35.7 million registered vehicles in California, which, based on data from the 2021 version of the EMissions FACtor (EMFAC) model, are estimated to consume approximately 17.5 billion gallons of fuel annually (17).[1] Gasoline (and other vehicle fuels) are commercially provided commodities and would be available to the Project patrons and employees via commercial outlets.

California's on-road transportation system includes 396,616 lane miles, more than 26.6 million passenger vehicles and light trucks, and almost 9.0 million medium- and heavy-duty vehicles (7). While gasoline consumption has been declining since 2008 it is still by far the dominant fuel. California is the second-largest consumer of petroleum products, after Texas, and accounts for 9% of the nation's total consumption. The State is the largest U.S. consumer of jet fuel and the second

[1] Fuel consumptions estimated utilizing information from EMFAC2021.

largest U.S. consumer of motor gasoline. 86% of the petroleum consumed in California is used in the transportation sector (18).

California accounts for less than 1% of total U.S. natural gas reserves and production. As with crude oil, California's natural gas production has experienced a gradual decline since 1985. In 2024, about 31% of the natural gas delivered to consumers went to the State's industrial sector, and about 30% was delivered to the electric power sector. Natural gas fueled more than two-fifths of the State's utility-scale electricity generation in 2024. The residential sector, where three-fifths of California households use natural gas for home heating, accounted for 22% of natural gas deliveries. The commercial sector received 15% of the deliveries to end users and the transportation sector consumed the remaining 1% (18).

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# 3 REGULATORY BACKGROUND

Federal and state agencies regulate energy use and consumption through various means and programs. On the federal level, the United States Department of Transportation, the United States Department of Energy, and the United States Environmental Protection Agency (EPA) are three federal agencies with substantial influence over energy policies and programs. On the state level, the CPUC and the CEC are two agencies with authority over different aspects of energy. Relevant federal and state energy-related laws and plans are summarized below.

## 3.1 FEDERAL REGULATIONS

### 3.1.1 Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The ISTEA promoted the development of inter-modal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. ISTEA contained factors that Metropolitan Planning Organizations (MPOs) were to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, MPOs adopted explicit policies defining the social, economic, energy, and environmental values guiding transportation decisions.

### 3.1.2 The Transportation Equity Act for the 21st Century (TEA-21)

The TEA-21 was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation, discussed above. The TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. The TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. The TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems (ITS), to help improve operations and management of transportation systems and vehicle safety.

## 3.2 CALIFORNIA REGULATIONS

### 3.2.1 Integrated Energy Policy Report (IEPR)

Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the CEC to prepare a biennial integrated energy policy report that assesses major energy trends and issues facing the state's electricity, natural gas, and transportation fuel sectors and provides policy recommendations to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety (Public Resources Code § 25301[a]). The CEC prepares these assessments and associated policy recommendations every two years, with updates in alternate years, as part of the Integrated Energy Policy Report.

The 2024 IEPR was adopted September 2025, and continues to work towards improving electricity, natural gas, and transportation fuel energy use in California. The 2024 IEPR provides critical updates on California's energy future, focusing on several key areas. It includes an updated energy demand forecast, offering revised projections for electricity consumption and generation needs. Additionally,

the report evaluates the feasibility, costs, and potential benefits of wave and tidal energy resources in accordance with SB 605, which aims to explore alternative renewable energy sources for the state (19).

Compared to the 2023 IEPR, the 2024 update introduces new insights and considerations, particularly in the context of emerging renewable energy technologies like wave and tidal energy and further refines the demand forecasts. This edition provides a more comprehensive view of California's evolving energy landscape and the role of innovative resources in meeting future energy needs.

### 3.2.2 State of California Energy Plan

The CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access.

### 3.2.3 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 2025 California Title 24 Energy Standards became effective on January 1, 2026. As the Project is expected to be completed in 2030, 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 went 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.

### 3.2.4 AB 1493 Pavley Regulations and Fuel Efficiency Standards

California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Under this legislation, CARB adopted regulations to reduce GHG emissions from non-commercial passenger vehicles (cars and light-duty trucks). Although aimed at reducing GHG emissions, specifically, a co-benefit of the Pavley standards is an improvement in fuel efficiency and consequently a reduction in fuel consumption.

### 3.2.5 California's Renewable Portfolio Standard (RPS)

First established in 2002 under Senate Bill (SB) 1078, California's Renewable Portfolio Standards (RPS) requires retail sellers of electric services to increase procurement from eligible renewable resources to 44% of total retail sales by 2024 (20).

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

In October 2015, the legislature approved and the Governor signed SB 350, which reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the renewables portfolio standard (RPS), higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. 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 will be achieved through the California Public Utility Commission (CPUC), the CEC, and local publicly owned utilities.
- Reorganize the Independent System Operator (ISO) to develop more regional electricity transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States (California Leginfo 2015).

### 3.2.7 Executive Order N-79-20 and Advanced Clean Cars II

On August 25, 2022, CARB approved the Advanced Clean Cars II rule, which codifies the goals set out in Executive Order N-79-20 and establishes a year-by-year roadmap such that by 2035, 100% of new cars and light trucks sold in California will be zero-emission vehicles. Under this regulation, automakers are required to accelerate deliveries of zero-emission light-duty vehicles, beginning with model year 2026. CARB estimates that between 2026 and 2040, the regulation would reduce GHG emissions by a cumulative 395 million metric tons, equivalent to reducing petroleum use by 915 million barrels. However, asserting disputed authority under the Congressional Review Act, Congress passed, and the president signed, a joint resolution (H.J. Res 88) which disapproved the EPA waiver for the Advanced Clean Cars II rule. California is challenging these actions, but at the time of publication of the EIR, there is uncertainty about whether these rules will take place. Therefore, while ACC II is discussed for the sake of providing a complete picture of the potential regulatory framework, it is conservatively assumed for purposes of this analysis that ACC II is not, and will not, take effect.

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# 4 PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY MEASURES

## 4.1 EVALUATION CRITERIA

Appendix F of the *State CEQA Guidelines* (21) states that the means of achieving the goal of energy conservation includes the following:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, and oil; and
- Increasing reliance on renewable energy sources.

In compliance with Appendix G of the *State CEQA Guidelines* (22), this report analyzes the Project's anticipated energy use during construction and operations to determine if the Project would:

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

## 4.2 METHODOLOGY

Information from the CalEEMod Version 2022.1 outputs for the *Irwindale Brew Yard Specific Plan Air Quality Impact Analysis* (AQIA) (23) was utilized in this analysis, detailing Project-related construction equipment, transportation energy demands, and facility energy demands.

### 4.2.1 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 as well as energy usage (24). Accordingly, the latest version of CalEEMod has been used to determine the proposed Project's anticipated transportation and facility energy demands. Outputs from the annual model runs are provided in Appendices 4.1 through 4.3.

### 4.2.2 Emission Factors Model

On May 2, 2022, the EPA approved the 2021 version of the EMissions FACtor model (EMFAC) web database for use in State Implementation Plan and transportation conformity analyses. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (25). On November 21, 2025, the United States Environmental Protection Agency approved the use of EMFAC 2021 off-model adjustment factors. These adjustment factors remove the estimated emission benefits that were attributed to California's Advanced Clean Trucks, Zero-Emission Airport Shuttle, Heavy-Duty Vehicle and Engine Emission Warranty and Maintenance Provisions, and Heavy Duty Omnibus regulations from EMFAC 2021. Because the preemption waivers for these regulations

no longer have effect, these regulations are no longer enforceable. It should be noted that these adjustment factors only apply to emissions of ROG, $NO_X$, $PM_{10}$, and $PM_{2.5}$. Any effects on fuel efficiency are unknown and unquantifiable at this time.

This energy study utilizes the different fuel types for each vehicle class from the annual EMFAC2021 emission inventory in order to derive the average vehicle fuel economy which is then used to determine the estimated annual fuel consumption associated with vehicle usage during Project construction and operational activities. For purposes of analysis, the 2025 through 2030 analysis years were utilized to determine the average vehicle fuel economy used throughout the duration of the Project. Output from the EMFAC2021 model run is provided in Appendix 4.3.

## 4.3 Construction Energy Demands

The focus within this section is the energy implications of the construction process, specifically the power cost from on-site electricity consumption during construction of the proposed Project.

### 4.3.1 Construction Power Cost

The total Project construction power costs is the summation of the products of the area (sf) by the construction duration and the typical power cost.

#### Construction Duration

For purposes of analysis, Project construction would begin in May 2025 and would last through November 2030 (23). The construction schedule utilized in the analysis, shown in Table 4-1, represents a "worst-case" analysis scenario. The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (26).

**Table 4-1: Construction Duration**

| Construction Activity | Start Date | End Date | Days |
|---|---|---|---|
| Demolition | 5/13/2025 | 7/14/2025 | 45 |
| Filling of Northwest Pit (Site Preparation) | 7/15/2025 | 10/29/2029 | 1,120 |
| Filling of Southeast Pit (Site Preparation) | 7/15/2025 | 3/23/2026 | 180 |
| Site Infrastructure (Grading) | 3/24/2026 | 9/7/2026 | 120 |
| Phase I Building Construction | 5/5/2026 | 4/5/2027 | 240 |
| Phase I Paving | 9/8/2026 | 4/5/2027 | 150 |
| Phase I Architectural Coating | 9/8/2026 | 4/5/2027 | 150 |
| Phase II Building Construction | 12/11/2029 | 11/30/2030 | 254 |
| Phase II Paving | 5/4/2030 | 11/30/2030 | 150 |
| Phase II Architectural Coating | 5/4/2030 | 11/30/2030 | 150 |

#### Project Construction Power Cost

The *2025 National Construction Estimator* identifies a typical power cost per 1,000 sf of construction per month of $2.85, which was used to calculate the Project's total construction power cost (27). As

shown in Table 4-2, the total power cost of on-site electricity usage during the building construction of the Project is estimated to be approximately $575,141.

### TABLE 4-2: CONSTRUCTION POWER COST

| Land Use | Power Cost[1] | Total Building Size (1,000 SF) | Construction Duration (months) | Total Project Construction Power Cost |
|---|---|---|---|---|
| High-Cube Cold Storage | $2.85 | 535.000 | 67 | $102,158 |
| High-Cube Fulfillment Center (Sort) | $2.85 | 1,555.500 | 67 | $297,023 |
| Warehousing | $2.85 | 454.750 | 67 | $86,835 |
| High-Cube Short-Term Storage Warehouse | $2.85 | 454.750 | 67 | $86,835 |
| Strip Retail | $2.85 | 12.000 | 67 | $2,291 |
| | | | Total Project Construction Cost | $575,141 |

[1] Per 1,000 SF of building per month of construction

### 4.3.2 Construction Electricity Usage

The total Project construction electricity usage is the summation of the products of the power cost (estimated in Table 4-2) by the utility provider cost per kWh of electricity.

#### Project Construction Electricity Usage

The SCE's general service rate schedule was used to determine the Project's electrical usage. As of June 1, 2025, SCE's general service rate is $0.17 per kWh of electricity for industrial uses (28). As shown in Table 4-3, the total electricity usage from on-site Project construction related activities is estimated to be approximately 3,383,185 kWh.

### TABLE 4-3: CONSTRUCTION ELECTRICITY USAGE

| Land Use | Cost per kWh | Total Project Construction Electricity Usage (kWh) |
|---|---|---|
| High-Cube Cold Storage | $0.17 | 600,931 |
| High-Cube Fulfillment Center (Sort) | $0.17 | 1,747,193 |
| Warehousing | $0.17 | 510,791 |
| High-Cube Short-Term Storage Warehouse | $0.17 | 510,791 |
| Strip Retail | $0.17 | 13,479 |
| Total Project Construction Electricity Usage (kWh) | | 3,383,185 |

### 4.3.3 Construction Equipment Fuel Estimates

Fuel consumed by construction equipment would be the primary energy resource expended over the course of Project construction.

### Construction Equipment

A summary of construction equipment assumptions by phase is provided at Table 4-4.

**TABLE 4-4: CONSTRUCTION EQUIPMENT ASSUMPTIONS**

| Construction Activity | Equipment | Quantity | Hours Per Day |
|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 9.5 |
| | Excavators | 3 | 9.5 |
| | Rubber Tired Dozers | 2 | 9.5 |
| Filling of Northwest Pit | Rubber Tired Dozers | 4 | 9.5 |
| | Tractors/Loaders/Backhoes | 2 | 9.5 |
| | Excavators | 4 | 9.5 |
| | Off-Highway Trucks | 3 | 9.5 |
| | Crushing/Processing Equipment | 3 | 9.5 |
| Filling of Southeast Pit | Rubber Tired Dozers | 4 | 9.5 |
| | Tractors/Loaders/Backhoes | 2 | 9.5 |
| | Excavators | 4 | 9.5 |
| | Off-Highway Trucks | 3 | 9.5 |
| | Crushing/Processing Equipment | 3 | 9.5 |
| Site Infrastructure | Rubber Tired Dozers | 1 | 9.5 |
| | Graders | 1 | 9.5 |
| | Excavators | 2 | 9.5 |
| | Scrapers | 2 | 9.5 |
| | Tractors/Loaders/Backhoes | 2 | 9.5 |
| Phase I Building Construction | Cranes | 1 | 9.5 |
| | Forklifts | 3 | 9.5 |
| | Generator Sets | 1 | 9.5 |
| | Tractors/Loaders/Backhoes | 3 | 9.5 |
| | Welders | 1 | 9.5 |
| Phase I Paving | Pavers | 2 | 9.5 |
| | Paving Equipment | 2 | 9.5 |
| | Rollers | 2 | 9.5 |
| Phase I Architectural Coating | Air Compressors | 1 | 9.5 |
| Phase II Building Construction | Cranes | 1 | 9.5 |
| | Forklifts | 3 | 9.5 |
| | Generator Sets | 1 | 9.5 |
| | Tractors/Loaders/Backhoes | 3 | 9.5 |
| | Welders | 1 | 9.5 |
| Phase II Paving | Pavers | 2 | 9.5 |
| | Paving Equipment | 2 | 9.5 |
| | Rollers | 2 | 9.5 |

| Construction Activity | Equipment | Quantity | Hours Per Day |
|---|---|---|---|
| Phase II Architectural Coating | Air Compressors | 1 | 9.5 |

### Project Construction Equipment Fuel Consumption

Project construction activity timeline estimates, construction equipment schedules, equipment power ratings, load factors, and associated fuel consumption estimates are presented in Table 4-5. The aggregate fuel consumption rate for all equipment is estimated at 18.5 horsepower hour per gallon (hp-hr-gal.), obtained from CARB 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer Guidelines (29). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is consistent with industry standards. Diesel fuel would be supplied by existing industrial fuel providers serving the Project area and region.[2] As presented in Table 4-5, Project construction activities would consume an estimated total of 987,674 gallons of diesel fuel. Project construction would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose.

[2] Based on Appendix A of the CalEEMod User's Guide, Construction consists of several types of off-road equipment. Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod assumes all of the equipment operates on diesel fuel.

## TABLE 4-5: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

| Activity | Duration (Days) | Equipment | HP Rating | Quantity | Usage Hours | Load Factor | HP-hrs/day | Total Fuel Consumption |
|---|---|---|---|---|---|---|---|---|
| Demolition | 45 | Concrete/Industrial Saws | 33 | 1 | 9.5 | 0.73 | 229 | 557 |
| | | Excavators | 36 | 3 | 9.5 | 0.38 | 390 | 948 |
| | | Rubber Tired Dozers | 367 | 2 | 9.5 | 0.40 | 2,789 | 6,785 |
| Filling of NW Pit | 1,120 | Rubber Tired Dozers | 367 | 4 | 9.5 | 0.40 | 5,578 | 337,719 |
| | | Crawler Tractors | 87 | 2 | 9.5 | 0.43 | 711 | 43,032 |
| | | Excavators | 36 | 4 | 9.5 | 0.38 | 520 | 31,471 |
| | | Off-Highway Trucks | 376 | 3 | 9.5 | 0.38 | 4,072 | 246,526 |
| | | Other Material Handling Equipment | 93 | 3 | 9.5 | 0.40 | 1,060 | 64,185 |
| Filling of SE Pit | 180 | Rubber Tired Dozers | 367 | 4 | 9.5 | 0.40 | 5,578 | 54,276 |
| | | Crawler Tractors | 87 | 2 | 9.5 | 0.43 | 711 | 6,916 |
| | | Excavators | 36 | 4 | 9.5 | 0.38 | 520 | 5,058 |
| | | Off-Highway Trucks | 376 | 3 | 9.5 | 0.38 | 4,072 | 39,620 |
| | | Other Material Handling Equipment | 93 | 3 | 9.5 | 0.40 | 1,060 | 10,315 |
| Site Infrastructure | 120 | Excavators | 36 | 2 | 9.5 | 0.38 | 260 | 1,686 |
| | | Graders | 148 | 1 | 9.5 | 0.41 | 576 | 3,739 |
| | | Rubber Tired Dozers | 367 | 1 | 9.5 | 0.40 | 1,395 | 9,046 |
| | | Scrapers | 423 | 2 | 9.5 | 0.48 | 3,858 | 25,023 |
| | | Crawler Tractors | 87 | 2 | 9.5 | 0.43 | 711 | 4,611 |
| Phase I Building Construction | 240 | Forklifts | 82 | 3 | 9.5 | 0.20 | 467 | 6,064 |
| | | Generator Sets | 14 | 1 | 9.5 | 0.74 | 98 | 1,277 |
| | | Cranes | 367 | 1 | 9.5 | 0.29 | 1,011 | 13,117 |
| | | Welders | 46 | 1 | 9.5 | 0.45 | 197 | 2,551 |
| | | Tractors/Loaders/Backhoes | 84 | 3 | 9.5 | 0.37 | 886 | 11,491 |
| Phase I Paving | 150 | Pavers | 81 | 2 | 9.5 | 0.42 | 646 | 5,241 |
| | | Paving Equipment | 89 | 2 | 9.5 | 0.36 | 609 | 4,936 |
| | | Rollers | 36 | 2 | 9.5 | 0.38 | 260 | 2,107 |
| Phase I Architectural Coating | 150 | Air Compressors | 37 | 1 | 9.5 | 0.48 | 169 | 1,368 |

| Activity | Duration (Days) | Equipment | HP Rating | Quantity | Usage Hours | Load Factor | HP-hrs/day | Total Fuel Consumption |
|---|---|---|---|---|---|---|---|---|
| Phase II Building Construction | 254 | Forklifts | 82 | 3 | 9.5 | 0.20 | 467 | 6,417 |
| | | Generator Sets | 14 | 1 | 9.5 | 0.74 | 98 | 1,351 |
| | | Cranes | 367 | 1 | 9.5 | 0.29 | 1,011 | 13,882 |
| | | Welders | 46 | 1 | 9.5 | 0.45 | 197 | 2,700 |
| | | Tractors/Loaders/Backhoes | 84 | 3 | 9.5 | 0.37 | 886 | 12,162 |
| Paving | 150 | Pavers | 81 | 2 | 8 | 0.42 | 544 | 4,413 |
| | | Paving Equipment | 89 | 2 | 8 | 0.36 | 513 | 4,157 |
| | | Rollers | 36 | 2 | 8 | 0.38 | 219 | 1,775 |
| Architectural Coating | 150 | Air Compressors | 37 | 1 | 8 | 0.48 | 142 | 1,152 |
| | | | | | | | Total Construction Fuel Demand (Gallons Fuel) | 987,674 |

### 4.3.4 Construction Trips and VMT

Construction generates on-road vehicle emissions from vehicle usage for workers and vendors commuting to and from the site. The number of workers and vendor trips are presented below in Table 4-6.

**TABLE 4-6: CONSTRUCTION TRIPS AND VMT**

| Construction Activity | Trips Per Day | | | |
|---|---|---|---|---|
| | Worker | Vendor | Onsite Truck | Hauling |
| Demolition | 15 | 0 | 0 | 6 |
| Filling of NW Pit (Site Preparation) | 40 | 0 | 451 | 1,004 |
| Filling of SE Pit (Site Preparation) | 40 | 0 | 705 | 0 |
| Site Infrastructure (Grading) | 40 | 0 | 0 | 0 |
| Phase I Building Construction | 791 | 309 | 0 | 0 |
| Phase I Paving | 15 | 0 | 0 | 0 |
| Phase I Architectural Coating | 158 | 0 | 0 | 0 |
| Phase II Building Construction | 473 | 185 | 0 | 0 |
| Phase II Paving | 15 | 0 | 0 | 0 |
| Phase II Architectural Coating | 95 | 0 | 0 | 0 |

### 4.3.5 Construction Worker Fuel Estimates

With respect to estimated VMT for the Project, construction worker trips would generate an estimated 7,581,800 VMT during the 67 months of construction (23). Based on CalEEMod methodology, it is assumed that 50% of all worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks (LDT1[3]), and 25% are from light-duty-trucks (LDT2[4]). Data regarding Project related construction worker trips were based on CalEEMod defaults utilized within the AQIA.

Vehicle fuel efficiencies for LDA, LDT1, and LDT2 were estimated using information generated within the 2021 version of the EMFAC developed by CARB. EMFAC2021 is a mathematical model that was developed to calculate emission rates, fuel consumption, and VMT from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the CARB to project changes in future emissions from on-road mobile sources (25). EMFAC2021 was run for the LDA, LDT1, and LDT2 vehicle class within the Los Angeles (SC) sub-area for the 2025 through 2030 calendar years. Data from EMFAC2021 is shown in Appendix 4.3.

Table 4-7 provides an estimated annual fuel consumption resulting from Project construction worker trips. Based on Table 4-7, it is estimated that 255,101 gallons of fuel will be consumed related to construction worker trips during full construction of the Project. For a conservative analysis, two-way worker trips are estimated in Table 4-7 to account for the annual fuel consumption. It should be

[3] 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.

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

noted that construction worker trips would represent a "single-event" gasoline fuel demand and would not require on-going or permanent commitment of fuel resources for this purpose.

## TABLE 4-7: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES

| Year | Construction Activity | Duration (Days) | Worker Trips / Day | Trip Length (miles) | Vehicle Miles Traveled | Average Vehicle Fuel Economy (mpg) | | | Estimated Fuel Consumption (gallons) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | LDA | LDT1 | LDT2 | |
| 2025 | Demolition | 45 | 15 | 18.5 | 12,488 | 32.24 | 24.82 | 24.75 | 446 |
| | Filling of NW Pit | 122 | 40 | 18.5 | 90,280 | 32.24 | 24.82 | 24.75 | 3,221 |
| | Filling of SE Pit | 122 | 40 | 18.5 | 90,280 | 32.24 | 24.82 | 24.75 | 3,221 |
| 2026 | Filling of NW Pit | 260 | 40 | 18.5 | 192,400 | 33.12 | 25.34 | 25.41 | 6,696 |
| | Filling of SE Pit | 58 | 40 | 18.5 | 42,920 | 33.12 | 25.34 | 25.41 | 1,494 |
| | Site Infrastructure | 120 | 40 | 18.5 | 88,800 | 33.12 | 25.34 | 25.41 | 3,090 |
| | Ph I Building Construction | 173 | 791 | 18.5 | 2,531,596 | 33.12 | 25.34 | 25.41 | 88,106 |
| | Ph I Paving | 83 | 15 | 18.5 | 23,033 | 33.12 | 25.34 | 25.41 | 802 |
| | Ph I Architectural Coating | 83 | 158 | 18.5 | 242,609 | 33.12 | 25.34 | 25.41 | 8,443 |
| 2027 | Filling of NW Pit | 260 | 40 | 18.5 | 192,400 | 33.97 | 25.86 | 26.03 | 6,540 |
| | Ph I Building Construction | 67 | 791 | 18.5 | 980,445 | 33.97 | 25.86 | 26.03 | 33,327 |
| | Ph I Paving | 67 | 15 | 18.5 | 18,593 | 33.97 | 25.86 | 26.03 | 632 |
| | Ph I Architectural Coating | 67 | 158 | 18.5 | 195,841 | 33.97 | 25.86 | 26.03 | 6,657 |
| 2028 | Filling of NW Pit | 260 | 40 | 18.5 | 192,400 | 34.79 | 26.37 | 26.60 | 6,398 |
| 2029 | Filling of NW Pit | 216 | 40 | 18.5 | 159,840 | 35.57 | 26.88 | 27.12 | 5,206 |
| | Ph II Building Construction | 15 | 473 | 18.5 | 131,258 | 35.57 | 26.88 | 27.12 | 4,275 |
| 2030 | Ph II Building Construction | 239 | 473 | 18.5 | 2,091,370 | 36.34 | 27.39 | 27.62 | 66,798 |
| | Ph II Paving | 150 | 15 | 18.5 | 41,625 | 36.34 | 27.39 | 27.62 | 1,329 |
| | Ph II Architectural Coating | 150 | 95 | 18.5 | 263,625 | 36.34 | 27.39 | 27.62 | 8,420 |
| TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION | | | | | | | | | 255,101 |

### 4.3.6 Construction Vendor and Hauling Fuel Estimates

With respect to estimated VMT, the construction vendor trips (vehicles that deliver materials to the site during construction), onsite trips (movement of material within the site) and hauling trips (export/import of demolition debris and soil) would generate an estimated 24,065,671 VMT for the Project over the duration of construction activity (23). It is assumed that 50% of all vendor trips are from MHDTs and 50% of vendor trips are from HHDTs. All onsite and hauling trips were assumed to be performed by HHDT vehicles. These assumptions are consistent with the CalEEMod defaults utilized within the within the AQIA (23). Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2021. EMFAC2021 was run for the MHDT and HHDT vehicle classes within the California sub-area for the 2025 through 2030 calendar years. Data from EMFAC2021 is shown in Appendix 4.3.

As shown in Table 4-8, it is estimated that 3,673,829 gallons of fuel will be consumed related to construction vendor and hauling trips during full construction of the Project. For a conservative analysis, two-way vendor trips are estimated in Table 4-8 to account for the annual fuel consumption. It should be noted that Project construction vendor trips would represent a "single-event" diesel fuel demand and would not require on-going or permanent commitment of diesel fuel resources for this purpose. It should be noted that it is not anticipated that natural gas would be used during Project construction.

## TABLE 4-8: CONSTRUCTION VENDOR AND HAULING FUEL CONSUMPTION ESTIMATES

| Construction Activity | Duration (Days) | Trips/Day | | | Trip Length (miles) | | | Average Vehicle Fuel Economy (mpg) | | Estimated Fuel Consumption (gallons) |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Vendor | Onsite | Hauling | Vendor | Onsite | Hauling | MHD | HHD | |
| 2025 | | | | | | | | | | |
| Demolition | 45 | 0 | 0 | 6 | 0 | 0 | 20.0 | 7.73 | 6.14 | 879 |
| Filling of NW Pit | 122 | 0 | 451 | 1,004 | 0 | 0.53 | 20.0 | 7.73 | 6.14 | 398,881 |
| Filling of SE Pit | 122 | 0 | 705 | 0 | 0 | 0.85 | 0 | 7.73 | 6.14 | 0 |
| 2026 | | | | | | | | | | |
| Filling of NW Pit | 260 | 0 | 451 | 1,004 | 0 | 0.53 | 20.0 | 7.86 | 6.25 | 835,139 |
| Filling of SE Pit | 58 | 0 | 705 | 0 | 0 | 0.85 | 0 | 7.86 | 6.25 | 0 |
| Site Infrastructure | 120 | 0 | 0 | 0 | 0 | 0 | 0 | 7.86 | 6.25 | 0 |
| Ph I Building Construction | 173 | 309 | 0 | 0 | 10.2 | 0 | 0 | 7.86 | 6.25 | 78,293 |
| Ph I Paving | 83 | 0 | 0 | 0 | 0 | 0 | 0 | 7.86 | 6.25 | 0 |
| Ph I Architectural Coating | 83 | 0 | 0 | 0 | 0 | 0 | 0 | 7.86 | 6.25 | 0 |
| 2027 | | | | | | | | | | |
| Filling of NW Pit | 260 | 0 | 451 | 1,004 | 0 | 0.53 | 20.0 | 8.02 | 6.38 | 818,798 |
| Ph I Building Construction | 67 | 309 | 0 | 0 | 10.2 | 0 | 0 | 8.02 | 6.38 | 29,726 |
| Ph I Paving | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 8.02 | 6.38 | 0 |
| Ph I Architectural Coating | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 8.02 | 6.38 | 0 |
| 2028 | | | | | | | | | | |
| Filling of NW Pit | 260 | 0 | 451 | 1,004 | 0 | 0.53 | 20.0 | 8.23 | 6.52 | 800,566 |
| 2029 | | | | | | | | | | |
| Filling of NW Pit | 216 | 0 | 451 | 1,004 | 0 | 0.53 | 20.0 | 8.49 | 6.68 | 649,275 |
| Ph II Building Construction | 15 | 185 | 0 | 0 | 10.2 | 0 | 0 | 8.49 | 6.68 | 3,785 |
| 2030 | | | | | | | | | | |
| Ph II Building Construction | 239 | 185 | 0 | 0 | 10.2 | 0 | 0 | 8.82 | 6.85 | 58,488 |
| Ph II Paving | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 8.82 | 6.85 | 0 |
| Ph II Architectural Coating | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 8.82 | 6.85 | 0 |
| TOTAL VENDOR, ONSITE, AND HAUL TRUCK FUEL CONSUMPTION | | | | | | | | | | 3,673,829 |

### 4.3.7 Construction Energy Efficiency/Conservation Measures

Starting in 2014, CARB adopted the nation's first regulation aimed at cleaning up off-road construction equipment such as bulldozers, graders, and backhoes. These requirements ensure fleets gradually turnover the oldest and dirtiest equipment to newer, cleaner models and prevent fleets from adding older, dirtier equipment. As such, the equipment used for Project construction would conform to CARB regulations and California emissions standards. It should also be noted that there are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in the construction of the Project would therefore not result in inefficient wasteful, or unnecessary consumption of fuel.

Construction contractors would be required to comply with applicable CARB regulation regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with anti-idling and emissions regulations would result in a more efficient use of construction-related energy and the minimization or elimination of wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additional construction-source energy efficiencies would occur due to required California regulations and best available control measures (BACM). For example, CCR Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Section 2449(d)(3) requires that grading plans shall reference the requirement that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling." In this manner, construction equipment operators are required to be informed that engines are to be turned off at or prior to five minutes of idling. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

A full analysis related to the energy needed to form construction materials is not included in this analysis due to a lack of detailed Project-specific information on construction materials. At this time, an analysis of the energy needed to create Project-related construction materials would be extremely speculative and thus has not been prepared.

In general, the construction processes promote conservation and efficient use of energy by reducing raw materials demands, with related reduction in energy demands associated with raw materials extraction, transportation, processing, and refinement. Use of materials in bulk reduces energy demands associated with preparation and transport of construction materials as well as the transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

## 4.4 OPERATIONAL ENERGY DEMANDS

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by passenger car and truck vehicles accessing the Project site), fuel demands from operational equipment, and facilities energy demands (energy consumed by building operations and site maintenance activities).

### 4.4.1 Transportation Energy Demands

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. The VMT per vehicle class can be determined by evaluating the vehicle fleet mix and the total VMT. As with worker and vendor trips, operational vehicle fuel efficiencies were estimated using information generated within EMFAC2021 developed by CARB (25). EMFAC2021 was run for the Los Angeles (SC) area for the 2030 calendar year. Data from EMFAC2021 is shown in Appendix 4.3.

As summarized in Table 4-9, the Project would result in 64,075,275 annual VMT and an estimated annual fuel consumption of 3,533,959 gallons of fuel.

**TABLE 4-9: TOTAL PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION**

| Vehicle Type | Average Vehicle Fuel Economy (mpg) | Annual VMT | Estimated Annual Fuel Consumption (gallons) |
|---|---|---|---|
| HHD | 6.85 | 8,327,753 | 1,215,898 |
| LDA | 36.34 | 25,467,466 | 700,882 |
| LDT1 | 27.39 | 2,159,013 | 78,820 |
| LDT2 | 27.62 | 13,421,730 | 486,000 |
| LHD1 | 18.67 | 1,908,311 | 102,194 |
| LHD2 | 17.59 | 505,691 | 28,751 |
| MCY | 41.79 | 1,221,115 | 29,219 |
| MDV | 22.92 | 7,901,801 | 344,830 |
| MH | 5.78 | 6,575 | 1,137 |
| MHD | 8.82 | 3,150,738 | 357,195 |
| OBUS | 6.79 | 1,990 | 293 |
| SBUS | 6.92 | 1,598 | 231 |
| UBUS | 4.63 | 1,495 | 323 |
| TRUs | -- | -- | 188,187 |
| Project Annual Fuel Consumption (All Vehicles) | | | 3,533,959 |

### 4.4.2 Emergency Engine Fuel Demands

The proposed Project was conservatively assumed to include a total of five emergency fire pumps and one emergency generator. Each emergency fire pump was assumed to be diesel-fueled and rated at 350 brake horsepower, while the emergency generator was assumed to be diesel-fueled and rated at 2,000 brake horsepower. Each emergency engine 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. As

presented in Table 4-10, emergency engine operation for maintenance and testing purposes would consume an estimated 7,061 gallons of diesel fuel per year at buildout.

**TABLE 4-10: EMERGENCY ENGINE FUEL CONSUMPTION ESTIMATES**

| Equipment | Quantity | Horsepower | Fuel Consumption (gal./hour) | Activity (hrs./yr) | Total Fuel Consumption |
|---|---|---|---|---|---|
| Fire Pump | 5 | 350 | 13.18 | 50 | 3,295 |
| Emergency Generator | 1 | 2,000 | 75.32 | 50 | 3,766 |
| | | | | Total Annual Fuel Consumption: | 7,061 |

### 4.4.3 On-Site Cargo Handling Equipment Fuel Demands

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 eleven pieces of equipment [5]. Each piece of equipment was modeled as a 175-horsepower natural gas-powered port tractor and assumed to operate 4 hours a day[6] for 365 days of the year. As shown below on Table 4-11, on-site operational cargo handling equipment is estimated to consume approximately 51,071 gallons of fuel per year at buildout.

**TABLE 4-11: ON-SITE CARGO HANDLING EQUIPMENT FUEL CONSUMPTION ESTIMATES**

| Equipment | Quantity | Usage Hours | Fuel Consumption (gals./hr.) | Activity (hrs./yr) | Total Fuel Consumption (gal.yr) |
|---|---|---|---|---|---|
| Port Tractor | 11 | 4 | 3.18 | 16,060 | 51,071 |

### 4.4.4 Facility Energy Demands

Project building operations activities would result in the consumption of electricity, which would be supplied to the Project through rooftop solar as well as by SCE. As summarized in Table 4-12, the Project would result in an estimated 16,699,027 kWh/year of electricity demand at buildout. Additionally, it was conservatively estimated that the Project would result in an estimated 60,951,840 kBTU/year of natural gas demand. Project electricity and natural gas demand are based on CalEEMod defaults.

[5] 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.

[6] 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.

### TABLE 4-12: PROJECT ANNUAL OPERATIONAL ENERGY DEMAND SUMMARY

| Energy Type | Natural Gas (kBTU/year) | Electricity (kWh/year) |
|---|---|---|
| High-Cube Cold Storage | 13,402,323 | 5,347,070 |
| High-Cube Fulfillment Center (Sort) | 29,961,336 | 5,669,798 |
| Warehousing | 8,759,188 | 1,657,564 |
| High-Cube Short-Term Storage Warehouse | 8,759,188 | 1,657,564 |
| Strip Retail | 69,805 | 79,807 |
| Parking Lot | 0 | 2,287,224 |
| Total | 60,951,840 | 16,699,027 |

### 4.4.3 Operational Energy Efficiency/Conservation Measures

Energy efficiency/energy conservation attributes of the Project would be complemented by increasingly stringent state and federal regulatory actions addressing vehicle fuel economies and vehicle emissions standards; and enhanced building/utilities energy efficiencies mandated under California building codes (e.g., Title 24, California Green Building Standards Code).

The Project incorporates a series of measures that generally reduce energy demand associated with the Project. As previously stated, the Project will comply with Title 24 Standards which include incorporating contemporary design features such as photovoltaic systems or renewable energy. Specifically, the Project would install rooftop solar systems to offset 45% of the warehouse electrical demands.

The Project would also not result in a substantial increase in demand for transmission service, resulting in the need for new or expanded sources of energy supply or new or expanded energy delivery systems or infrastructure (other than site-adjacent and on-site connects to local utilities).

#### Enhanced Vehicle Fuel Efficiencies

Project annual fuel consumption estimates presented previously in Table 4-9 represent likely potential maximums that would occur for the Project. Under subsequent future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation, and to a lesser and uncertain extent, in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Although not relied upon for purposes of this analysis, enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) could further decrease future gasoline fuel demands per VMT. The Project's location near regional and local road networks helps decrease VMT in the area, which in turn reduces the overall energy demand for vehicles in the region.

## 4.5 SUMMARY

### 4.5.1 Construction Energy Demands

The estimated power cost of on-site electricity usage during the building construction of the Project is assumed to be approximately $575,141. Additionally, based on the assumed power cost, it is estimated that the total electricity usage during construction, after full Project build-out, is calculated to be approximately 3,383,185 kWh.

Construction equipment used by the Project would result in single event consumption of approximately 987,674 gallons of diesel fuel. Construction equipment use of fuel would not be atypical for the type of construction proposed because there are no aspects of the Project's proposed construction process that are unusual or energy-intensive, and Project construction equipment would conform to the applicable CARB emissions standards, acting to promote equipment fuel efficiencies.

CCR Title 13, Title 13, Motor Vehicles, section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than 5 minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. BACMs inform construction equipment operators of this requirement. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials, and/or in response to citizen complaints.

Construction worker trips for full construction of the Project would result in the estimated fuel consumption of 255,101 gallons of fuel. Additionally, fuel consumption from construction vendor trips (MHDTs and HHDTs) and hauling trips (HHDTs) will total approximately 3,673,829 gallons. Diesel fuel would be supplied by City and regional industrial vendors. Indirectly, construction energy efficiencies and energy conservation would be achieved using bulk purchases, transport and use of construction materials. The 2024 IEPR released by the CEC has shown that fuel efficiencies are getting better within on and off-road vehicle engines due to more stringent government requirements (30). As supported by the preceding discussions, Project construction energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

### 4.5.2 Operational Energy Demands

#### Transportation Energy Demands

Annual vehicular trips and related VMT generated by the operation of the Project would result in a fuel demand of 3,533,959 gallons of fuel.

Fuel would be provided by current and future industrial vendors. Trip generation and VMT generated by the Project are consistent with other industrial uses of similar scale and configuration, as reflected respectively in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Ed., 2021); and CalEEMod. As such, Project operations would not result in excessive and wasteful vehicle trips and VMT, nor excess and wasteful vehicle energy consumption compared to other industrial uses.

It should be noted that the state strategy for the transportation sector for medium and heavy-duty trucks is focused on making trucks more efficient and expediting truck turnover rather than reducing VMT from trucks. This is in contrast to the passenger vehicle component of the transportation sector

where both per-capita VMT reductions and an increase in vehicle efficiency are forecasted to be needed to achieve the overall state emissions reductions goals.

Heavy duty trucks involved in goods movements are generally controlled on the technology side and through fleet turnover of older trucks and engines to newer and cleaner trucks and engines. The first battery-electric HHDTs are being tested this year and SCAQMD is looking to integrate this new technology into large-scale truck operations. The following state strategies reduce GHG emissions from the medium and heavy-duty trucks:

- CARB's Mobile Source Strategy focuses on reducing GHGs through the transition to zero and low emission vehicles and from medium-duty and heavy-duty trucks.
- CARB's Sustainable Freight Action Plan establishes a goal to improve freight efficiency by 25 percent by 2030, deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment powered by renewable energy by 2030.
- CARB's Emissions Reduction Plan for Ports and Goods Movement (Goods Movement Plan) in California focuses on reducing heavy-duty truck-related emissions focus on establishment of emissions standards for trucks, fleet turnover, truck retrofits, and restriction on truck idling (CARB 2006). While the focus of Goods Movement Plan is to reduce criteria air pollutant and air toxic emissions, the strategies to reduce these pollutants would also generally have a beneficial effect in reducing GHG emissions.
- CARB's On-Road Truck and Bus Regulation (2010) requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. Newer heavier trucks and buses must meet particulate matter filter requirements beginning January 1, 2012. Lighter and older heavier trucks must be replaced starting January 1, 2015. By January 1, 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent (31).
- CARB's Heavy-Duty (Tractor-Trailer) GHG Regulation requires SmartWay tractor trailers that include idle-reduction technologies, aerodynamic technologies, and low-rolling resistant tires that would reduce fuel consumption and associated GHG emissions.

Enhanced fuel economies realized pursuant to federal and state regulatory actions, and related transition of vehicles to alternative energy sources (e.g., electricity, natural gas, biofuels, hydrogen cells) could further decrease future gasoline fuel demands per VMT. The Project's location near regional and local road networks helps decrease VMT in the area, which in turn reduces the overall energy demand for vehicles in the region. Notwithstanding the uncertainty in implementing future regulations, the Project would implement sidewalks, facilitating and encouraging pedestrian access. Facilitating pedestrian and bicycle access would reduce VMT and associated energy consumption. In all cases, transportation energy use would be comparable to other industrial uses of similar scale and configuration. As supported by the preceding discussions, Project transportation energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

### On-Site Cargo Handling Equipment Fuel Demands

The analysis assumed the operation of a total of eleven pieces of equipment. On-site operational cargo handling equipment is estimated to consume approximately 51,071 gallons of fuel per year at buildout.

### Emergency Engine Fuel Demands

The proposed Project was conservatively assumed to include a total of five emergency fire pumps and one emergency generator. Emergency engine operation for maintenance and testing purposes would consume an estimated 7,061 gallons of diesel fuel per year at buildout.

### Facility Energy Demands

Project facility operational energy demands are estimated to result in 16,699,027 kWh per year of electricity demand for the Project, which would be supplied by SCE. Natural gas usage was estimated at 60,951,840 kBTU per year, which would be provided by SoCalGas. The Project proposes conventional industrial uses reflecting contemporary energy efficient/energy conserving designs and operational programs. The Project does not propose uses that are inherently energy intensive and the energy demands in total would be comparable to other industrial uses of similar scale and configuration.

The Project will comply with the applicable Title 24 standards. Compliance itself with applicable Title 24 standards will ensure that the Project energy demands would not be inefficient, wasteful, or otherwise unnecessary.

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# 5 CONCLUSIONS

## 5.1 ENERGY IMPACT 1

Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

### Impact Analysis

A significant impact would occur if the proposed Project would result in the inefficient, wasteful, or unnecessary use of energy.

### Construction

Based on CalEEMod estimations within the modeling output, construction-related vehicle trips would result in approximately 31,647,470 VMT and consume an estimated 3,928,930 gallons of gasoline and diesel combined during construction. Additionally, on-site construction equipment would consume an estimated 987,674 gallons of diesel fuel. Limitations on the idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California Code of Regulations, Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by the CARB. Additionally, given the cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction.

Due to the temporary nature of construction and the financial incentives for developers and contractors to use energy-consuming resources in an efficient manner, the construction phase of the proposed Project would not result in wasteful, inefficient, and unnecessary consumption of energy. Therefore, the construction-related impacts related to electricity and fuel consumption would be less than significant.

### Operation

#### Electricity and Natural Gas

Operation of the proposed Project would consume energy as part of building operations and transportation activities including passenger vehicle traffic. Building operations would involve energy consumption for multiple purposes including, but not limited to, building heating and cooling, refrigeration, lighting, and electronics. Based on CalEEMod energy use estimations, operations for the Project would result in approximately 16,699,027 kWh of electricity demand and 60,951,840 kBTU of natural gas demand annually.

The proposed Project would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards are widely regarded as the most advanced energy efficiency standards and would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

### Fuel

Operational energy would also be consumed during vehicle trips associated with the proposed Project. Fuel consumption would be primarily related to vehicle use by visitors and employees associated with the Project. Based on CalEEMod energy use estimations, project-related vehicle trips would result in approximately 64,075,275 VMT and consume an estimated 3,533,959 gallons of gasoline and diesel combined, annually (see Appendix 4.3).

The Project is within close proximity of existing land uses that would provide future employees access to facilities such as residents, restaurants, a gas station, and other commercial uses, which would further reduce fuel consumption demand. For these reasons, operational-related transportation fuel consumption would not result in a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, the operational impact related to vehicle fuel consumption would be less than significant.

## 5.2 ENERGY IMPACT 2

Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

### Impact Analysis

A significant impact would occur if the proposed Project would conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

### Construction

As discussed in Section 5.1 above, the proposed Project would result in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment, and the use of electricity for temporary buildings used during construction, lighting, and other sources. California Code of Regulations Title 13, Sections 2449 and 2485, limit idling from both on-road and off-road diesel-powered equipment and are enforced by CARB. The proposed Project would comply with these regulations. There are no policies at the local level applicable to energy conservation specific to the construction phase. Thus, it is anticipated that construction of the proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, construction-related energy efficiency and renewable energy standards consistency impacts would be less than significant.

### Operation

The proposed Projects would be designed and constructed in accordance with the City's latest adopted energy efficiency standards, which are based on the California Title 24 energy efficiency standards. Title 24 standards include a broad set of energy conservation requirements that apply to the structural, mechanical, electrical, and plumbing systems in a building. For example, the Title 24 Lighting Power Density requirements define the maximum wattage of lighting that can be used in a building based on its square footage. Title 24 standards, widely regarded as the most advanced energy efficiency standards, would help reduce the amount of energy required for lighting, water heating, and heating and air conditioning in buildings and promote energy conservation.

Compliance with the aforementioned mandatory measures would ensure that the proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing energy use or increasing the use of renewable energy. Therefore, operational energy efficiency and renewable energy standards consistency impacts would be less than significant.

### Cumulative Impacts

As discussed previously, the proposed Project would not conflict with or obstruct any state or local plan for renewable energy or energy efficiency, and Project-related energy usage would not be wasteful, inefficient, or unnecessary. As discussed previously, the proposed Project would implement several energy saving measures and would comply with California Title 24 energy efficiency standards. Therefore, the proposed Project's cumulative energy impacts would be considered less than significant.

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# 6 REFERENCES


1. **State of California.** *2024 CEQA California Environmental Quality Act.* 2024.

2. **Urban Crossroads, Inc.** *Irwindale Brew Yard Specific Plan Air Quality Impact Analysis.* 2026.

3. **Administration, U.S. Energy Information.** California State Profile and Energy Estimates. [Online] https://www.eia.gov/state/data.php?sid=CA#ConsumptionExpenditures.

4. **U.S. Energy Information Administration.** Use of Energy in the United States Explained Energy Use for Transportation. [Online] https://www.eia.gov/energyexplained/use-of-energy/transportation.php.

5. —. Use of Energy in the United States Explained Energy Use for Transportation. [Online] https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=MTPUPUS1&f=A.

6. —. Prime Supplier Sales Volume, California, Annual. [Online] 2022. https://www.eia.gov/dnav/pet/pet_cons_prim_dcu_SCA_a.htm.

7. —. California Energy Consumption by End-Use Sector. *California State Profile and Energy Estimates.* [Online] https://www.eia.gov/state/?sid=CA#tabs-2.

8. —. California State Profile and Energy Estimates. [Online] https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_use_es.pdf.

9. —. California State Profile and Energy Estimates. [Online] https://www.eia.gov/dnav/ng/ng_cons_sum_dcu_SCA_a.htm.

10. **California Energy Commission.** 2023 Total System Electric Generation. *CA.gov.* [Online] https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2023-total-system-electric-generation.

11. **U.S. Energy Information Administration.** California State Profile and Energy Estimates. [Online] June 20, 2025. https://www.eia.gov/state/?sid=CA.

12. **California Energy Commission.** Integrated Energy Policy Report. [Online] https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report-iepr/2023-integrated-energy-policy-report.

13. **California ISO.** Understanding the ISO. [Online] http://www.caiso.com/about/Pages/OurBusiness/UnderstandingtheISO/default.aspx.

14. **Southern California Edison.** *Southern California Edison's Service Area.* [Online] https://download.newsroom.edison.com/create_memory_file/?f_id=5cc32d492cfac24d21aecf4c&content_verified=True.

15. —. 2024 Power Content Label. *Southern California Edison.* [Online] https://www.sce.com/regulatory/regulatory-information/document-library/customer-business-connection-archive.

16. **California Public Utilities Commission.** Natural Gas and California. [Online] https://www.cpuc.ca.gov/industries-and-topics/natural-gas/natural-gas-and-california.

17. **California Department of Motor Vehicles.** DMV Statistics. *State of California Department of Motor Vehicles.* [Online] https://www.dmv.ca.gov/portal/news-and-media/dmv-statistics/.

18. **U.S. Energy Information Administration.** California Analysis. *Energy Information Administration.* [Online] https://www.eia.gov/beta/states/states/ca/analysis.

19. **California Energy Commission Staff.** 2024 Integrated Energy Policy Report Update. [Online] 2025. https://www.energy.ca.gov/publications/2024/2024-integrated-energy-policy-report-update.

20. **California Energy Commission.** Renewables Portfolio Standard (RPS). [Online] 2002. http://www.energy.ca.gov/portfolio/.

21. **State of California.** *California Environmental Quality Act Guideline, California Public Resources Code, Title 14, Division 6, Chapter 3,.*

22. **Association of Environmental Professionals.** *2024 CEQA California Environmental Quality Act.* 2024.

23. **Urban Crossroads, Inc.** *Irwindale Brew Yard Specific Plan Air Quality Impact Analysis.* 2026.

24. **California Air Pollution Control Officers Association (CAPCOA).** California Emissions Estimator Model (CalEEMod). [Online] May 2022. www.caleemod.com.

25. **California Department of Transportation.** EMFAC Software. [Online] http://www.dot.ca.gov/hq/env/air/pages/emfac.htm.

26. **State of California.** *2024 CEQA California Environmental Quality Act.* 2024.

27. **Pray, Richard.** *2025 National Construction Estimator.* Carlsbad : Craftsman Book Company, 2025.

28. **Southern California Edison.** Rates & Pricing Choices. *Southern California Edison.* [Online] https://www.sce.com/regulatory/tariff-books/rates-pricing-choices.

29. **California Air Resources Board.** *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects For Evaluating Motor Vehicle Registration Fee Projects And Congestion Mitigation and Air Quality Improvement (CMAQ) Projects, Emission Factor Tables.* 2018.

30. **California Energy Commission.** 2024 Integrated Energy Policy Report Update. [Online] 2025. https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report-iepr/2024-integrated-energy-policy-report.

31. **California Air Resources Board.** Truck and Bus Regulation. [Online] https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation.

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# 7 CERTIFICATION

The contents of this energy analysis report represent an accurate depiction of the environmental impacts associated with the proposed Irwindale Brew Yard Specific Plan Project. The information contained in this energy analysis 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
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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# APPENDIX 4.1:

# CALEEMOD EMISSIONS MODEL OUTPUTS – CONSTRUCTION

# 15575 Brew Yard Site Prep Detailed Report

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## 8.1. Justifications

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | 15575 Brew Yard Site Prep |
| Construction Start Date | 7/15/2025 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 1.8 |
| Precipitation (days) | 22 |
| Location | 34.126753567265794, -117.94443250223712 |
| County | Los Angeles-South Coast |
| City | Irwindale |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 4900 |
| EDFZ | 7 |
| 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 |
|---|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 535 | 1000sqft | 12 | 535,000 | 0.00 | — | — | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Unrefrigerated Warehouse-No Rail | 2,465 | 1000sqft | 77 | 2,465,000 | 878,779 | — | — | — |
| Strip Mall | 12 | 1000sqft | 1.1 | 12,000 | 39,210 | — | — | — |
| Parking Lot | 60 | Acre | 60 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Construction | C-5 | Use Advanced Engine Tiers |

## 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. | 26 | 18 | 240 | 182 | 0.77 | 6.8 | 79 | 85 | 6.4 | 18 | 25 | — | 103,510 | 103,510 | 5.9 | 12 | 172 | 107,391 |
| Mit. | 10 | 4.9 | 124 | 201 | 0.77 | 1.4 | 79 | 80 | 1.4 | 18 | 20 | — | 103,510 | 103,510 | 5.9 | 12 | 172 | 107,391 |
| % Reduced | 60% | 72% | 48% | -10% | — | 79% | — | 6% | 77% | — | 20% | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 26 | 18 | 244 | 182 | 0.77 | 6.8 | 79 | 85 | 6.4 | 18 | 25 | — | 103,512 | 103,512 | 5.9 | 12 | 4.5 | 107,226 |
| Mit. | 10 | 4.8 | 129 | 201 | 0.77 | 1.4 | 79 | 80 | 1.4 | 18 | 20 | — | 103,512 | 103,512 | 5.9 | 12 | 4.5 | 107,226 |
| % Reduced | 61% | 73% | 47% | -10% | — | 79% | — | 6% | 77% | — | 20% | — | — | — | — | — | — | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | 14 | 9.0 | 136 | 97 | 0.49 | 3.6 | 35 | 38 | 3.3 | 9.2 | 13 | — | 65,937 | 65,937 | 3.7 | 8.2 | 49 | 68,522 |
| Mit. | 5.8 | 2.7 | 79 | 110 | 0.49 | 0.92 | 35 | 36 | 0.92 | 9.2 | 10 | — | 65,937 | 65,937 | 3.7 | 8.2 | 49 | 68,522 |
| % Reduced | 58% | 71% | 42% | -13% | — | 74% | — | 7% | 72% | — | 19% | — | — | — | — | — | — | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 2.5 | 1.6 | 25 | 18 | 0.09 | 0.65 | 6.4 | 7.0 | 0.61 | 1.7 | 2.3 | — | 10,917 | 10,917 | 0.61 | 1.4 | 8.1 | 11,345 |
| Mit. | 1.1 | 0.48 | 14 | 20 | 0.09 | 0.17 | 6.4 | 6.5 | 0.17 | 1.7 | 1.9 | — | 10,917 | 10,917 | 0.61 | 1.4 | 8.1 | 11,345 |
| % Reduced | 58% | 71% | 42% | -13% | — | 74% | — | 7% | 72% | — | 19% | — | — | — | — | — | — | — |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 26 | 18 | 240 | 182 | 0.77 | 6.8 | 79 | 85 | 6.4 | 18 | 25 | — | 103,510 | 103,510 | 5.9 | 12 | 172 | 107,391 |
| 2026 | 20 | 13 | 188 | 139 | 0.68 | 5.3 | 43 | 49 | 4.9 | 12 | 17 | — | 92,936 | 92,936 | 5.1 | 11 | 159 | 96,614 |
| 2027 | 14 | 8.7 | 146 | 101 | 0.61 | 3.4 | 40 | 43 | 3.2 | 11 | 14 | — | 83,028 | 83,028 | 4.2 | 11 | 146 | 86,638 |
| 2028 | 14 | 8.6 | 142 | 100 | 0.61 | 3.3 | 40 | 43 | 3.1 | 11 | 14 | — | 81,494 | 81,494 | 4.2 | 11 | 135 | 84,959 |
| 2029 | 14 | 8.5 | 136 | 99 | 0.61 | 3.2 | 40 | 43 | 3.0 | 11 | 14 | — | 79,900 | 79,900 | 4.2 | 10 | 126 | 83,222 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 26 | 18 | 244 | 182 | 0.77 | 6.8 | 79 | 85 | 6.4 | 18 | 25 | — | 103,512 | 103,512 | 5.9 | 12 | 4.5 | 107,226 |
| 2026 | 25 | 17 | 231 | 176 | 0.77 | 6.3 | 79 | 85 | 5.9 | 18 | 24 | — | 102,172 | 102,172 | 5.9 | 12 | 4.2 | 105,885 |
| 2027 | 14 | 8.6 | 150 | 101 | 0.61 | 3.4 | 40 | 43 | 3.2 | 11 | 14 | — | 83,043 | 83,043 | 4.2 | 11 | 3.8 | 86,520 |
| 2028 | 14 | 8.5 | 145 | 100 | 0.61 | 3.3 | 40 | 43 | 3.1 | 11 | 14 | — | 81,510 | 81,510 | 4.2 | 11 | 3.5 | 84,844 |
| 2029 | 13 | 8.4 | 139 | 98 | 0.61 | 3.2 | 40 | 43 | 3.0 | 11 | 14 | — | 79,918 | 79,918 | 4.2 | 10 | 3.3 | 83,117 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 9.0 | 6.2 | 85 | 63 | 0.26 | 2.4 | 25 | 28 | 2.2 | 6.0 | 8.3 | — | 35,000 | 35,000 | 2.0 | 4.0 | 25 | 36,263 |
| 2026 | 14 | 9.0 | 136 | 97 | 0.49 | 3.6 | 35 | 38 | 3.3 | 9.2 | 13 | — | 65,937 | 65,937 | 3.7 | 8.2 | 49 | 68,522 |
| 2027 | 10 | 6.2 | 108 | 72 | 0.44 | 2.5 | 28 | 30 | 2.3 | 7.6 | 9.9 | — | 59,304 | 59,304 | 3.0 | 8.0 | 45 | 61,823 |
| 2028 | 9.8 | 6.1 | 105 | 72 | 0.44 | 2.4 | 28 | 30 | 2.2 | 7.6 | 9.9 | — | 58,368 | 58,368 | 3.0 | 7.8 | 42 | 60,795 |
| 2029 | 8.0 | 5.0 | 83 | 58 | 0.36 | 1.9 | 23 | 25 | 1.8 | 6.3 | 8.1 | — | 47,220 | 47,220 | 2.5 | 6.1 | 32 | 49,142 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 1.7 | 1.1 | 15 | 12 | 0.05 | 0.44 | 4.6 | 5.1 | 0.41 | 1.1 | 1.5 | — | 5,795 | 5,795 | 0.33 | 0.66 | 4.1 | 6,004 |
| 2026 | 2.5 | 1.6 | 25 | 18 | 0.09 | 0.65 | 6.4 | 7.0 | 0.61 | 1.7 | 2.3 | — | 10,917 | 10,917 | 0.61 | 1.4 | 8.1 | 11,345 |
| 2027 | 1.9 | 1.1 | 20 | 13 | 0.08 | 0.45 | 5.0 | 5.5 | 0.42 | 1.4 | 1.8 | — | 9,818 | 9,818 | 0.50 | 1.3 | 7.4 | 10,236 |
| 2028 | 1.8 | 1.1 | 19 | 13 | 0.08 | 0.43 | 5.1 | 5.5 | 0.41 | 1.4 | 1.8 | — | 9,664 | 9,664 | 0.50 | 1.3 | 6.9 | 10,065 |
| 2029 | 1.5 | 0.91 | 15 | 11 | 0.07 | 0.34 | 4.2 | 4.5 | 0.32 | 1.1 | 1.5 | — | 7,818 | 7,818 | 0.41 | 1.0 | 5.3 | 8,136 |

## 2.3. Construction Emissions by Year, Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 10 | 4.9 | 124 | 201 | 0.77 | 1.4 | 79 | 80 | 1.4 | 18 | 20 | — | 103,510 | 103,510 | 5.9 | 12 | 172 | 107,391 |
| 2026 | 8.1 | 3.8 | 105 | 160 | 0.68 | 1.3 | 43 | 45 | 1.3 | 12 | 13 | — | 92,936 | 92,936 | 5.1 | 11 | 159 | 96,614 |
| 2027 | 7.1 | 2.9 | 96 | 113 | 0.61 | 1.2 | 40 | 41 | 1.2 | 11 | 12 | — | 83,028 | 83,028 | 4.2 | 11 | 146 | 86,638 |
| 2028 | 6.6 | 2.9 | 94 | 112 | 0.61 | 1.2 | 40 | 41 | 1.2 | 11 | 12 | — | 81,494 | 81,494 | 4.2 | 11 | 135 | 84,959 |
| 2029 | 6.6 | 2.9 | 91 | 112 | 0.61 | 1.2 | 40 | 41 | 1.2 | 11 | 12 | — | 79,900 | 79,900 | 4.2 | 10 | 126 | 83,222 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 10 | 4.8 | 129 | 201 | 0.77 | 1.4 | 79 | 80 | 1.4 | 18 | 20 | — | 103,512 | 103,512 | 5.9 | 12 | 4.5 | 107,226 |
| 2026 | 9.6 | 4.7 | 125 | 200 | 0.77 | 1.4 | 79 | 80 | 1.4 | 18 | 20 | — | 102,172 | 102,172 | 5.9 | 12 | 4.2 | 105,885 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2027 | 7.0 | 2.8 | 100 | 113 | 0.61 | 1.2 | 40 | 41 | 1.2 | 11 | 12 | — | 83,043 | 83,043 | 4.2 | 11 | 3.8 | 86,520 |
| 2028 | 6.5 | 2.7 | 97 | 112 | 0.61 | 1.2 | 40 | 41 | 1.2 | 11 | 12 | — | 81,510 | 81,510 | 4.2 | 11 | 3.5 | 84,844 |
| 2029 | 6.5 | 2.7 | 94 | 111 | 0.61 | 1.2 | 40 | 41 | 1.2 | 11 | 12 | — | 79,918 | 79,918 | 4.2 | 10 | 3.3 | 83,117 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 3.5 | 1.7 | 44 | 70 | 0.26 | 0.49 | 25 | 26 | 0.49 | 6.0 | 6.5 | — | 35,000 | 35,000 | 2.0 | 4.0 | 25 | 36,263 |
| 2026 | 5.8 | 2.7 | 79 | 110 | 0.49 | 0.92 | 35 | 36 | 0.92 | 9.2 | 10 | — | 65,937 | 65,937 | 3.7 | 8.2 | 49 | 68,522 |
| 2027 | 5.0 | 2.0 | 72 | 81 | 0.44 | 0.83 | 28 | 28 | 0.83 | 7.6 | 8.4 | — | 59,304 | 59,304 | 3.0 | 8.0 | 45 | 61,823 |
| 2028 | 4.7 | 2.0 | 70 | 80 | 0.44 | 0.83 | 28 | 29 | 0.83 | 7.6 | 8.4 | — | 58,368 | 58,368 | 3.0 | 7.8 | 42 | 60,795 |
| 2029 | 3.9 | 1.7 | 56 | 66 | 0.36 | 0.69 | 23 | 24 | 0.69 | 6.3 | 7.0 | — | 47,220 | 47,220 | 2.5 | 6.1 | 32 | 49,142 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2025 | 0.63 | 0.31 | 8.0 | 13 | 0.05 | 0.09 | 4.6 | 4.7 | 0.09 | 1.1 | 1.2 | — | 5,795 | 5,795 | 0.33 | 0.66 | 4.1 | 6,004 |
| 2026 | 1.1 | 0.48 | 14 | 20 | 0.09 | 0.17 | 6.4 | 6.5 | 0.17 | 1.7 | 1.9 | — | 10,917 | 10,917 | 0.61 | 1.4 | 8.1 | 11,345 |
| 2027 | 0.92 | 0.37 | 13 | 15 | 0.08 | 0.15 | 5.0 | 5.2 | 0.15 | 1.4 | 1.5 | — | 9,818 | 9,818 | 0.50 | 1.3 | 7.4 | 10,236 |
| 2028 | 0.86 | 0.37 | 13 | 15 | 0.08 | 0.15 | 5.1 | 5.2 | 0.15 | 1.4 | 1.5 | — | 9,664 | 9,664 | 0.50 | 1.3 | 6.9 | 10,065 |
| 2029 | 0.71 | 0.30 | 10 | 12 | 0.07 | 0.13 | 4.2 | 4.3 | 0.13 | 1.1 | 1.3 | — | 7,818 | 7,818 | 0.41 | 1.0 | 5.3 | 8,136 |

# 3. Construction Emissions Details

## 3.1. Demolition (2025) - 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 | 3.4 | 2.8 | 26 | 24 | 0.04 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 4,067 | 4,067 | 0.16 | 0.03 | — | 4,081 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demoliti | — | — | — | — | — | — | 0.28 | 0.28 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| 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 | 0.42 | 0.35 | 3.2 | 2.9 | < 0.005 | 0.13 | — | 0.13 | 0.12 | — | 0.12 | — | 501 | 501 | 0.02 | < 0.005 | — | 503 |
| 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 | 0.08 | 0.06 | 0.59 | 0.53 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 83 | 83 | < 0.005 | < 0.005 | — | 83 |
| 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.06 | 1.0 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 207 | 207 | 0.01 | 0.01 | 0.76 | 210 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.03 | 0.01 | 0.43 | 0.17 | < 0.005 | < 0.005 | 0.09 | 0.10 | < 0.005 | 0.03 | 0.03 | — | 354 | 354 | 0.02 | 0.06 | 0.82 | 372 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.11 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | 0.01 | 0.01 | — | 25 | 25 | < 0.005 | < 0.005 | 0.04 | 25 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.06 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 44 | 44 | < 0.005 | 0.01 | 0.04 | 46 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 4.1 | 4.1 | < 0.005 | < 0.005 | 0.01 | 4.1 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.2 | 7.2 | < 0.005 | < 0.005 | 0.01 | 7.6 |

## 3.2. Demolition (2025) - Mitigated

### 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 | 0.43 | 0.43 | 5.3 | 22 | 0.04 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 4,067 | 4,067 | 0.16 | 0.03 | — | 4,081 |
| Demolition | — | — | — | — | — | — | 0.28 | 0.28 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| 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 | 0.05 | 0.05 | 0.66 | 2.7 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 501 | 501 | 0.02 | < 0.005 | — | 503 |
| 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 | 0.01 | 0.01 | 0.12 | 0.49 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 83 | 83 | < 0.005 | < 0.005 | — | 83 |
| 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.06 | 1.0 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 207 | 207 | 0.01 | 0.01 | 0.76 | 210 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.03 | 0.01 | 0.43 | 0.17 | < 0.005 | < 0.005 | 0.09 | 0.10 | < 0.005 | 0.03 | 0.03 | — | 354 | 354 | 0.02 | 0.06 | 0.82 | 372 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.11 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | 0.01 | 0.01 | — | 25 | 25 | < 0.005 | < 0.005 | 0.04 | 25 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.06 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 44 | 44 | < 0.005 | 0.01 | 0.04 | 46 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 4.1 | 4.1 | < 0.005 | < 0.005 | 0.01 | 4.1 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.2 | 7.2 | < 0.005 | < 0.005 | 0.01 | 7.6 |

## 3.3. Filling of NW Pit (2025) - 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 | 9.2 | 7.7 | 67 | 65 | 0.13 | 3.0 | — | 3.0 | 2.7 | — | 2.7 | — | 14,027 | 14,027 | 0.57 | 0.11 | — | 14,075 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 9.2 | 7.7 | 67 | 65 | 0.13 | 3.0 | — | 3.0 | 2.7 | — | 2.7 | — | 14,027 | 14,027 | 0.57 | 0.11 | — | 14,075 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 Equipment | 3.1 | 2.6 | 22 | 22 | 0.04 | 0.98 | — | 0.98 | 0.90 | — | 0.90 | — | 4,667 | 4,667 | 0.19 | 0.04 | — | 4,683 |
| Dust From Material Movement | — | — | — | — | — | — | 2.8 | 2.8 | — | 1.4 | 1.4 | — | — | — | — | — | — | — |
| 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 | 0.56 | 0.47 | 4.1 | 3.9 | 0.01 | 0.18 | — | 0.18 | 0.16 | — | 0.16 | — | 773 | 773 | 0.03 | 0.01 | — | 775 |
| Dust From Material Movement | — | — | — | — | — | — | 0.52 | 0.52 | — | 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.17 | 0.17 | 2.8 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 553 | 553 | 0.02 | 0.02 | 2.0 | 561 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 5.4 | 1.1 | 85 | 33 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 69,554 | 69,554 | 3.8 | 11 | 161 | 73,062 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.17 | 0.19 | 2.4 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 524 | 524 | 0.02 | 0.02 | 0.05 | 531 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 5.3 | 1.0 | 89 | 34 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 69,581 | 69,581 | 3.8 | 11 | 4.2 | 72,932 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.06 | 0.07 | 0.82 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 177 | 177 | 0.01 | 0.01 | 0.29 | 179 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 1.8 | 0.35 | 30 | 11 | 0.15 | 0.29 | 6.1 | 6.4 | 0.29 | 1.7 | 2.0 | — | 23,143 | 23,143 | 1.3 | 3.6 | 23 | 24,279 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.15 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 29 | 29 | < 0.005 | < 0.005 | 0.05 | 30 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.33 | 0.06 | 5.4 | 2.0 | 0.03 | 0.05 | 1.1 | 1.2 | 0.05 | 0.31 | 0.36 | — | 3,832 | 3,832 | 0.21 | 0.60 | 3.8 | 4,020 |

## 3.4. Filling of NW Pit (2025) - Mitigated

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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,027 | 14,027 | 0.57 | 0.11 | — | 14,075 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,027 | 14,027 | 0.57 | 0.11 | — | 14,075 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 0.45 | 0.45 | 3.2 | 25 | 0.04 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 4,667 | 4,667 | 0.19 | 0.04 | — | 4,683 |
| Dust From Material Movement | — | — | — | — | — | — | 2.8 | 2.8 | — | 1.4 | 1.4 | — | — | — | — | — | — | — |
| 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 | 0.59 | 4.5 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 773 | 773 | 0.03 | 0.01 | — | 775 |
| Dust From Material Movement | — | — | — | — | — | — | 0.52 | 0.52 | — | 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.17 | 0.17 | 2.8 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 553 | 553 | 0.02 | 0.02 | 2.0 | 561 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 5.4 | 1.1 | 85 | 33 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 69,554 | 69,554 | 3.8 | 11 | 161 | 73,062 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.17 | 0.19 | 2.4 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 524 | 524 | 0.02 | 0.02 | 0.05 | 531 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 5.3 | 1.0 | 89 | 34 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 69,581 | 69,581 | 3.8 | 11 | 4.2 | 72,932 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.06 | 0.07 | 0.82 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 177 | 177 | 0.01 | 0.01 | 0.29 | 179 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 1.8 | 0.35 | 30 | 11 | 0.15 | 0.29 | 6.1 | 6.4 | 0.29 | 1.7 | 2.0 | — | 23,143 | 23,143 | 1.3 | 3.6 | 23 | 24,279 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.15 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 29 | 29 | < 0.005 | < 0.005 | 0.05 | 30 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.33 | 0.06 | 5.4 | 2.0 | 0.03 | 0.05 | 1.1 | 1.2 | 0.05 | 0.31 | 0.36 | — | 3,832 | 3,832 | 0.21 | 0.60 | 3.8 | 4,020 |

## 3.5. Filling of NW Pit (2026) - 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 | 8.8 | 7.4 | 63 | 63 | 0.13 | 2.7 | — | 2.7 | 2.5 | — | 2.5 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 8.8 | 7.4 | 63 | 63 | 0.13 | 2.7 | — | 2.7 | 2.5 | — | 2.5 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 6.3 | 5.3 | 45 | 45 | 0.09 | 1.9 | — | 1.9 | 1.8 | — | 1.8 | — | 10,026 | 10,026 | 0.41 | 0.08 | — | 10,061 |
| Dust From Material Movement | — | — | — | — | — | — | 6.1 | 6.1 | — | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.2 | 0.97 | 8.2 | 8.2 | 0.02 | 0.35 | — | 0.35 | 0.33 | — | 0.33 | — | 1,660 | 1,660 | 0.07 | 0.01 | — | 1,666 |
| Dust From Material Movement | — | — | — | — | — | — | 1.1 | 1.1 | — | 0.55 | 0.55 | — | — | — | — | — | — | — |
| 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 | 0.16 | 2.6 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 542 | 542 | 0.02 | 0.02 | 1.8 | 550 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.9 | 1.1 | 82 | 32 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 68,293 | 68,293 | 3.8 | 11 | 153 | 71,793 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.17 | 0.15 | 0.17 | 2.2 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 514 | 514 | 0.02 | 0.02 | 0.05 | 520 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.8 | 1.0 | 85 | 33 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 68,322 | 68,322 | 3.8 | 11 | 4.0 | 71,673 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.12 | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 372 | 372 | 0.02 | 0.01 | 0.57 | 377 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 3.5 | 0.76 | 62 | 23 | 0.33 | 0.63 | 13 | 14 | 0.63 | 3.6 | 4.2 | — | 48,790 | 48,790 | 2.7 | 7.8 | 47 | 51,227 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 62 | 62 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.64 | 0.14 | 11 | 4.2 | 0.06 | 0.12 | 2.4 | 2.5 | 0.12 | 0.66 | 0.77 | — | 8,078 | 8,078 | 0.45 | 1.3 | 7.8 | 8,481 |

## 3.6. Filling of NW Pit (2026) - Mitigated

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 | 1.4 | 1.4 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 0.97 | 0.97 | 6.9 | 53 | 0.09 | 0.19 | — | 0.19 | 0.19 | — | 0.19 | — | 10,026 | 10,026 | 0.41 | 0.08 | — | 10,061 |
| Dust From Material Movement | — | — | — | — | — | — | 6.1 | 6.1 | — | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.18 | 0.18 | 1.3 | 9.7 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,660 | 1,660 | 0.07 | 0.01 | — | 1,666 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 1.1 | 1.1 | — | 0.55 | 0.55 | — | — | — | — | — | — | — |
| 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 | 0.16 | 2.6 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 542 | 542 | 0.02 | 0.02 | 1.8 | 550 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.9 | 1.1 | 82 | 32 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 68,293 | 68,293 | 3.8 | 11 | 153 | 71,793 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.17 | 0.15 | 0.17 | 2.2 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 514 | 514 | 0.02 | 0.02 | 0.05 | 520 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.8 | 1.0 | 85 | 33 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 68,322 | 68,322 | 3.8 | 11 | 4.0 | 71,673 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.12 | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 372 | 372 | 0.02 | 0.01 | 0.57 | 377 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 3.5 | 0.76 | 62 | 23 | 0.33 | 0.63 | 13 | 14 | 0.63 | 3.6 | 4.2 | — | 48,790 | 48,790 | 2.7 | 7.8 | 47 | 51,227 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 62 | 62 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.64 | 0.14 | 11 | 4.2 | 0.06 | 0.12 | 2.4 | 2.5 | 0.12 | 0.66 | 0.77 | — | 8,078 | 8,078 | 0.45 | 1.3 | 7.8 | 8,481 |

## 3.7. Filling of NW Pit (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 | 8.6 | 7.2 | 60 | 62 | 0.13 | 2.5 | — | 2.5 | 2.3 | — | 2.3 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 8.6 | 7.2 | 60 | 62 | 0.13 | 2.5 | — | 2.5 | 2.3 | — | 2.3 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 6.1 | 5.2 | 43 | 44 | 0.09 | 1.8 | — | 1.8 | 1.7 | — | 1.7 | — | 10,026 | 10,026 | 0.41 | 0.08 | — | 10,061 |
| Dust From Material Movement | — | — | — | — | — | — | 6.1 | 6.1 | — | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.1 | 0.94 | 7.8 | 8.1 | 0.02 | 0.33 | — | 0.33 | 0.30 | — | 0.30 | — | 1,660 | 1,660 | 0.07 | 0.01 | — | 1,666 |
| Dust From Material Movement | — | — | — | — | — | — | 1.1 | 1.1 | — | 0.55 | 0.55 | — | — | — | — | — | — | — |
| 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 | 0.14 | 2.4 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 532 | 532 | 0.02 | 0.02 | 1.7 | 539 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.9 | 1.1 | 79 | 31 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 66,939 | 66,939 | 3.3 | 11 | 142 | 70,409 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.16 | 0.14 | 0.17 | 2.0 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 504 | 504 | 0.01 | 0.02 | 0.04 | 510 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.8 | 1.00 | 83 | 32 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 66,968 | 66,968 | 3.3 | 11 | 3.7 | 70,307 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.11 | 0.10 | 0.12 | 1.5 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 365 | 365 | 0.01 | 0.01 | 0.51 | 370 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 3.5 | 0.74 | 60 | 23 | 0.33 | 0.63 | 13 | 14 | 0.63 | 3.6 | 4.2 | — | 47,822 | 47,822 | 2.4 | 7.8 | 44 | 50,244 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.28 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 60 | 60 | < 0.005 | < 0.005 | 0.08 | 61 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.64 | 0.14 | 11 | 4.1 | 0.06 | 0.12 | 2.4 | 2.5 | 0.12 | 0.66 | 0.77 | — | 7,918 | 7,918 | 0.39 | 1.3 | 7.3 | 8,318 |

## 3.8. Filling of NW Pit (2027) - Mitigated

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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Roa Equipment | 0.97 | 0.97 | 6.9 | 53 | 0.09 | 0.19 | — | 0.19 | 0.19 | — | 0.19 | — | 10,026 | 10,026 | 0.41 | 0.08 | — | 10,061 |
| Dust From Material Movement | — | — | — | — | — | — | 6.1 | 6.1 | — | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Roa d Equipm ent | 0.18 | 0.18 | 1.3 | 9.7 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,660 | 1,660 | 0.07 | 0.01 | — | 1,666 |
| Dust From Material Movement | — | — | — | — | — | — | 1.1 | 1.1 | — | 0.55 | 0.55 | — | — | — | — | — | — | — |
| 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 | 0.14 | 2.4 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 532 | 532 | 0.02 | 0.02 | 1.7 | 539 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.9 | 1.1 | 79 | 31 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 66,939 | 66,939 | 3.3 | 11 | 142 | 70,409 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.16 | 0.14 | 0.17 | 2.0 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 504 | 504 | 0.01 | 0.02 | 0.04 | 510 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.8 | 1.00 | 83 | 32 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 66,968 | 66,968 | 3.3 | 11 | 3.7 | 70,307 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.11 | 0.10 | 0.12 | 1.5 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 365 | 365 | 0.01 | 0.01 | 0.51 | 370 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 3.5 | 0.74 | 60 | 23 | 0.33 | 0.63 | 13 | 14 | 0.63 | 3.6 | 4.2 | — | 47,822 | 47,822 | 2.4 | 7.8 | 44 | 50,244 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.28 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 60 | 60 | < 0.005 | < 0.005 | 0.08 | 61 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.64 | 0.14 | 11 | 4.1 | 0.06 | 0.12 | 2.4 | 2.5 | 0.12 | 0.66 | 0.77 | — | 7,918 | 7,918 | 0.39 | 1.3 | 7.3 | 8,318 |

## 3.9. Filling of NW Pit (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 | 8.5 | 7.1 | 58 | 62 | 0.13 | 2.4 | — | 2.4 | 2.2 | — | 2.2 | — | 14,042 | 14,042 | 0.57 | 0.11 | — | 14,090 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 8.5 | 7.1 | 58 | 62 | 0.13 | 2.4 | — | 2.4 | 2.2 | — | 2.2 | — | 14,042 | 14,042 | 0.57 | 0.11 | — | 14,090 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 6.1 | 5.1 | 42 | 44 | 0.09 | 1.7 | — | 1.7 | 1.6 | — | 1.6 | — | 10,057 | 10,057 | 0.41 | 0.08 | — | 10,092 |
| Dust From Material Movement | — | — | — | — | — | — | 6.1 | 6.1 | — | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.1 | 0.93 | 7.6 | 8.1 | 0.02 | 0.32 | — | 0.32 | 0.29 | — | 0.29 | — | 1,665 | 1,665 | 0.07 | 0.01 | — | 1,671 |
| Dust From Material Movement | — | — | — | — | — | — | 1.1 | 1.1 | — | 0.55 | 0.55 | — | — | — | — | — | — | — |
| 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 | 0.14 | 2.3 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 522 | 522 | 0.01 | 0.02 | 1.5 | 529 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.5 | 1.1 | 77 | 31 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 65,437 | 65,437 | 3.3 | 10 | 132 | 68,765 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.15 | 0.14 | 0.16 | 1.9 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 495 | 495 | 0.01 | 0.02 | 0.04 | 501 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.4 | 1.00 | 80 | 31 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 65,467 | 65,467 | 3.3 | 10 | 3.4 | 68,667 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.11 | 0.10 | 0.11 | 1.4 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 360 | 360 | < 0.005 | 0.01 | 0.46 | 364 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 3.2 | 0.75 | 58 | 22 | 0.33 | 0.63 | 13 | 14 | 0.63 | 3.6 | 4.2 | — | 46,878 | 46,878 | 2.4 | 7.5 | 41 | 49,208 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.26 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 60 | 60 | < 0.005 | < 0.005 | 0.08 | 60 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.58 | 0.14 | 11 | 4.0 | 0.06 | 0.12 | 2.4 | 2.5 | 0.12 | 0.66 | 0.78 | — | 7,761 | 7,761 | 0.39 | 1.2 | 6.8 | 8,147 |

## 3.10. Filling of NW Pit (2028) - Mitigated

### 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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,042 | 14,042 | 0.57 | 0.11 | — | 14,090 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,042 | 14,042 | 0.57 | 0.11 | — | 14,090 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 0.98 | 0.98 | 6.9 | 53 | 0.09 | 0.19 | — | 0.19 | 0.19 | — | 0.19 | — | 10,057 | 10,057 | 0.41 | 0.08 | — | 10,092 |
| Dust From Material Movement | — | — | — | — | — | — | 6.1 | 6.1 | — | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.18 | 0.18 | 1.3 | 9.7 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,665 | 1,665 | 0.07 | 0.01 | — | 1,671 |
| Dust From Material Movement | — | — | — | — | — | — | 1.1 | 1.1 | — | 0.55 | 0.55 | — | — | — | — | — | — | — |
| 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 | 0.14 | 2.3 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 522 | 522 | 0.01 | 0.02 | 1.5 | 529 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.5 | 1.1 | 77 | 31 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 65,437 | 65,437 | 3.3 | 10 | 132 | 68,765 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.15 | 0.14 | 0.16 | 1.9 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 495 | 495 | 0.01 | 0.02 | 0.04 | 501 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.4 | 1.00 | 80 | 31 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 65,467 | 65,467 | 3.3 | 10 | 3.4 | 68,667 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.11 | 0.10 | 0.11 | 1.4 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 360 | 360 | < 0.005 | 0.01 | 0.46 | 364 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 3.2 | 0.75 | 58 | 22 | 0.33 | 0.63 | 13 | 14 | 0.63 | 3.6 | 4.2 | — | 46,878 | 46,878 | 2.4 | 7.5 | 41 | 49,208 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.02 | 0.26 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 60 | 60 | < 0.005 | < 0.005 | 0.08 | 60 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.58 | 0.14 | 11 | 4.0 | 0.06 | 0.12 | 2.4 | 2.5 | 0.12 | 0.66 | 0.78 | — | 7,761 | 7,761 | 0.39 | 1.2 | 6.8 | 8,147 |

## 3.11. Filling of NW Pit (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 | 8.3 | 7.0 | 55 | 61 | 0.13 | 2.3 | — | 2.3 | 2.1 | — | 2.1 | — | 14,040 | 14,040 | 0.57 | 0.11 | — | 14,088 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 8.3 | 7.0 | 55 | 61 | 0.13 | 2.3 | — | 2.3 | 2.1 | — | 2.1 | — | 14,040 | 14,040 | 0.57 | 0.11 | — | 14,088 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 4.9 | 4.1 | 33 | 36 | 0.08 | 1.4 | — | 1.4 | 1.2 | — | 1.2 | — | 8,298 | 8,298 | 0.34 | 0.07 | — | 8,326 |
| Dust From Material Movement | — | — | — | — | — | — | 5.0 | 5.0 | — | 2.5 | 2.5 | — | — | — | — | — | — | — |
| 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 | 0.90 | 0.75 | 5.9 | 6.6 | 0.01 | 0.25 | — | 0.25 | 0.23 | — | 0.23 | — | 1,374 | 1,374 | 0.06 | 0.01 | — | 1,378 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.92 | 0.92 | — | 0.45 | 0.45 | — | — | — | — | — | — | — |
| 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 | 0.15 | 0.13 | 0.12 | 2.1 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 513 | 513 | 0.01 | 0.02 | 1.3 | 520 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.4 | 1.1 | 74 | 30 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 63,881 | 63,881 | 3.3 | 10 | 123 | 67,068 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.13 | 0.13 | 0.14 | 1.8 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 487 | 487 | 0.01 | 0.02 | 0.03 | 492 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.4 | 1.00 | 77 | 30 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 63,912 | 63,912 | 3.3 | 10 | 3.2 | 66,979 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08 | 0.08 | 0.08 | 1.1 | 0.00 | 0.00 | 0.30 | 0.30 | 0.00 | 0.07 | 0.07 | — | 292 | 292 | < 0.005 | 0.01 | 0.34 | 296 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 2.6 | 0.61 | 46 | 18 | 0.27 | 0.52 | 11 | 11 | 0.52 | 3.0 | 3.5 | — | 37,761 | 37,761 | 2.0 | 5.9 | 31 | 39,604 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.20 | 0.00 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | — | 48 | 48 | < 0.005 | < 0.005 | 0.06 | 49 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.48 | 0.11 | 8.4 | 3.3 | 0.05 | 0.10 | 2.0 | 2.1 | 0.10 | 0.54 | 0.64 | — | 6,252 | 6,252 | 0.32 | 0.98 | 5.2 | 6,557 |

## 3.12. Filling of NW Pit (2029) - Mitigated

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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,040 | 14,040 | 0.57 | 0.11 | — | 14,088 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,040 | 14,040 | 0.57 | 0.11 | — | 14,088 |
| Dust From Material Movement | — | — | — | — | — | — | 8.5 | 8.5 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 0.81 | 0.81 | 5.7 | 44 | 0.08 | 0.16 | — | 0.16 | 0.16 | — | 0.16 | — | 8,298 | 8,298 | 0.34 | 0.07 | — | 8,326 |
| Dust From Material Movement | — | — | — | — | — | — | 5.0 | 5.0 | — | 2.5 | 2.5 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.15 | 0.15 | 1.0 | 8.0 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,374 | 1,374 | 0.06 | 0.01 | — | 1,378 |
| Dust From Material Movement | — | — | — | — | — | — | 0.92 | 0.92 | — | 0.45 | 0.45 | — | — | — | — | — | — | — |
| 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 | 0.15 | 0.13 | 0.12 | 2.1 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 513 | 513 | 0.01 | 0.02 | 1.3 | 520 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.4 | 1.1 | 74 | 30 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 63,881 | 63,881 | 3.3 | 10 | 123 | 67,068 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.13 | 0.13 | 0.14 | 1.8 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 487 | 487 | 0.01 | 0.02 | 0.03 | 492 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 4.4 | 1.00 | 77 | 30 | 0.46 | 0.89 | 19 | 19 | 0.89 | 5.1 | 6.0 | — | 63,912 | 63,912 | 3.3 | 10 | 3.2 | 66,979 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.08 | 0.08 | 0.08 | 1.1 | 0.00 | 0.00 | 0.30 | 0.30 | 0.00 | 0.07 | 0.07 | — | 292 | 292 | < 0.005 | 0.01 | 0.34 | 296 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 2.6 | 0.61 | 46 | 18 | 0.27 | 0.52 | 11 | 11 | 0.52 | 3.0 | 3.5 | — | 37,761 | 37,761 | 2.0 | 5.9 | 31 | 39,604 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.20 | 0.00 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | — | 48 | 48 | < 0.005 | < 0.005 | 0.06 | 49 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.48 | 0.11 | 8.4 | 3.3 | 0.05 | 0.10 | 2.0 | 2.1 | 0.10 | 0.54 | 0.64 | — | 6,252 | 6,252 | 0.32 | 0.98 | 5.2 | 6,557 |

## 3.13. Filling of SE Pit (2025) - 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 | 9.2 | 7.7 | 67 | 65 | 0.13 | 3.0 | — | 3.0 | 2.7 | — | 2.7 | — | 14,027 | 14,027 | 0.57 | 0.11 | — | 14,075 |
| Dust From Material Movement | — | — | — | — | — | — | 8.4 | 8.4 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 9.2 | 7.7 | 67 | 65 | 0.13 | 3.0 | — | 3.0 | 2.7 | — | 2.7 | — | 14,027 | 14,027 | 0.57 | 0.11 | — | 14,075 |
| Dust From Material Movement | — | — | — | — | — | — | 8.4 | 8.4 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 Equipment | 3.1 | 2.6 | 22 | 22 | 0.04 | 0.98 | — | 0.98 | 0.90 | — | 0.90 | — | 4,667 | 4,667 | 0.19 | 0.04 | — | 4,683 |
| Dust From Material Movement | — | — | — | — | — | — | 2.8 | 2.8 | — | 1.4 | 1.4 | — | — | — | — | — | — | — |
| 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 | 0.56 | 0.47 | 4.1 | 3.9 | 0.01 | 0.18 | — | 0.18 | 0.16 | — | 0.16 | — | 773 | 773 | 0.03 | 0.01 | — | 775 |
| Dust From Material Movement | — | — | — | — | — | — | 0.51 | 0.51 | — | 0.25 | 0.25 | — | — | — | — | — | — | — |
| 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 | 0.19 | 0.17 | 0.17 | 2.8 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 553 | 553 | 0.02 | 0.02 | 2.0 | 561 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.19 | 0.17 | 0.19 | 2.4 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 524 | 524 | 0.02 | 0.02 | 0.05 | 531 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.06 | 0.06 | 0.07 | 0.82 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 177 | 177 | 0.01 | 0.01 | 0.29 | 179 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.15 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 29 | 29 | < 0.005 | < 0.005 | 0.05 | 30 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.14. Filling of SE Pit (2025) - Mitigated

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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,027 | 14,027 | 0.57 | 0.11 | — | 14,075 |
| Dust From Material Movement | — | — | — | — | — | — | 8.4 | 8.4 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,027 | 14,027 | 0.57 | 0.11 | — | 14,075 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 8.4 | 8.4 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 0.45 | 0.45 | 3.2 | 25 | 0.04 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 4,667 | 4,667 | 0.19 | 0.04 | — | 4,683 |
| Dust From Material Movement | — | — | — | — | — | — | 2.8 | 2.8 | — | 1.4 | 1.4 | — | — | — | — | — | — | — |
| 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 | 0.59 | 4.5 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 773 | 773 | 0.03 | 0.01 | — | 775 |
| Dust From Material Movement | — | — | — | — | — | — | 0.51 | 0.51 | — | 0.25 | 0.25 | — | — | — | — | — | — | — |
| 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 | 0.19 | 0.17 | 0.17 | 2.8 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 553 | 553 | 0.02 | 0.02 | 2.0 | 561 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.19 | 0.17 | 0.19 | 2.4 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 524 | 524 | 0.02 | 0.02 | 0.05 | 531 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.06 | 0.06 | 0.07 | 0.82 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 177 | 177 | 0.01 | 0.01 | 0.29 | 179 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.15 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 29 | 29 | < 0.005 | < 0.005 | 0.05 | 30 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.15. Filling of SE Pit (2026) - 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 | 8.8 | 7.4 | 63 | 63 | 0.13 | 2.7 | — | 2.7 | 2.5 | — | 2.5 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 8.4 | 8.4 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 1.4 | 1.2 | 10 | 10 | 0.02 | 0.44 | — | 0.44 | 0.40 | — | 0.40 | — | 2,253 | 2,253 | 0.09 | 0.02 | — | 2,260 |
| Dust From Material Movement | — | — | — | — | — | — | 1.4 | 1.4 | — | 0.67 | 0.67 | — | — | — | — | — | — | — |
| 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 | 0.26 | 0.22 | 1.8 | 1.8 | < 0.005 | 0.08 | — | 0.08 | 0.07 | — | 0.07 | — | 373 | 373 | 0.02 | < 0.005 | — | 374 |
| Dust From Material Movement | — | — | — | — | — | — | 0.25 | 0.25 | — | 0.12 | 0.12 | — | — | — | — | — | — | — |
| 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 | 0.17 | 0.15 | 0.17 | 2.2 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 514 | 514 | 0.02 | 0.02 | 0.05 | 520 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.03 | 0.02 | 0.03 | 0.37 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 84 | 84 | < 0.005 | < 0.005 | 0.13 | 85 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.01 | 0.07 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | < 0.005 | < 0.005 | — | 14 | 14 | < 0.005 | < 0.005 | 0.02 | 14 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.16. Filling of SE Pit (2026) - Mitigated

### 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 | 1.4 | 1.4 | 9.7 | 74 | 0.13 | 0.26 | — | 0.26 | 0.26 | — | 0.26 | — | 14,037 | 14,037 | 0.57 | 0.11 | — | 14,085 |
| Dust From Material Movement | — | — | — | — | — | — | 8.4 | 8.4 | — | 4.2 | 4.2 | — | — | — | — | — | — | — |
| 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 | 0.22 | 0.22 | 1.6 | 12 | 0.02 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 2,253 | 2,253 | 0.09 | 0.02 | — | 2,260 |
| Dust From Material Movement | — | — | — | — | — | — | 1.4 | 1.4 | — | 0.67 | 0.67 | — | — | — | — | — | — | — |
| 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 | 0.28 | 2.2 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 373 | 373 | 0.02 | < 0.005 | — | 374 |
| Dust From Material Movement | — | — | — | — | — | — | 0.25 | 0.25 | — | 0.12 | 0.12 | — | — | — | — | — | — | — |
| 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 | 0.17 | 0.15 | 0.17 | 2.2 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 514 | 514 | 0.02 | 0.02 | 0.05 | 520 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.03 | 0.02 | 0.03 | 0.37 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 84 | 84 | < 0.005 | < 0.005 | 0.13 | 85 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.01 | 0.07 | 0.00 | 0.00 | 0.02 | 0.02 | 0.00 | < 0.005 | < 0.005 | — | 14 | 14 | < 0.005 | < 0.005 | 0.02 | 14 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.17. Filling of NW Pit Onsite Trucks (2025) - 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.68 | 0.29 | 7.2 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,574 | 1,574 | 0.35 | 0.26 | 1.9 | 1,660 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.64 | 0.26 | 7.5 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,586 | 1,586 | 0.35 | 0.26 | 0.05 | 1,671 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.22 | 0.09 | 2.4 | 1.7 | 0.01 | < 0.005 | 3.8 | 3.8 | < 0.005 | 0.42 | 0.42 | — | 525 | 525 | 0.11 | 0.09 | 0.28 | 554 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.04 | 0.02 | 0.45 | 0.31 | < 0.005 | < 0.005 | 0.69 | 0.69 | < 0.005 | 0.08 | 0.08 | — | 87 | 87 | 0.02 | 0.01 | 0.05 | 92 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.18. Filling of NW Pit Onsite Trucks (2025) - Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.68 | 0.29 | 7.2 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,574 | 1,574 | 0.35 | 0.26 | 1.9 | 1,660 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.64 | 0.26 | 7.5 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,586 | 1,586 | 0.35 | 0.26 | 0.05 | 1,671 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.22 | 0.09 | 2.4 | 1.7 | 0.01 | < 0.005 | 3.8 | 3.8 | < 0.005 | 0.42 | 0.42 | — | 525 | 525 | 0.11 | 0.09 | 0.28 | 554 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.04 | 0.02 | 0.45 | 0.31 | < 0.005 | < 0.005 | 0.69 | 0.69 | < 0.005 | 0.08 | 0.08 | — | 87 | 87 | 0.02 | 0.01 | 0.05 | 92 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.19. Filling of NW Pit Onsite Trucks (2026) - 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.67 | 0.29 | 7.1 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,548 | 1,548 | 0.35 | 0.26 | 1.8 | 1,634 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.63 | 0.26 | 7.4 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,560 | 1,560 | 0.35 | 0.26 | 0.05 | 1,645 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.46 | 0.20 | 5.2 | 3.6 | 0.01 | 0.01 | 8.1 | 8.1 | 0.01 | 0.90 | 0.91 | — | 1,109 | 1,109 | 0.25 | 0.18 | 0.56 | 1,170 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.08 | 0.04 | 0.95 | 0.66 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.16 | 0.17 | — | 184 | 184 | 0.04 | 0.03 | 0.09 | 194 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.20. Filling of NW Pit Onsite Trucks (2026) - Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.67 | 0.29 | 7.1 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,548 | 1,548 | 0.35 | 0.26 | 1.8 | 1,634 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.63 | 0.26 | 7.4 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,560 | 1,560 | 0.35 | 0.26 | 0.05 | 1,645 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.46 | 0.20 | 5.2 | 3.6 | 0.01 | 0.01 | 8.1 | 8.1 | 0.01 | 0.90 | 0.91 | — | 1,109 | 1,109 | 0.25 | 0.18 | 0.56 | 1,170 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.08 | 0.04 | 0.95 | 0.66 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.16 | 0.17 | — | 184 | 184 | 0.04 | 0.03 | 0.09 | 194 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.21. Filling of NW Pit Onsite Trucks (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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.66 | 0.29 | 7.0 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,521 | 1,521 | 0.33 | 0.25 | 1.7 | 1,604 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.62 | 0.25 | 7.3 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,534 | 1,534 | 0.33 | 0.26 | 0.04 | 1,619 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.46 | 0.20 | 5.1 | 3.6 | 0.01 | 0.01 | 8.1 | 8.1 | 0.01 | 0.90 | 0.91 | — | 1,090 | 1,090 | 0.24 | 0.18 | 0.52 | 1,149 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.08 | 0.04 | 0.93 | 0.66 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.16 | 0.17 | — | 181 | 181 | 0.04 | 0.03 | 0.09 | 190 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.22. Filling of NW Pit Onsite Trucks (2027) - Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.66 | 0.29 | 7.0 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,521 | 1,521 | 0.33 | 0.25 | 1.7 | 1,604 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |

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| Onsite truck | 0.62 | 0.25 | 7.3 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,534 | 1,534 | 0.33 | 0.26 | 0.04 | 1,619 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.46 | 0.20 | 5.1 | 3.6 | 0.01 | 0.01 | 8.1 | 8.1 | 0.01 | 0.90 | 0.91 | — | 1,090 | 1,090 | 0.24 | 0.18 | 0.52 | 1,149 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.08 | 0.04 | 0.93 | 0.66 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.16 | 0.17 | — | 181 | 181 | 0.04 | 0.03 | 0.09 | 190 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.23. Filling of NW Pit Onsite Trucks (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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.65 | 0.29 | 6.9 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,493 | 1,493 | 0.33 | 0.24 | 1.6 | 1,575 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.61 | 0.25 | 7.2 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,507 | 1,507 | 0.33 | 0.24 | 0.04 | 1,587 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.45 | 0.20 | 5.0 | 3.7 | 0.01 | 0.01 | 8.1 | 8.1 | 0.01 | 0.90 | 0.91 | — | 1,074 | 1,074 | 0.24 | 0.17 | 0.49 | 1,131 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.08 | 0.04 | 0.92 | 0.67 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.17 | 0.17 | — | 178 | 178 | 0.04 | 0.03 | 0.08 | 187 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.24. Filling of NW Pit Onsite Trucks (2028) - Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.65 | 0.29 | 6.9 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,493 | 1,493 | 0.33 | 0.24 | 1.6 | 1,575 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.61 | 0.25 | 7.2 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,507 | 1,507 | 0.33 | 0.24 | 0.04 | 1,587 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.45 | 0.20 | 5.0 | 3.7 | 0.01 | 0.01 | 8.1 | 8.1 | 0.01 | 0.90 | 0.91 | — | 1,074 | 1,074 | 0.24 | 0.17 | 0.49 | 1,131 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.08 | 0.04 | 0.92 | 0.67 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.17 | 0.17 | — | 178 | 178 | 0.04 | 0.03 | 0.08 | 187 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.25. Filling of NW Pit Onsite Trucks (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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.64 | 0.29 | 6.8 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,465 | 1,465 | 0.33 | 0.24 | 1.5 | 1,545 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.60 | 0.25 | 7.1 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,479 | 1,479 | 0.32 | 0.24 | 0.04 | 1,558 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.37 | 0.16 | 4.1 | 3.0 | 0.01 | 0.01 | 6.7 | 6.7 | 0.01 | 0.75 | 0.75 | — | 870 | 870 | 0.19 | 0.14 | 0.37 | 916 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.07 | 0.03 | 0.75 | 0.55 | < 0.005 | < 0.005 | 1.2 | 1.2 | < 0.005 | 0.14 | 0.14 | — | 144 | 144 | 0.03 | 0.02 | 0.06 | 152 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.26. Filling of NW Pit Onsite Trucks (2029) - Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.64 | 0.29 | 6.8 | 5.0 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,465 | 1,465 | 0.33 | 0.24 | 1.5 | 1,545 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.60 | 0.25 | 7.1 | 5.2 | 0.02 | 0.01 | 12 | 12 | 0.01 | 1.3 | 1.3 | — | 1,479 | 1,479 | 0.32 | 0.24 | 0.04 | 1,558 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.37 | 0.16 | 4.1 | 3.0 | 0.01 | 0.01 | 6.7 | 6.7 | 0.01 | 0.75 | 0.75 | — | 870 | 870 | 0.19 | 0.14 | 0.37 | 916 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.07 | 0.03 | 0.75 | 0.55 | < 0.005 | < 0.005 | 1.2 | 1.2 | < 0.005 | 0.14 | 0.14 | — | 144 | 144 | 0.03 | 0.02 | 0.06 | 152 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.27. Filling of SE Pit Onsite Trucks (2025) - 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 1.1 | 0.46 | 12 | 8.1 | 0.03 | 0.03 | 30 | 30 | 0.03 | 3.3 | 3.4 | — | 3,222 | 3,222 | 0.57 | 0.52 | 4.8 | 3,396 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 1.1 | 0.42 | 13 | 8.4 | 0.03 | 0.03 | 30 | 30 | 0.03 | 3.3 | 3.4 | — | 3,242 | 3,242 | 0.57 | 0.52 | 0.12 | 3,411 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.36 | 0.15 | 4.1 | 2.7 | 0.01 | 0.01 | 9.4 | 9.4 | 0.01 | 1.1 | 1.1 | — | 1,075 | 1,075 | 0.19 | 0.17 | 0.69 | 1,132 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.07 | 0.03 | 0.75 | 0.50 | < 0.005 | < 0.005 | 1.7 | 1.7 | < 0.005 | 0.19 | 0.19 | — | 178 | 178 | 0.03 | 0.03 | 0.11 | 187 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.28. Filling of SE Pit Onsite Trucks (2025) - Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 1.1 | 0.46 | 12 | 8.1 | 0.03 | 0.03 | 30 | 30 | 0.03 | 3.3 | 3.4 | — | 3,222 | 3,222 | 0.57 | 0.52 | 4.8 | 3,396 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 1.1 | 0.42 | 13 | 8.4 | 0.03 | 0.03 | 30 | 30 | 0.03 | 3.3 | 3.4 | — | 3,242 | 3,242 | 0.57 | 0.52 | 0.12 | 3,411 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.36 | 0.15 | 4.1 | 2.7 | 0.01 | 0.01 | 9.4 | 9.4 | 0.01 | 1.1 | 1.1 | — | 1,075 | 1,075 | 0.19 | 0.17 | 0.69 | 1,132 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.07 | 0.03 | 0.75 | 0.50 | < 0.005 | < 0.005 | 1.7 | 1.7 | < 0.005 | 0.19 | 0.19 | — | 178 | 178 | 0.03 | 0.03 | 0.11 | 187 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.29. Filling of SE Pit Onsite Trucks (2026) - 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 1.0 | 0.42 | 12 | 8.4 | 0.03 | 0.03 | 30 | 30 | 0.03 | 3.3 | 3.4 | — | 3,188 | 3,188 | 0.57 | 0.52 | 0.12 | 3,357 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.17 | 0.07 | 1.9 | 1.3 | < 0.005 | < 0.005 | 4.5 | 4.5 | < 0.005 | 0.51 | 0.51 | — | 510 | 510 | 0.09 | 0.08 | 0.32 | 537 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.03 | 0.01 | 0.36 | 0.24 | < 0.005 | < 0.005 | 0.83 | 0.83 | < 0.005 | 0.09 | 0.09 | — | 84 | 84 | 0.02 | 0.01 | 0.05 | 89 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.30. Filling of SE Pit Onsite Trucks (2026) - Mitigated

### 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 1.0 | 0.42 | 12 | 8.4 | 0.03 | 0.03 | 30 | 30 | 0.03 | 3.3 | 3.4 | — | 3,188 | 3,188 | 0.57 | 0.52 | 0.12 | 3,357 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.17 | 0.07 | 1.9 | 1.3 | < 0.005 | < 0.005 | 4.5 | 4.5 | < 0.005 | 0.51 | 0.51 | — | 510 | 510 | 0.09 | 0.08 | 0.32 | 537 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Dust From Material Movement | — | — | — | — | — | — | 0.00 | 0.00 | — | 0.00 | 0.00 | — | — | — | — | — | — | — |
| Onsite truck | 0.03 | 0.01 | 0.36 | 0.24 | < 0.005 | < 0.005 | 0.83 | 0.83 | < 0.005 | 0.09 | 0.09 | — | 84 | 84 | 0.02 | 0.01 | 0.05 | 89 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.31. Site Infrastructure (2026) - 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 | 4.8 | 4.0 | 36 | 34 | 0.07 | 1.6 | — | 1.6 | 1.5 | — | 1.5 | — | 7,975 | 7,975 | 0.32 | 0.06 | — | 8,002 |
| Dust From Material Movement | — | — | — | — | — | — | 3.2 | 3.2 | — | 1.2 | 1.2 | — | — | — | — | — | — | — |
| 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 | 4.8 | 4.0 | 36 | 34 | 0.07 | 1.6 | — | 1.6 | 1.5 | — | 1.5 | — | 7,975 | 7,975 | 0.32 | 0.06 | — | 8,002 |
| Dust From Material Movement | — | — | — | — | — | — | 3.2 | 3.2 | — | 1.2 | 1.2 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 1.6 | 1.3 | 12 | 11 | 0.02 | 0.54 | — | 0.54 | 0.50 | — | 0.50 | — | 2,622 | 2,622 | 0.11 | 0.02 | — | 2,631 |
| Dust From Material Movement | — | — | — | — | — | — | 1.0 | 1.0 | — | 0.38 | 0.38 | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.29 | 0.24 | 2.1 | 2.0 | < 0.005 | 0.10 | — | 0.10 | 0.09 | — | 0.09 | — | 434 | 434 | 0.02 | < 0.005 | — | 436 |
| Dust From Material Movement | — | — | — | — | — | — | 0.19 | 0.19 | — | 0.07 | 0.07 | — | — | — | — | — | — | — |
| 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 | 0.16 | 2.6 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 542 | 542 | 0.02 | 0.02 | 1.8 | 550 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.17 | 0.15 | 0.17 | 2.2 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 514 | 514 | 0.02 | 0.02 | 0.05 | 520 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.05 | 0.05 | 0.06 | 0.76 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 171 | 171 | 0.01 | 0.01 | 0.26 | 174 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.14 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 28 | 28 | < 0.005 | < 0.005 | 0.04 | 29 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.32. Site Infrastructure (2026) - Mitigated

### 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 | 0.77 | 0.77 | 5.3 | 43 | 0.07 | 0.15 | — | 0.15 | 0.15 | — | 0.15 | — | 7,975 | 7,975 | 0.32 | 0.06 | — | 8,002 |
| Dust From Material Movement | — | — | — | — | — | — | 3.2 | 3.2 | — | 1.2 | 1.2 | — | — | — | — | — | — | — |
| 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 | 0.77 | 0.77 | 5.3 | 43 | 0.07 | 0.15 | — | 0.15 | 0.15 | — | 0.15 | — | 7,975 | 7,975 | 0.32 | 0.06 | — | 8,002 |
| Dust From Material Movement | — | — | — | — | — | — | 3.2 | 3.2 | — | 1.2 | 1.2 | — | — | — | — | — | — | — |
| 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 | 1.8 | 14 | 0.02 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 2,622 | 2,622 | 0.11 | 0.02 | — | 2,631 |
| Dust From Material Movement | — | — | — | — | — | — | 1.0 | 1.0 | — | 0.38 | 0.38 | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.05 | 0.32 | 2.6 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 434 | 434 | 0.02 | < 0.005 | — | 436 |
| Dust From Material Movement | — | — | — | — | — | — | 0.19 | 0.19 | — | 0.07 | 0.07 | — | — | — | — | — | — | — |
| 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 | 0.16 | 2.6 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 542 | 542 | 0.02 | 0.02 | 1.8 | 550 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.17 | 0.15 | 0.17 | 2.2 | 0.00 | 0.00 | 0.52 | 0.52 | 0.00 | 0.12 | 0.12 | — | 514 | 514 | 0.02 | 0.02 | 0.05 | 520 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.05 | 0.05 | 0.06 | 0.76 | 0.00 | 0.00 | 0.17 | 0.17 | 0.00 | 0.04 | 0.04 | — | 171 | 171 | 0.01 | 0.01 | 0.26 | 174 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.14 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 28 | 28 | < 0.005 | < 0.005 | 0.04 | 29 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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 | 5/13/2025 | 7/14/2025 | 5.0 | 45 | — |
| Filling of NW Pit | Site Preparation | 7/15/2025 | 10/29/2029 | 5.0 | 1,120 | — |
| Filling of SE Pit | Site Preparation | 7/15/2025 | 3/23/2026 | 5.0 | 180 | — |
| Filling of NW Pit Onsite Trucks | Site Preparation | 7/15/2025 | 10/29/2029 | 5.0 | 1,120 | — |
| Filling of SE Pit Onsite Trucks | Site Preparation | 7/15/2025 | 3/23/2026 | 5.0 | 180 | — |
| Site Infrastructure | Grading | 3/24/2026 | 9/7/2026 | 5.0 | 120 | — |

## 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 | Concrete/Industrial Saws | Diesel | Average | 1.00 | 9.5 | 33 | 0.73 |
| Demolition | Excavators | Diesel | Average | 3.0 | 9.5 | 36 | 0.38 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 2.0 | 9.5 | 367 | 0.40 |
| Filling of NW Pit | Rubber Tired Dozers | Diesel | Average | 4.0 | 9.5 | 367 | 0.40 |
| Filling of NW Pit | Crawler Tractors | Diesel | Average | 2.0 | 9.5 | 87 | 0.43 |
| Filling of NW Pit | Excavators | Diesel | Average | 4.0 | 9.5 | 36 | 0.38 |
| Filling of NW Pit | Off-Highway Trucks | Diesel | Average | 3.0 | 9.5 | 376 | 0.38 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Filling of NW Pit | Other Material Handling Equipment | Diesel | Average | 3.0 | 9.5 | 93 | 0.40 |
| Filling of SE Pit | Rubber Tired Dozers | Diesel | Average | 4.0 | 9.5 | 367 | 0.40 |
| Filling of SE Pit | Crawler Tractors | Diesel | Average | 2.0 | 9.5 | 87 | 0.43 |
| Filling of SE Pit | Excavators | Diesel | Average | 4.0 | 9.5 | 36 | 0.38 |
| Filling of SE Pit | Off-Highway Trucks | Diesel | Average | 3.0 | 9.5 | 376 | 0.38 |
| Filling of SE Pit | Other Material Handling Equipment | Diesel | Average | 3.0 | 9.5 | 93 | 0.40 |
| Site Infrastructure | Excavators | Diesel | Average | 2.0 | 9.5 | 36 | 0.38 |
| Site Infrastructure | Graders | Diesel | Average | 1.00 | 9.5 | 148 | 0.41 |
| Site Infrastructure | Rubber Tired Dozers | Diesel | Average | 1.00 | 9.5 | 367 | 0.40 |
| Site Infrastructure | Scrapers | Diesel | Average | 2.0 | 9.5 | 423 | 0.48 |
| Site Infrastructure | Crawler Tractors | Diesel | Average | 2.0 | 9.5 | 87 | 0.43 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | Diesel | Tier 4 Final | 1.00 | 9.5 | 33 | 0.73 |
| Demolition | Excavators | Diesel | Tier 4 Final | 3.0 | 9.5 | 36 | 0.38 |
| Demolition | Rubber Tired Dozers | Diesel | Tier 4 Final | 2.0 | 9.5 | 367 | 0.40 |
| Filling of NW Pit | Rubber Tired Dozers | Diesel | Tier 4 Final | 4.0 | 9.5 | 367 | 0.40 |
| Filling of NW Pit | Crawler Tractors | Diesel | Tier 4 Final | 2.0 | 9.5 | 87 | 0.43 |
| Filling of NW Pit | Excavators | Diesel | Tier 4 Final | 4.0 | 9.5 | 36 | 0.38 |
| Filling of NW Pit | Off-Highway Trucks | Diesel | Tier 4 Final | 3.0 | 9.5 | 376 | 0.38 |
| Filling of NW Pit | Other Material Handling Equipment | Diesel | Tier 4 Final | 3.0 | 9.5 | 93 | 0.40 |
| Filling of SE Pit | Rubber Tired Dozers | Diesel | Tier 4 Final | 4.0 | 9.5 | 367 | 0.40 |
| Filling of SE Pit | Crawler Tractors | Diesel | Tier 4 Final | 2.0 | 9.5 | 87 | 0.43 |
| Filling of SE Pit | Excavators | Diesel | Tier 4 Final | 4.0 | 9.5 | 36 | 0.38 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Filling of SE Pit | Off-Highway Trucks | Diesel | Tier 4 Final | 3.0 | 9.5 | 376 | 0.38 |
| Filling of SE Pit | Other Material Handling Equipment | Diesel | Tier 4 Final | 3.0 | 9.5 | 93 | 0.40 |
| Site Infrastructure | Excavators | Diesel | Tier 4 Final | 2.0 | 9.5 | 36 | 0.38 |
| Site Infrastructure | Graders | Diesel | Tier 4 Final | 1.00 | 9.5 | 148 | 0.41 |
| Site Infrastructure | Rubber Tired Dozers | Diesel | Tier 4 Final | 1.00 | 9.5 | 367 | 0.40 |
| Site Infrastructure | Scrapers | Diesel | Tier 4 Final | 2.0 | 9.5 | 423 | 0.48 |
| Site Infrastructure | Crawler Tractors | Diesel | Tier 4 Final | 2.0 | 9.5 | 87 | 0.43 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15 | 19 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 10 | HHDT,MHDT |
| Demolition | Hauling | 5.1 | 20 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Filling of NW Pit | Worker | 40 | 19 | LDA,LDT1,LDT2 |
| Filling of NW Pit | Vendor | — | 10 | HHDT,MHDT |
| Filling of NW Pit | Hauling | 1,004 | 20 | HHDT |
| Filling of NW Pit | Onsite truck | 0.00 | 0.53 | HHDT |
| Filling of SE Pit | Worker | 40 | 19 | LDA,LDT1,LDT2 |
| Filling of SE Pit | Vendor | — | 10 | HHDT,MHDT |
| Filling of SE Pit | Hauling | 0.00 | 20 | HHDT |
| Filling of SE Pit | Onsite truck | 0.00 | 0.85 | HHDT |
| Filling of NW Pit Onsite Trucks | Worker | 0.00 | 19 | LDA,LDT1,LDT2 |
| Filling of NW Pit Onsite Trucks | Vendor | — | 10 | HHDT,MHDT |
| Filling of NW Pit Onsite Trucks | Hauling | 0.00 | 20 | HHDT |
| Filling of NW Pit Onsite Trucks | Onsite truck | 451 | 0.53 | HHDT |

| | | | | |
|---|---|---|---|---|
| Filling of SE Pit Onsite Trucks | Worker | 0.00 | 19 | LDA,LDT1,LDT2 |
| Filling of SE Pit Onsite Trucks | Vendor | — | 10 | HHDT,MHDT |
| Filling of SE Pit Onsite Trucks | Hauling | 0.00 | 20 | HHDT |
| Filling of SE Pit Onsite Trucks | Onsite truck | 705 | 0.85 | HHDT |
| Site Infrastructure | Worker | 40 | 19 | LDA,LDT1,LDT2 |
| Site Infrastructure | Vendor | — | 10 | HHDT,MHDT |
| Site Infrastructure | Hauling | 0.00 | 20 | HHDT |
| Site Infrastructure | Onsite truck | — | — | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 15 | 19 | LDA,LDT1,LDT2 |
| Demolition | Vendor | — | 10 | HHDT,MHDT |
| Demolition | Hauling | 5.1 | 20 | HHDT |
| Demolition | Onsite truck | — | — | HHDT |
| Filling of NW Pit | Worker | 40 | 19 | LDA,LDT1,LDT2 |
| Filling of NW Pit | Vendor | — | 10 | HHDT,MHDT |
| Filling of NW Pit | Hauling | 1,004 | 20 | HHDT |
| Filling of NW Pit | Onsite truck | 0.00 | 0.53 | HHDT |
| Filling of SE Pit | Worker | 40 | 19 | LDA,LDT1,LDT2 |
| Filling of SE Pit | Vendor | — | 10 | HHDT,MHDT |
| Filling of SE Pit | Hauling | 0.00 | 20 | HHDT |
| Filling of SE Pit | Onsite truck | 0.00 | 0.85 | HHDT |
| Filling of NW Pit Onsite Trucks | Worker | 0.00 | 19 | LDA,LDT1,LDT2 |
| Filling of NW Pit Onsite Trucks | Vendor | — | 10 | HHDT,MHDT |
| Filling of NW Pit Onsite Trucks | Hauling | 0.00 | 20 | HHDT |
| Filling of NW Pit Onsite Trucks | Onsite truck | 451 | 0.53 | HHDT |
| Filling of SE Pit Onsite Trucks | Worker | 0.00 | 19 | LDA,LDT1,LDT2 |

| | | | | |
|---|---|---|---|---|
| Filling of SE Pit Onsite Trucks | Vendor | — | 10 | HHDT,MHDT |
| Filling of SE Pit Onsite Trucks | Hauling | 0.00 | 20 | HHDT |
| Filling of SE Pit Onsite Trucks | Onsite truck | 705 | 0.85 | HHDT |
| Site Infrastructure | Worker | 40 | 19 | LDA,LDT1,LDT2 |
| Site Infrastructure | Vendor | — | 10 | HHDT,MHDT |
| Site Infrastructure | Hauling | 0.00 | 20 | HHDT |
| Site Infrastructure | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Water unpaved roads twice daily | 55% | 55% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |
| Sweep paved roads once per month | 9% | 9% |

## 5.5. Architectural Coatings

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Cubic Yards) | Material Exported (Cubic Yards) | Acres Graded (acres) | Material Demolished (Building Square Footage) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 0.00 | 20,000 | 0.00 |
| Filling of NW Pit | 8,000,000 | — | 3,990 | 0.00 | 0.00 |
| Filling of SE Pit | — | — | 641 | 0.00 | 0.00 |
| Filling of NW Pit Onsite Trucks | — | — | 0.00 | 0.00 | 0.00 |
| Filling of SE Pit Onsite Trucks | — | — | 0.00 | 0.00 | 0.00 |
| Site Infrastructure | — | — | 570 | 0.00 | 0.00 |

### 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

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2026 | 0.00 | 532 | 0.03 | < 0.005 |
| 2027 | 0.00 | 532 | 0.03 | < 0.005 |
| 2028 | 0.00 | 532 | 0.03 | < 0.005 |
| 2029 | 0.00 | 532 | 0.03 | < 0.005 |
| 2025 | 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 |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| 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 |
|---|---|---|

#### 5.18.1.2. Mitigated

| 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) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| 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 | 26 | annual days of extreme heat |
| Extreme Precipitation | 8.9 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 29 | 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 | 3 | 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 | 3 | 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 | 83 |
| AQ-PM | 66 |
| AQ-DPM | 68 |
| Drinking Water | 85 |
| Lead Risk Housing | 68 |
| Pesticides | 54 |
| Toxic Releases | 75 |
| Traffic | 88 |
| Effect Indicators | — |
| CleanUp Sites | 83 |
| Groundwater | 93 |
| Haz Waste Facilities/Generators | 92 |
| Impaired Water Bodies | 44 |
| Solid Waste | 99 |

| | |
|---|---|
| Sensitive Population | — |
| Asthma | 54 |
| Cardio-vascular | 37 |
| Low Birth Weights | 36 |
| Socioeconomic Factor Indicators | — |
| Education | 70 |
| Housing | 35 |
| Linguistic | 36 |
| Poverty | 49 |
| Unemployment | 73 |

## 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 | — |
| Employed | — |
| Median HI | — |
| Education | — |
| Bachelor's or higher | — |
| High school enrollment | — |
| Preschool enrollment | — |
| Transportation | — |
| Auto Access | — |
| Active commuting | — |
| Social | — |
| 2-parent households | — |
| Voting | — |

| | |
|---|---|
| Neighborhood | — |
| Alcohol availability | — |
| Park access | — |
| Retail density | — |
| Supermarket access | — |
| Tree canopy | — |
| Housing | — |
| Homeownership | — |
| Housing habitability | — |
| Low-inc homeowner severe housing cost burden | — |
| Low-inc renter severe housing cost burden | — |
| Uncrowded housing | — |
| Health Outcomes | — |
| Insured adults | — |
| Arthritis | 0.0 |
| Asthma ER Admissions | 58.6 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 0.0 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 24.6 |
| Heart Attack ER Admissions | 66.5 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |

| | |
|---|---|
| Obesity | 0.0 |
| Pedestrian Injuries | 0.0 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 1.3 |
| SLR Inundation Area | 0.0 |
| Children | 19.0 |
| Elderly | 62.6 |
| English Speaking | 0.0 |
| Foreign-born | 0.0 |
| Outdoor Workers | 37.5 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 29.6 |
| Traffic Density | 0.0 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 0.0 |
| Other Decision Support | — |
| 2016 Voting | 0.0 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 83 |

| | |
|---|---|
| Healthy Places Index Score for Project Location (b) | — |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | Yes |
| Project Located in a Low-Income Community (Assembly Bill 1550) | Yes |
| 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 |
|---|---|
| Land Use | Lot acreage adjusted to account for total site area. |
| Construction: Construction Phases | Construction schedule based on Project Description. |
| Construction: Off-Road Equipment | Construction equipment based on the Project Description. Crawler tractors utilized in lieu of tractors/loaders/backhoes in order to account for fugitive dust. |
| Construction: Trips and VMT | Construction trips based on Project Description. |
| Construction: On-Road Fugitive Dust | Onsite trucks adjusted based on Project Description. |

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | 15575 Brew Yard Phase I Development |
| Construction Start Date | 7/15/2025 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 1.8 |
| Precipitation (days) | 22 |
| Location | 34.126753567265794, -117.94443250223712 |
| County | Los Angeles-South Coast |
| City | Irwindale |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 4900 |
| EDFZ | 7 |
| 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 |
|---|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 334 | 1000sqft | 7.7 | 334,197 | 0.00 | — | — | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Unrefrigerated Warehouse-No Rail | 1,540 | 1000sqft | 35 | 1,539,803 | 487,352 | — | — | — |
| Strip Mall | 12 | 1000sqft | 1.1 | 12,000 | 39,210 | — | — | — |
| Parking Lot | 31 | Acre | 31 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Construction | C-5 | Use Advanced Engine Tiers |

## 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. | 69 | 68 | 37 | 98 | 0.12 | 1.0 | 15 | 16 | 0.90 | 3.7 | 4.6 | — | 27,828 | 27,828 | 1.2 | 1.9 | 70 | 28,485 |
| Mit. | 67 | 66 | 21 | 101 | 0.12 | 0.27 | 15 | 16 | 0.20 | 3.7 | 3.9 | — | 27,828 | 27,828 | 1.2 | 1.9 | 70 | 28,485 |
| % Reduced | 3% | 3% | 43% | -3% | — | 74% | — | 5% | 78% | — | 15% | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 69 | 68 | 38 | 89 | 0.12 | 1.0 | 15 | 16 | 0.90 | 3.7 | 4.6 | — | 27,154 | 27,154 | 1.2 | 1.9 | 1.8 | 27,743 |
| Mit. | 67 | 66 | 22 | 92 | 0.12 | 0.27 | 15 | 16 | 0.20 | 3.7 | 3.9 | — | 27,154 | 27,154 | 1.2 | 1.9 | 1.8 | 27,743 |
| % Reduced | 3% | 3% | 41% | -3% | — | 74% | — | 5% | 78% | — | 15% | — | — | — | — | — | — | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | 17 | 16 | 15 | 37 | 0.05 | 0.39 | 6.5 | 6.9 | 0.33 | 1.6 | 1.9 | — | 11,840 | 11,840 | 0.51 | 0.86 | 13 | 12,122 |
| Mit. | 16 | 16 | 9.6 | 38 | 0.05 | 0.12 | 6.5 | 6.7 | 0.08 | 1.6 | 1.7 | — | 11,840 | 11,840 | 0.51 | 0.86 | 13 | 12,122 |
| % Reduced | 5% | 4% | 38% | -4% | — | 70% | — | 4% | 74% | — | 13% | — | — | — | — | — | — | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 3.1 | 3.0 | 2.8 | 6.8 | 0.01 | 0.07 | 1.2 | 1.3 | 0.06 | 0.29 | 0.35 | — | 1,960 | 1,960 | 0.08 | 0.14 | 2.2 | 2,007 |
| Mit. | 2.9 | 2.9 | 1.8 | 7.0 | 0.01 | 0.02 | 1.2 | 1.2 | 0.02 | 0.29 | 0.30 | — | 1,960 | 1,960 | 0.08 | 0.14 | 2.2 | 2,007 |
| % Reduced | 5% | 4% | 38% | -4% | — | 70% | — | 4% | 74% | — | 13% | — | — | — | — | — | — | — |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 69 | 68 | 37 | 98 | 0.12 | 1.0 | 15 | 16 | 0.90 | 3.7 | 4.6 | — | 27,828 | 27,828 | 1.2 | 1.9 | 70 | 28,485 |
| 2027 | 69 | 67 | 35 | 93 | 0.12 | 0.89 | 15 | 16 | 0.82 | 3.7 | 4.5 | — | 27,392 | 27,392 | 1.2 | 1.8 | 65 | 28,023 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 69 | 68 | 38 | 89 | 0.12 | 1.0 | 15 | 16 | 0.90 | 3.7 | 4.6 | — | 27,154 | 27,154 | 1.2 | 1.9 | 1.8 | 27,743 |
| 2027 | 69 | 67 | 36 | 84 | 0.12 | 0.89 | 15 | 16 | 0.82 | 3.7 | 4.5 | — | 26,731 | 26,731 | 0.78 | 1.8 | 1.7 | 27,290 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 17 | 16 | 15 | 37 | 0.05 | 0.39 | 6.5 | 6.9 | 0.33 | 1.6 | 1.9 | — | 11,840 | 11,840 | 0.51 | 0.86 | 13 | 12,122 |
| 2027 | 13 | 13 | 6.8 | 16 | 0.02 | 0.16 | 2.8 | 3.0 | 0.15 | 0.68 | 0.83 | — | 5,002 | 5,002 | 0.14 | 0.34 | 5.2 | 5,111 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 3.1 | 3.0 | 2.8 | 6.8 | 0.01 | 0.07 | 1.2 | 1.3 | 0.06 | 0.29 | 0.35 | — | 1,960 | 1,960 | 0.08 | 0.14 | 2.2 | 2,007 |
| 2027 | 2.3 | 2.3 | 1.2 | 2.9 | < 0.005 | 0.03 | 0.51 | 0.54 | 0.03 | 0.12 | 0.15 | — | 828 | 828 | 0.02 | 0.06 | 0.86 | 846 |

## 2.3. Construction Emissions by Year, Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 67 | 66 | 21 | 101 | 0.12 | 0.27 | 15 | 16 | 0.20 | 3.7 | 3.9 | — | 27,828 | 27,828 | 1.2 | 1.9 | 70 | 28,485 |
| 2027 | 66 | 66 | 20 | 96 | 0.12 | 0.20 | 15 | 15 | 0.20 | 3.7 | 3.9 | — | 27,392 | 27,392 | 1.2 | 1.8 | 65 | 28,023 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 67 | 66 | 22 | 92 | 0.12 | 0.27 | 15 | 16 | 0.20 | 3.7 | 3.9 | — | 27,154 | 27,154 | 1.2 | 1.9 | 1.8 | 27,743 |
| 2027 | 66 | 66 | 22 | 87 | 0.12 | 0.20 | 15 | 15 | 0.20 | 3.7 | 3.9 | — | 26,731 | 26,731 | 0.78 | 1.8 | 1.7 | 27,290 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 16 | 16 | 9.6 | 38 | 0.05 | 0.12 | 6.5 | 6.7 | 0.08 | 1.6 | 1.7 | — | 11,840 | 11,840 | 0.51 | 0.86 | 13 | 12,122 |
| 2027 | 12 | 12 | 4.0 | 17 | 0.02 | 0.04 | 2.8 | 2.8 | 0.04 | 0.68 | 0.71 | — | 5,002 | 5,002 | 0.14 | 0.34 | 5.2 | 5,111 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 2.9 | 2.9 | 1.8 | 7.0 | 0.01 | 0.02 | 1.2 | 1.2 | 0.02 | 0.29 | 0.30 | — | 1,960 | 1,960 | 0.08 | 0.14 | 2.2 | 2,007 |
| 2027 | 2.3 | 2.2 | 0.73 | 3.0 | < 0.005 | 0.01 | 0.51 | 0.52 | 0.01 | 0.12 | 0.13 | — | 828 | 828 | 0.02 | 0.06 | 0.86 | 846 |

# 3. Construction Emissions Details

## 3.1. Building Construction (2026) - 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-Roa Equipment | 1.6 | 1.4 | 13 | 17 | 0.03 | 0.49 | — | 0.49 | 0.45 | — | 0.45 | — | 3,123 | 3,123 | 0.13 | 0.03 | — | 3,134 |
| 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 d Equipm ent | 1.6 | 1.4 | 13 | 17 | 0.03 | 0.49 | — | 0.49 | 0.45 | — | 0.45 | — | 3,123 | 3,123 | 0.13 | 0.03 | — | 3,134 |
| 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 | 0.77 | 0.65 | 6.0 | 7.9 | 0.01 | 0.23 | — | 0.23 | 0.21 | — | 0.21 | — | 1,473 | 1,473 | 0.06 | 0.01 | — | 1,478 |
| 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 | 0.14 | 0.12 | 1.1 | 1.4 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 244 | 244 | 0.01 | < 0.005 | — | 245 |
| 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 | 3.3 | 2.9 | 3.1 | 51 | 0.00 | 0.00 | 10 | 10 | 0.00 | 2.4 | 2.4 | — | 10,716 | 10,716 | 0.44 | 0.37 | 36 | 10,875 |
| Vendor | 0.70 | 0.29 | 11 | 5.1 | 0.07 | 0.14 | 2.6 | 2.8 | 0.07 | 0.73 | 0.80 | — | 9,637 | 9,637 | 0.40 | 1.4 | 26 | 10,083 |
| 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 | 3.3 | 2.9 | 3.4 | 44 | 0.00 | 0.00 | 10 | 10 | 0.00 | 2.4 | 2.4 | — | 10,159 | 10,159 | 0.46 | 0.37 | 0.94 | 10,283 |
| Vendor | 0.68 | 0.28 | 11 | 5.3 | 0.07 | 0.14 | 2.6 | 2.8 | 0.07 | 0.73 | 0.80 | — | 9,642 | 9,642 | 0.40 | 1.4 | 0.68 | 10,063 |
| 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 | 1.5 | 1.4 | 1.8 | 22 | 0.00 | 0.00 | 4.8 | 4.8 | 0.00 | 1.1 | 1.1 | — | 4,862 | 4,862 | 0.22 | 0.18 | 7.4 | 4,927 |
| Vendor | 0.33 | 0.13 | 5.3 | 2.5 | 0.03 | 0.07 | 1.2 | 1.3 | 0.03 | 0.34 | 0.37 | — | 4,546 | 4,546 | 0.19 | 0.65 | 5.3 | 4,749 |
| 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 | 0.28 | 0.25 | 0.32 | 3.9 | 0.00 | 0.00 | 0.88 | 0.88 | 0.00 | 0.21 | 0.21 | — | 805 | 805 | 0.04 | 0.03 | 1.2 | 816 |
| Vendor | 0.06 | 0.02 | 0.96 | 0.45 | 0.01 | 0.01 | 0.22 | 0.24 | 0.01 | 0.06 | 0.07 | — | 753 | 753 | 0.03 | 0.11 | 0.88 | 786 |
| 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 |

## 3.2. Building Construction (2026) - Mitigated

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 | 0.44 | 0.42 | 3.5 | 19 | 0.03 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 3,123 | 3,123 | 0.13 | 0.03 | — | 3,134 |
| 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 | 0.44 | 0.42 | 3.5 | 19 | 0.03 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 3,123 | 3,123 | 0.13 | 0.03 | — | 3,134 |
| 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 | 0.21 | 0.20 | 1.6 | 9.1 | 0.01 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 1,473 | 1,473 | 0.06 | 0.01 | — | 1,478 |
| 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 | 0.04 | 0.04 | 0.30 | 1.7 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 244 | 244 | 0.01 | < 0.005 | — | 245 |
| 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 | 3.3 | 2.9 | 3.1 | 51 | 0.00 | 0.00 | 10 | 10 | 0.00 | 2.4 | 2.4 | — | 10,716 | 10,716 | 0.44 | 0.37 | 36 | 10,875 |
| Vendor | 0.70 | 0.29 | 11 | 5.1 | 0.07 | 0.14 | 2.6 | 2.8 | 0.07 | 0.73 | 0.80 | — | 9,637 | 9,637 | 0.40 | 1.4 | 26 | 10,083 |
| 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 | 3.3 | 2.9 | 3.4 | 44 | 0.00 | 0.00 | 10 | 10 | 0.00 | 2.4 | 2.4 | — | 10,159 | 10,159 | 0.46 | 0.37 | 0.94 | 10,283 |
| Vendor | 0.68 | 0.28 | 11 | 5.3 | 0.07 | 0.14 | 2.6 | 2.8 | 0.07 | 0.73 | 0.80 | — | 9,642 | 9,642 | 0.40 | 1.4 | 0.68 | 10,063 |
| 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 | 1.5 | 1.4 | 1.8 | 22 | 0.00 | 0.00 | 4.8 | 4.8 | 0.00 | 1.1 | 1.1 | — | 4,862 | 4,862 | 0.22 | 0.18 | 7.4 | 4,927 |
| Vendor | 0.33 | 0.13 | 5.3 | 2.5 | 0.03 | 0.07 | 1.2 | 1.3 | 0.03 | 0.34 | 0.37 | — | 4,546 | 4,546 | 0.19 | 0.65 | 5.3 | 4,749 |
| 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 | 0.28 | 0.25 | 0.32 | 3.9 | 0.00 | 0.00 | 0.88 | 0.88 | 0.00 | 0.21 | 0.21 | — | 805 | 805 | 0.04 | 0.03 | 1.2 | 816 |
| Vendor | 0.06 | 0.02 | 0.96 | 0.45 | 0.01 | 0.01 | 0.22 | 0.24 | 0.01 | 0.06 | 0.07 | — | 753 | 753 | 0.03 | 0.11 | 0.88 | 786 |
| 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 |

## 3.3. 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 | 1.6 | 1.3 | 12 | 17 | 0.03 | 0.43 | — | 0.43 | 0.40 | — | 0.40 | — | 3,123 | 3,123 | 0.13 | 0.03 | — | 3,133 |
| 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 | 1.6 | 1.3 | 12 | 17 | 0.03 | 0.43 | — | 0.43 | 0.40 | — | 0.40 | — | 3,123 | 3,123 | 0.13 | 0.03 | — | 3,133 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.29 | 0.25 | 2.2 | 3.1 | 0.01 | 0.08 | — | 0.08 | 0.07 | — | 0.07 | — | 581 | 581 | 0.02 | < 0.005 | — | 583 |
| 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 | 0.04 | 0.41 | 0.57 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 96 | 96 | < 0.005 | < 0.005 | — | 96 |
| 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 | 3.2 | 2.8 | 2.7 | 48 | 0.00 | 0.00 | 10 | 10 | 0.00 | 2.4 | 2.4 | — | 10,511 | 10,511 | 0.44 | 0.37 | 33 | 10,666 |
| Vendor | 0.62 | 0.29 | 10 | 4.8 | 0.07 | 0.07 | 2.6 | 2.7 | 0.07 | 0.73 | 0.80 | — | 9,451 | 9,451 | 0.40 | 1.3 | 25 | 9,875 |
| 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 | 3.1 | 2.8 | 3.4 | 40 | 0.00 | 0.00 | 10 | 10 | 0.00 | 2.4 | 2.4 | — | 9,965 | 9,965 | 0.14 | 0.37 | 0.85 | 10,081 |
| Vendor | 0.61 | 0.28 | 11 | 5.0 | 0.07 | 0.07 | 2.6 | 2.7 | 0.07 | 0.73 | 0.80 | — | 9,456 | 9,456 | 0.40 | 1.3 | 0.64 | 9,856 |
| 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 | 0.59 | 0.51 | 0.63 | 7.9 | 0.00 | 0.00 | 1.9 | 1.9 | 0.00 | 0.44 | 0.44 | — | 1,880 | 1,880 | 0.03 | 0.07 | 2.6 | 1,904 |
| Vendor | 0.12 | 0.05 | 2.0 | 0.91 | 0.01 | 0.01 | 0.49 | 0.50 | 0.01 | 0.13 | 0.15 | — | 1,757 | 1,757 | 0.07 | 0.24 | 2.0 | 1,834 |
| 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 | 0.11 | 0.09 | 0.12 | 1.4 | 0.00 | 0.00 | 0.35 | 0.35 | 0.00 | 0.08 | 0.08 | — | 311 | 311 | < 0.005 | 0.01 | 0.43 | 315 |
| Vendor | 0.02 | 0.01 | 0.36 | 0.17 | < 0.005 | < 0.005 | 0.09 | 0.09 | < 0.005 | 0.02 | 0.03 | — | 291 | 291 | 0.01 | 0.04 | 0.33 | 304 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

## 3.4. Building Construction (2027) - Mitigated

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 | 0.44 | 0.42 | 3.5 | 19 | 0.03 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 3,123 | 3,123 | 0.13 | 0.03 | — | 3,133 |
| 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 | 0.44 | 0.42 | 3.5 | 19 | 0.03 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 3,123 | 3,123 | 0.13 | 0.03 | — | 3,133 |
| 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 | 0.65 | 3.6 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 581 | 581 | 0.02 | < 0.005 | — | 583 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipm | 0.01 | 0.01 | 0.12 | 0.65 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 96 | 96 | < 0.005 | < 0.005 | — | 96 |
| 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 | 3.2 | 2.8 | 2.7 | 48 | 0.00 | 0.00 | 10 | 10 | 0.00 | 2.4 | 2.4 | — | 10,511 | 10,511 | 0.44 | 0.37 | 33 | 10,666 |
| Vendor | 0.62 | 0.29 | 10 | 4.8 | 0.07 | 0.07 | 2.6 | 2.7 | 0.07 | 0.73 | 0.80 | — | 9,451 | 9,451 | 0.40 | 1.3 | 25 | 9,875 |
| 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 | 3.1 | 2.8 | 3.4 | 40 | 0.00 | 0.00 | 10 | 10 | 0.00 | 2.4 | 2.4 | — | 9,965 | 9,965 | 0.14 | 0.37 | 0.85 | 10,081 |
| Vendor | 0.61 | 0.28 | 11 | 5.0 | 0.07 | 0.07 | 2.6 | 2.7 | 0.07 | 0.73 | 0.80 | — | 9,456 | 9,456 | 0.40 | 1.3 | 0.64 | 9,856 |
| 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 | 0.59 | 0.51 | 0.63 | 7.9 | 0.00 | 0.00 | 1.9 | 1.9 | 0.00 | 0.44 | 0.44 | — | 1,880 | 1,880 | 0.03 | 0.07 | 2.6 | 1,904 |
| Vendor | 0.12 | 0.05 | 2.0 | 0.91 | 0.01 | 0.01 | 0.49 | 0.50 | 0.01 | 0.13 | 0.15 | — | 1,757 | 1,757 | 0.07 | 0.24 | 2.0 | 1,834 |
| 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 | 0.11 | 0.09 | 0.12 | 1.4 | 0.00 | 0.00 | 0.35 | 0.35 | 0.00 | 0.08 | 0.08 | — | 311 | 311 | < 0.005 | 0.01 | 0.43 | 315 |
| Vendor | 0.02 | 0.01 | 0.36 | 0.17 | < 0.005 | < 0.005 | 0.09 | 0.09 | < 0.005 | 0.02 | 0.03 | — | 291 | 291 | 0.01 | 0.04 | 0.33 | 304 |
| 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. Paving (2026) - 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.1 | 0.90 | 8.5 | 12 | 0.02 | 0.38 | — | 0.38 | 0.35 | — | 0.35 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,800 |
| Paving | 0.53 | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 1.1 | 0.90 | 8.5 | 12 | 0.02 | 0.38 | — | 0.38 | 0.35 | — | 0.35 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,800 |
| Paving | 0.53 | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.24 | 0.20 | 1.9 | 2.7 | < 0.005 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 404 | 404 | 0.02 | < 0.005 | — | 405 |
| Paving | 0.12 | 0.12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.35 | 0.48 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 67 | 67 | < 0.005 | < 0.005 | — | 67 |
| Paving | 0.02 | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.06 | 0.97 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 203 | 203 | 0.01 | 0.01 | 0.69 | 206 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.05 | 0.07 | 0.83 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 193 | 193 | 0.01 | 0.01 | 0.02 | 195 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.02 | 0.19 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | — | 44 | 44 | < 0.005 | < 0.005 | 0.07 | 45 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | 7.3 | 7.3 | < 0.005 | < 0.005 | 0.01 | 7.4 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.6. Paving (2026) - Mitigated

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 | 0.19 | 0.19 | 2.3 | 13 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,800 |
| Paving | 0.53 | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.19 | 0.19 | 2.3 | 13 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,800 |
| Paving | 0.53 | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.52 | 2.8 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 404 | 404 | 0.02 | < 0.005 | — | 405 |
| Paving | 0.12 | 0.12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.09 | 0.52 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 67 | 67 | < 0.005 | < 0.005 | — | 67 |
| Paving | 0.02 | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.06 | 0.97 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 203 | 203 | 0.01 | 0.01 | 0.69 | 206 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.05 | 0.07 | 0.83 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 193 | 193 | 0.01 | 0.01 | 0.02 | 195 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.02 | 0.19 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | — | 44 | 44 | < 0.005 | < 0.005 | 0.07 | 45 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | 7.3 | 7.3 | < 0.005 | < 0.005 | 0.01 | 7.4 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.7. Paving (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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.0 | 0.88 | 8.2 | 12 | 0.02 | 0.35 | — | 0.35 | 0.33 | — | 0.33 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,801 |
| Paving | 0.53 | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 1.0 | 0.88 | 8.2 | 12 | 0.02 | 0.35 | — | 0.35 | 0.33 | — | 0.33 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,801 |
| Paving | 0.53 | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.19 | 0.16 | 1.5 | 2.2 | < 0.005 | 0.07 | — | 0.07 | 0.06 | — | 0.06 | — | 334 | 334 | 0.01 | < 0.005 | — | 335 |
| Paving | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.03 | 0.28 | 0.40 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 55 | 55 | < 0.005 | < 0.005 | — | 55 |
| Paving | 0.02 | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.05 | 0.05 | 0.90 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 199 | 199 | 0.01 | 0.01 | 0.62 | 202 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.05 | 0.06 | 0.76 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 189 | 189 | < 0.005 | 0.01 | 0.02 | 191 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.15 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | — | 36 | 36 | < 0.005 | < 0.005 | 0.05 | 36 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | 5.9 | 5.9 | < 0.005 | < 0.005 | 0.01 | 6.0 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.8. Paving (2027) - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.19 | 0.19 | 2.3 | 13 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,801 |
| Paving | 0.53 | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.19 | 0.19 | 2.3 | 13 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,801 |
| Paving | 0.53 | 0.53 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.43 | 2.3 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 334 | 334 | 0.01 | < 0.005 | — | 335 |
| Paving | 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.08 | 0.43 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 55 | 55 | < 0.005 | < 0.005 | — | 55 |
| Paving | 0.02 | 0.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.05 | 0.05 | 0.90 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 199 | 199 | 0.01 | 0.01 | 0.62 | 202 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.05 | 0.06 | 0.76 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 189 | 189 | < 0.005 | 0.01 | 0.02 | 191 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.15 | 0.00 | 0.00 | 0.04 | 0.04 | 0.00 | 0.01 | 0.01 | — | 36 | 36 | < 0.005 | < 0.005 | 0.05 | 36 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | 5.9 | 5.9 | < 0.005 | < 0.005 | 0.01 | 6.0 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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. Architectural Coating (2026) - 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 0.19 | 1.4 | 1.8 | < 0.005 | 0.04 | — | 0.04 | 0.03 | — | 0.03 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 61 | 61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.19 | 1.4 | 1.8 | < 0.005 | 0.04 | — | 0.04 | 0.03 | — | 0.03 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 61 | 61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.05 | 0.04 | 0.31 | 0.40 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 48 | 48 | < 0.005 | < 0.005 | — | 48 |
| Architectural Coatings | 14 | 14 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.06 | 0.07 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 7.9 | 7.9 | < 0.005 | < 0.005 | — | 7.9 |
| Architectural Coatings | 2.5 | 2.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.66 | 0.58 | 0.61 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.48 | 0.48 | — | 2,143 | 2,143 | 0.09 | 0.07 | 7.3 | 2,175 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.66 | 0.58 | 0.69 | 8.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.48 | 0.48 | — | 2,032 | 2,032 | 0.09 | 0.07 | 0.19 | 2,057 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.15 | 0.13 | 0.17 | 2.1 | 0.00 | 0.00 | 0.46 | 0.46 | 0.00 | 0.11 | 0.11 | — | 464 | 464 | 0.02 | 0.02 | 0.71 | 470 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.02 | 0.03 | 0.37 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 77 | 77 | < 0.005 | < 0.005 | 0.12 | 78 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.10. Architectural Coating (2026) - Mitigated

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 | 0.03 | 0.03 | 1.0 | 1.5 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 61 | 61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.03 | 0.03 | 1.0 | 1.5 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 61 | 61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.01 | 0.01 | 0.23 | 0.34 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 48 | 48 | < 0.005 | < 0.005 | — | 48 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 14 | 14 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.04 | 0.06 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 7.9 | 7.9 | < 0.005 | < 0.005 | — | 7.9 |
| Architectural Coatings | 2.5 | 2.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.66 | 0.58 | 0.61 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.48 | 0.48 | — | 2,143 | 2,143 | 0.09 | 0.07 | 7.3 | 2,175 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.66 | 0.58 | 0.69 | 8.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.48 | 0.48 | — | 2,032 | 2,032 | 0.09 | 0.07 | 0.19 | 2,057 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.15 | 0.13 | 0.17 | 2.1 | 0.00 | 0.00 | 0.46 | 0.46 | 0.00 | 0.11 | 0.11 | — | 464 | 464 | 0.02 | 0.02 | 0.71 | 470 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.03 | 0.02 | 0.03 | 0.37 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 77 | 77 | < 0.005 | < 0.005 | 0.12 | 78 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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. Architectural Coating (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 | 0.22 | 0.18 | 1.3 | 1.8 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 61 | 61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.22 | 0.18 | 1.3 | 1.8 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 61 | 61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.03 | 0.24 | 0.33 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 39 | 39 | < 0.005 | < 0.005 | — | 39 |
| Architectural Coatings | 11 | 11 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.04 | 0.06 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 6.5 | 6.5 | < 0.005 | < 0.005 | — | 6.5 |
| Architectural Coatings | 2.1 | 2.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.64 | 0.56 | 0.55 | 9.5 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.48 | 0.48 | — | 2,102 | 2,102 | 0.09 | 0.07 | 6.6 | 2,133 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.63 | 0.55 | 0.68 | 8.1 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.48 | 0.48 | — | 1,993 | 1,993 | 0.03 | 0.07 | 0.17 | 2,016 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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| 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 | 0.13 | 1.6 | 0.00 | 0.00 | 0.38 | 0.38 | 0.00 | 0.09 | 0.09 | — | 376 | 376 | 0.01 | 0.01 | 0.52 | 381 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.29 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 62 | 62 | < 0.005 | < 0.005 | 0.09 | 63 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.12. Architectural Coating (2027) - Mitigated

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 | 0.03 | 0.03 | 1.0 | 1.5 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 61 | 61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 Equipm | 0.03 | 0.03 | 1.0 | 1.5 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 61 | 61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.01 | 0.01 | 0.19 | 0.28 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 39 | 39 | < 0.005 | < 0.005 | — | 39 |
| Architectural Coatings | 11 | 11 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.03 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 6.5 | 6.5 | < 0.005 | < 0.005 | — | 6.5 |
| Architectural Coatings | 2.1 | 2.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.64 | 0.56 | 0.55 | 9.5 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.48 | 0.48 | — | 2,102 | 2,102 | 0.09 | 0.07 | 6.6 | 2,133 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.63 | 0.55 | 0.68 | 8.1 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.48 | 0.48 | — | 1,993 | 1,993 | 0.03 | 0.07 | 0.17 | 2,016 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.13 | 1.6 | 0.00 | 0.00 | 0.38 | 0.38 | 0.00 | 0.09 | 0.09 | — | 376 | 376 | 0.01 | 0.01 | 0.52 | 381 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.29 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 62 | 62 | < 0.005 | < 0.005 | 0.09 | 63 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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 |
|---|---|---|---|---|---|---|
| Building Construction | Building Construction | 5/5/2026 | 4/5/2027 | 5.0 | 240 | — |
| Paving | Paving | 9/8/2026 | 4/5/2027 | 5.0 | 150 | — |
| Architectural Coating | Architectural Coating | 9/8/2026 | 4/5/2027 | 5.0 | 150 | — |

## 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 |
|---|---|---|---|---|---|---|---|
| Building Construction | Forklifts | Diesel | Average | 3.0 | 9.5 | 82 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 9.5 | 14 | 0.74 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 9.5 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Average | 1.00 | 9.5 | 46 | 0.45 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.0 | 9.5 | 84 | 0.37 |
| Paving | Pavers | Diesel | Average | 2.0 | 9.5 | 81 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 2.0 | 9.5 | 89 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.0 | 9.5 | 36 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 9.5 | 37 | 0.48 |

### 5.2.2. Mitigated

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Building Construction | Forklifts | Diesel | Tier 4 Final | 3.0 | 9.5 | 82 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 9.5 | 14 | 0.74 |
| Building Construction | Cranes | Diesel | Tier 4 Final | 1.00 | 9.5 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Tier 4 Final | 1.00 | 9.5 | 46 | 0.45 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 3.0 | 9.5 | 84 | 0.37 |
| Paving | Pavers | Diesel | Tier 4 Final | 2.0 | 9.5 | 81 | 0.42 |
| Paving | Paving Equipment | Diesel | Tier 4 Final | 2.0 | 9.5 | 89 | 0.36 |
| Paving | Rollers | Diesel | Tier 4 Final | 2.0 | 9.5 | 36 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Tier 4 Final | 1.00 | 9.5 | 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 |
|---|---|---|---|---|
| Building Construction | Worker | 791 | 19 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 309 | 10 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15 | 19 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 158 | 19 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 10 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Building Construction | Worker | 791 | 19 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 309 | 10 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15 | 19 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 158 | 19 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 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 | 2,829,000 | 943,000 | 79,976 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 31 |

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

| Phase Name | Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|---|
| Paving | Refrigerated Warehouse-No Rail | 0.00 | 0% |
| Paving | Unrefrigerated Warehouse-No Rail | 0.00 | 0% |
| Paving | Strip Mall | 0.00 | 0% |
| Paving | Parking Lot | 31 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2026 | 0.00 | 532 | 0.03 | < 0.005 |
| 2027 | 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 |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| 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 |
|---|---|---|

#### 5.18.1.2. Mitigated

| 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) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| 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 | 26 | annual days of extreme heat |
| Extreme Precipitation | 8.9 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 29 | 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 | 3 | 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 | 3 | 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 | 83 |
| AQ-PM | 66 |
| AQ-DPM | 68 |
| Drinking Water | 85 |
| Lead Risk Housing | 68 |
| Pesticides | 54 |
| Toxic Releases | 75 |
| Traffic | 88 |
| Effect Indicators | — |
| CleanUp Sites | 83 |
| Groundwater | 93 |

| | |
|---|---|
| Haz Waste Facilities/Generators | 92 |
| Impaired Water Bodies | 44 |
| Solid Waste | 99 |
| Sensitive Population | — |
| Asthma | 54 |
| Cardio-vascular | 37 |
| Low Birth Weights | 36 |
| Socioeconomic Factor Indicators | — |
| Education | 70 |
| Housing | 35 |
| Linguistic | 36 |
| Poverty | 49 |
| Unemployment | 73 |

## 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 | — |
| Employed | — |
| Median HI | — |
| Education | — |
| Bachelor's or higher | — |
| High school enrollment | — |
| Preschool enrollment | — |
| Transportation | — |
| Auto Access | — |
| Active commuting | — |

| | |
|---|---|
| Social | — |
| 2-parent households | — |
| Voting | — |
| Neighborhood | — |
| Alcohol availability | — |
| Park access | — |
| Retail density | — |
| Supermarket access | — |
| Tree canopy | — |
| Housing | — |
| Homeownership | — |
| Housing habitability | — |
| Low-inc homeowner severe housing cost burden | — |
| Low-inc renter severe housing cost burden | — |
| Uncrowded housing | — |
| Health Outcomes | — |
| Insured adults | — |
| Arthritis | 0.0 |
| Asthma ER Admissions | 58.6 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 0.0 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 24.6 |

| | |
|---|---|
| Heart Attack ER Admissions | 66.5 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 0.0 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 1.3 |
| SLR Inundation Area | 0.0 |
| Children | 19.0 |
| Elderly | 62.6 |
| English Speaking | 0.0 |
| Foreign-born | 0.0 |
| Outdoor Workers | 37.5 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 29.6 |
| Traffic Density | 0.0 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 0.0 |
| Other Decision Support | — |
| 2016 Voting | 0.0 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 83 |
| Healthy Places Index Score for Project Location (b) | — |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | Yes |
| Project Located in a Low-Income Community (Assembly Bill 1550) | Yes |
| 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 |
|---|---|
| Land Use | Lot acreage adjusted to account for total site area. |
| Construction: Construction Phases | Construction schedule based on Project Description. |
| Construction: Off-Road Equipment | Construction equipment based on the Project Description. |
| Construction: Architectural Coatings | VOC content adjusted to account for Rule 1113 limits associated with paints commonly associated with Project construction. |

# 15575 Brew Yard Phase II Development Detailed Report

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8.1. Justifications

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | 15575 Brew Yard Phase II Development |
| Construction Start Date | 7/15/2025 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 1.8 |
| Precipitation (days) | 22 |
| Location | 34.126753567265794, -117.94443250223712 |
| County | Los Angeles-South Coast |
| City | Irwindale |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 4900 |
| EDFZ | 7 |
| 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 |
|---|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 201 | 1000sqft | 4.6 | 200,803 | 0.00 | — | — | — |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Unrefrigerated Warehouse-No Rail | 925 | 1000sqft | 21 | 925,197 | 313,636 | — | — | — |
| Parking Lot | 18 | Acre | 18 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Construction | C-5 | Use Advanced Engine Tiers |

## 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. | 41 | 41 | 26 | 62 | 0.09 | 0.66 | 9.2 | 9.8 | 0.61 | 2.2 | 2.8 | — | 17,687 | 17,687 | 0.48 | 1.1 | 30 | 18,042 |
| Mit. | 39 | 39 | 14 | 65 | 0.09 | 0.17 | 9.2 | 9.4 | 0.17 | 2.2 | 2.4 | — | 17,687 | 17,687 | 0.48 | 1.1 | 30 | 18,042 |
| % Reduced | 5% | 4% | 48% | -5% | — | 74% | — | 5% | 72% | — | 16% | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 41 | 41 | 27 | 57 | 0.09 | 0.66 | 9.2 | 9.8 | 0.61 | 2.2 | 2.8 | — | 17,311 | 17,311 | 0.48 | 1.1 | 0.77 | 17,637 |
| Mit. | 39 | 39 | 14 | 60 | 0.09 | 0.17 | 9.2 | 9.4 | 0.17 | 2.2 | 2.4 | — | 17,311 | 17,311 | 0.48 | 1.1 | 0.77 | 17,637 |
| % Reduced | 5% | 4% | 47% | -6% | — | 74% | — | 5% | 72% | — | 16% | — | — | — | — | — | — | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 18 | 17 | 15 | 34 | 0.05 | 0.36 | 5.6 | 5.9 | 0.33 | 1.4 | 1.7 | — | 10,571 | 10,571 | 0.29 | 0.67 | 8.0 | 10,786 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mit. | 17 | 17 | 8.3 | 36 | 0.05 | 0.10 | 5.6 | 5.7 | 0.10 | 1.4 | 1.5 | — | 10,571 | 10,571 | 0.29 | 0.67 | 8.0 | 10,786 |
| % Reduced | 6% | 5% | 46% | -6% | — | 72% | — | 4% | 70% | — | 14% | — | — | — | — | — | — | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 3.2 | 3.2 | 2.8 | 6.1 | 0.01 | 0.07 | 1.0 | 1.1 | 0.06 | 0.25 | 0.31 | — | 1,750 | 1,750 | 0.05 | 0.11 | 1.3 | 1,786 |
| Mit. | 3.1 | 3.0 | 1.5 | 6.5 | 0.01 | 0.02 | 1.0 | 1.0 | 0.02 | 0.25 | 0.26 | — | 1,750 | 1,750 | 0.05 | 0.11 | 1.3 | 1,786 |
| % Reduced | 6% | 5% | 46% | -6% | — | 72% | — | 4% | 70% | — | 14% | — | — | — | — | — | — | — |

## 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 | 41 | 41 | 26 | 62 | 0.09 | 0.66 | 9.2 | 9.8 | 0.61 | 2.2 | 2.8 | — | 17,687 | 17,687 | 0.48 | 1.1 | 30 | 18,042 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2029 | 3.4 | 2.9 | 18 | 40 | 0.07 | 0.40 | 7.8 | 8.2 | 0.37 | 1.9 | 2.3 | — | 14,244 | 14,244 | 0.39 | 1.0 | 0.75 | 14,561 |
| 2030 | 41 | 41 | 27 | 57 | 0.09 | 0.66 | 9.2 | 9.8 | 0.61 | 2.2 | 2.8 | — | 17,311 | 17,311 | 0.48 | 1.1 | 0.77 | 17,637 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2029 | 0.14 | 0.12 | 0.76 | 1.7 | < 0.005 | 0.02 | 0.31 | 0.33 | 0.02 | 0.08 | 0.09 | — | 589 | 589 | 0.02 | 0.04 | 0.51 | 602 |
| 2030 | 18 | 17 | 15 | 34 | 0.05 | 0.36 | 5.6 | 5.9 | 0.33 | 1.4 | 1.7 | — | 10,571 | 10,571 | 0.29 | 0.67 | 8.0 | 10,786 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2029 | 0.03 | 0.02 | 0.14 | 0.31 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.01 | 0.02 | — | 97 | 97 | < 0.005 | 0.01 | 0.08 | 100 |
| 2030 | 3.2 | 3.2 | 2.8 | 6.1 | 0.01 | 0.07 | 1.0 | 1.1 | 0.06 | 0.25 | 0.31 | — | 1,750 | 1,750 | 0.05 | 0.11 | 1.3 | 1,786 |

## 2.3. Construction Emissions by Year, Mitigated

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 | 39 | 39 | 14 | 65 | 0.09 | 0.17 | 9.2 | 9.4 | 0.17 | 2.2 | 2.4 | — | 17,687 | 17,687 | 0.48 | 1.1 | 30 | 18,042 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2029 | 2.4 | 2.1 | 11 | 43 | 0.07 | 0.13 | 7.8 | 7.9 | 0.13 | 1.9 | 2.0 | — | 14,244 | 14,244 | 0.39 | 1.0 | 0.75 | 14,561 |
| 2030 | 39 | 39 | 14 | 60 | 0.09 | 0.17 | 9.2 | 9.4 | 0.17 | 2.2 | 2.4 | — | 17,311 | 17,311 | 0.48 | 1.1 | 0.77 | 17,637 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2029 | 0.10 | 0.08 | 0.45 | 1.8 | < 0.005 | 0.01 | 0.31 | 0.32 | 0.01 | 0.08 | 0.08 | — | 589 | 589 | 0.02 | 0.04 | 0.51 | 602 |
| 2030 | 17 | 17 | 8.3 | 36 | 0.05 | 0.10 | 5.6 | 5.7 | 0.10 | 1.4 | 1.5 | — | 10,571 | 10,571 | 0.29 | 0.67 | 8.0 | 10,786 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2029 | 0.02 | 0.02 | 0.08 | 0.33 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.01 | 0.01 | — | 97 | 97 | < 0.005 | 0.01 | 0.08 | 100 |
| 2030 | 3.1 | 3.0 | 1.5 | 6.5 | 0.01 | 0.02 | 1.0 | 1.0 | 0.02 | 0.25 | 0.26 | — | 1,750 | 1,750 | 0.05 | 0.11 | 1.3 | 1,786 |

# 3. Construction Emissions Details

## 3.1. 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.5 | 1.2 | 11 | 17 | 0.03 | 0.36 | — | 0.36 | 0.33 | — | 0.33 | — | 3,122 | 3,122 | 0.13 | 0.03 | — | 3,133 |
| 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 | 0.05 | 0.45 | 0.68 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 128 | 128 | 0.01 | < 0.005 | — | 129 |
| 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 | 0.08 | 0.12 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 21 | 21 | < 0.005 | < 0.005 | — | 21 |
| 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 | 1.6 | 1.5 | 1.6 | 21 | 0.00 | 0.00 | 6.2 | 6.2 | 0.00 | 1.4 | 1.4 | — | 5,753 | 5,753 | 0.07 | 0.22 | 0.41 | 5,822 |
| Vendor | 0.36 | 0.12 | 5.8 | 2.7 | 0.04 | 0.04 | 1.6 | 1.6 | 0.04 | 0.44 | 0.48 | — | 5,368 | 5,368 | 0.19 | 0.78 | 0.34 | 5,606 |
| 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 | 0.06 | 0.06 | 0.07 | 0.91 | 0.00 | 0.00 | 0.25 | 0.25 | 0.00 | 0.06 | 0.06 | — | 240 | 240 | < 0.005 | 0.01 | 0.28 | 243 |
| Vendor | 0.01 | 0.01 | 0.24 | 0.11 | < 0.005 | < 0.005 | 0.06 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 221 | 221 | 0.01 | 0.03 | 0.23 | 230 |
| 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 | 0.17 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 40 | 40 | < 0.005 | < 0.005 | 0.05 | 40 |
| 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 | 0.04 | 38 |
| 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 |

## 3.2. Building Construction (2029) - Mitigated

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 | 0.44 | 0.42 | 3.5 | 19 | 0.03 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 3,122 | 3,122 | 0.13 | 0.03 | — | 3,133 |
| 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 | 0.14 | 0.79 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 128 | 128 | 0.01 | < 0.005 | — | 129 |
| 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 Equipment | < 0.005 | < 0.005 | 0.03 | 0.14 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 21 | 21 | < 0.005 | < 0.005 | — | 21 |
| 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 | 1.6 | 1.5 | 1.6 | 21 | 0.00 | 0.00 | 6.2 | 6.2 | 0.00 | 1.4 | 1.4 | — | 5,753 | 5,753 | 0.07 | 0.22 | 0.41 | 5,822 |
| Vendor | 0.36 | 0.12 | 5.8 | 2.7 | 0.04 | 0.04 | 1.6 | 1.6 | 0.04 | 0.44 | 0.48 | — | 5,368 | 5,368 | 0.19 | 0.78 | 0.34 | 5,606 |
| 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 | 0.06 | 0.06 | 0.07 | 0.91 | 0.00 | 0.00 | 0.25 | 0.25 | 0.00 | 0.06 | 0.06 | — | 240 | 240 | < 0.005 | 0.01 | 0.28 | 243 |
| Vendor | 0.01 | 0.01 | 0.24 | 0.11 | < 0.005 | < 0.005 | 0.06 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 221 | 221 | 0.01 | 0.03 | 0.23 | 230 |
| 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 | 0.17 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 40 | 40 | < 0.005 | < 0.005 | 0.05 | 40 |
| 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 | 0.04 | 38 |
| 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 |

## 3.3. 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-Roa Equipment | 1.4 | 1.2 | 11 | 17 | 0.03 | 0.34 | — | 0.34 | 0.31 | — | 0.31 | — | 3,122 | 3,122 | 0.13 | 0.03 | — | 3,133 |
| 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 d Equipm ent | 1.4 | 1.2 | 11 | 17 | 0.03 | 0.34 | — | 0.34 | 0.31 | — | 0.31 | — | 3,122 | 3,122 | 0.13 | 0.03 | — | 3,133 |
| 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 | 0.94 | 0.79 | 7.0 | 11 | 0.02 | 0.22 | — | 0.22 | 0.20 | — | 0.20 | — | 2,041 | 2,041 | 0.08 | 0.02 | — | 2,048 |
| 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 | 0.17 | 0.14 | 1.3 | 2.0 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 338 | 338 | 0.01 | < 0.005 | — | 339 |
| 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 | 1.5 | 1.5 | 1.2 | 23 | 0.00 | 0.00 | 6.2 | 6.2 | 0.00 | 1.4 | 1.4 | — | 5,969 | 5,969 | 0.06 | 0.22 | 14 | 6,051 |
| Vendor | 0.32 | 0.12 | 5.3 | 2.6 | 0.04 | 0.04 | 1.6 | 1.6 | 0.04 | 0.44 | 0.48 | — | 5,208 | 5,208 | 0.19 | 0.73 | 12 | 5,444 |
| 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 | 1.5 | 1.5 | 1.4 | 20 | 0.00 | 0.00 | 6.2 | 6.2 | 0.00 | 1.4 | 1.4 | — | 5,660 | 5,660 | 0.06 | 0.22 | 0.36 | 5,729 |
| Vendor | 0.32 | 0.11 | 5.5 | 2.6 | 0.04 | 0.04 | 1.6 | 1.6 | 0.04 | 0.44 | 0.48 | — | 5,211 | 5,211 | 0.19 | 0.73 | 0.32 | 5,435 |
| 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 | 0.97 | 0.95 | 0.93 | 14 | 0.00 | 0.00 | 4.0 | 4.0 | 0.00 | 0.93 | 0.93 | — | 3,754 | 3,754 | 0.04 | 0.15 | 3.9 | 3,803 |
| Vendor | 0.21 | 0.08 | 3.6 | 1.7 | 0.03 | 0.03 | 1.0 | 1.0 | 0.03 | 0.28 | 0.31 | — | 3,405 | 3,405 | 0.13 | 0.48 | 3.5 | 3,554 |
| 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 | 0.17 | 0.17 | 2.5 | 0.00 | 0.00 | 0.73 | 0.73 | 0.00 | 0.17 | 0.17 | — | 622 | 622 | 0.01 | 0.02 | 0.65 | 630 |
| Vendor | 0.04 | 0.01 | 0.66 | 0.31 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.05 | 0.06 | — | 564 | 564 | 0.02 | 0.08 | 0.58 | 588 |
| 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 |

## 3.4. Building Construction (2030) - Mitigated

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 | 0.44 | 0.42 | 3.5 | 19 | 0.03 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 3,122 | 3,122 | 0.13 | 0.03 | — | 3,133 |
| 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 | 0.44 | 0.42 | 3.5 | 19 | 0.03 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 3,122 | 3,122 | 0.13 | 0.03 | — | 3,133 |
| 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 | 0.29 | 0.27 | 2.3 | 13 | 0.02 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 2,041 | 2,041 | 0.08 | 0.02 | — | 2,048 |
| 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 | 0.41 | 2.3 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 338 | 338 | 0.01 | < 0.005 | — | 339 |
| 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 | 1.5 | 1.5 | 1.2 | 23 | 0.00 | 0.00 | 6.2 | 6.2 | 0.00 | 1.4 | 1.4 | — | 5,969 | 5,969 | 0.06 | 0.22 | 14 | 6,051 |
| Vendor | 0.32 | 0.12 | 5.3 | 2.6 | 0.04 | 0.04 | 1.6 | 1.6 | 0.04 | 0.44 | 0.48 | — | 5,208 | 5,208 | 0.19 | 0.73 | 12 | 5,444 |
| 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 | 1.5 | 1.5 | 1.4 | 20 | 0.00 | 0.00 | 6.2 | 6.2 | 0.00 | 1.4 | 1.4 | — | 5,660 | 5,660 | 0.06 | 0.22 | 0.36 | 5,729 |
| Vendor | 0.32 | 0.11 | 5.5 | 2.6 | 0.04 | 0.04 | 1.6 | 1.6 | 0.04 | 0.44 | 0.48 | — | 5,211 | 5,211 | 0.19 | 0.73 | 0.32 | 5,435 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.97 | 0.95 | 0.93 | 14 | 0.00 | 0.00 | 4.0 | 4.0 | 0.00 | 0.93 | 0.93 | — | 3,754 | 3,754 | 0.04 | 0.15 | 3.9 | 3,803 |
| Vendor | 0.21 | 0.08 | 3.6 | 1.7 | 0.03 | 0.03 | 1.0 | 1.0 | 0.03 | 0.28 | 0.31 | — | 3,405 | 3,405 | 0.13 | 0.48 | 3.5 | 3,554 |
| 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 | 0.17 | 0.17 | 2.5 | 0.00 | 0.00 | 0.73 | 0.73 | 0.00 | 0.17 | 0.17 | — | 622 | 622 | 0.01 | 0.02 | 0.65 | 630 |
| Vendor | 0.04 | 0.01 | 0.66 | 0.31 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.05 | 0.06 | — | 564 | 564 | 0.02 | 0.08 | 0.58 | 588 |
| 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. Paving (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 | 0.91 | 0.76 | 7.5 | 12 | 0.02 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,800 |
| Paving | 0.32 | 0.32 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.91 | 0.76 | 7.5 | 12 | 0.02 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,800 |
| Paving | 0.32 | 0.32 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.37 | 0.31 | 3.1 | 4.8 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 737 | 737 | 0.03 | 0.01 | — | 740 |
| Paving | 0.13 | 0.13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.07 | 0.06 | 0.56 | 0.88 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 122 | 122 | < 0.005 | < 0.005 | — | 122 |
| 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 | 0.05 | 0.05 | 0.04 | 0.74 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 189 | 189 | < 0.005 | 0.01 | 0.44 | 192 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.04 | 0.63 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 180 | 180 | < 0.005 | 0.01 | 0.01 | 182 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.27 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 75 | 75 | < 0.005 | < 0.005 | 0.08 | 76 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | — | 12 | 12 | < 0.005 | < 0.005 | 0.01 | 13 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.6. Paving (2030) - Mitigated

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 | 0.19 | 0.19 | 2.3 | 13 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,800 |
| Paving | 0.32 | 0.32 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.19 | 0.19 | 2.3 | 13 | 0.02 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 1,794 | 1,794 | 0.07 | 0.01 | — | 1,800 |
| Paving | 0.32 | 0.32 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.08 | 0.08 | 0.94 | 5.2 | 0.01 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 737 | 737 | 0.03 | 0.01 | — | 740 |
| Paving | 0.13 | 0.13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.17 | 0.94 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 122 | 122 | < 0.005 | < 0.005 | — | 122 |
| 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 | 0.05 | 0.05 | 0.04 | 0.74 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 189 | 189 | < 0.005 | 0.01 | 0.44 | 192 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.04 | 0.63 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 180 | 180 | < 0.005 | 0.01 | 0.01 | 182 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.27 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 75 | 75 | < 0.005 | < 0.005 | 0.08 | 76 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.01 | 13 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.7. Architectural Coating (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 | 0.19 | 0.16 | 1.2 | 1.8 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 36 | 36 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.19 | 0.16 | 1.2 | 1.8 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 36 | 36 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.06 | 0.51 | 0.72 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 87 | 87 | < 0.005 | < 0.005 | — | 87 |
| Architectural Coatings | 15 | 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 | 0.09 | 0.13 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 14 | 14 | < 0.005 | < 0.005 | — | 14 |
| Architectural Coatings | 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.30 | 0.30 | 0.24 | 4.7 | 0.00 | 0.00 | 1.2 | 1.2 | 0.00 | 0.29 | 0.29 | — | 1,194 | 1,194 | 0.01 | 0.04 | 2.8 | 1,210 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.30 | 0.29 | 0.28 | 3.9 | 0.00 | 0.00 | 1.2 | 1.2 | 0.00 | 0.29 | 0.29 | — | 1,132 | 1,132 | 0.01 | 0.04 | 0.07 | 1,146 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

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| 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 | 0.12 | 0.12 | 1.7 | 0.00 | 0.00 | 0.50 | 0.50 | 0.00 | 0.12 | 0.12 | — | 472 | 472 | 0.01 | 0.02 | 0.50 | 478 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.31 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.02 | 0.02 | — | 78 | 78 | < 0.005 | < 0.005 | 0.08 | 79 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 |

## 3.8. Architectural Coating (2030) - Mitigated

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 | 0.03 | 0.03 | 1.0 | 1.5 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 36 | 36 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 Equipm | 0.03 | 0.03 | 1.0 | 1.5 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 211 | 211 | 0.01 | < 0.005 | — | 212 |
| Architectural Coatings | 36 | 36 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.01 | 0.01 | 0.42 | 0.63 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 87 | 87 | < 0.005 | < 0.005 | — | 87 |
| Architectural Coatings | 15 | 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 | < 0.005 | < 0.005 | 0.08 | 0.11 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 14 | 14 | < 0.005 | < 0.005 | — | 14 |
| Architectural Coatings | 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 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.30 | 0.30 | 0.24 | 4.7 | 0.00 | 0.00 | 1.2 | 1.2 | 0.00 | 0.29 | 0.29 | — | 1,194 | 1,194 | 0.01 | 0.04 | 2.8 | 1,210 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.30 | 0.29 | 0.28 | 3.9 | 0.00 | 0.00 | 1.2 | 1.2 | 0.00 | 0.29 | 0.29 | — | 1,132 | 1,132 | 0.01 | 0.04 | 0.07 | 1,146 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.12 | 0.12 | 1.7 | 0.00 | 0.00 | 0.50 | 0.50 | 0.00 | 0.12 | 0.12 | — | 472 | 472 | 0.01 | 0.02 | 0.50 | 478 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | 0.31 | 0.00 | 0.00 | 0.09 | 0.09 | 0.00 | 0.02 | 0.02 | — | 78 | 78 | < 0.005 | < 0.005 | 0.08 | 79 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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 |
|---|---|---|---|---|---|---|
| Building Construction | Building Construction | 12/11/2029 | 11/30/2030 | 5.0 | 254 | — |
| Paving | Paving | 5/4/2030 | 11/30/2030 | 5.0 | 150 | — |
| Architectural Coating | Architectural Coating | 5/4/2030 | 11/30/2030 | 5.0 | 150 | — |

## 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 |
|---|---|---|---|---|---|---|---|
| Building Construction | Forklifts | Diesel | Average | 3.0 | 9.5 | 82 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 9.5 | 14 | 0.74 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 9.5 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Average | 1.00 | 9.5 | 46 | 0.45 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.0 | 9.5 | 84 | 0.37 |
| Paving | Pavers | Diesel | Average | 2.0 | 9.5 | 81 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 2.0 | 9.5 | 89 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.0 | 9.5 | 36 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 9.5 | 37 | 0.48 |

### 5.2.2. Mitigated

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Building Construction | Forklifts | Diesel | Tier 4 Final | 3.0 | 9.5 | 82 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 9.5 | 14 | 0.74 |
| Building Construction | Cranes | Diesel | Tier 4 Final | 1.00 | 9.5 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Tier 4 Final | 1.00 | 9.5 | 46 | 0.45 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Tier 4 Final | 3.0 | 9.5 | 84 | 0.37 |
| Paving | Pavers | Diesel | Tier 4 Final | 2.0 | 9.5 | 81 | 0.42 |
| Paving | Paving Equipment | Diesel | Tier 4 Final | 2.0 | 9.5 | 89 | 0.36 |
| Paving | Rollers | Diesel | Tier 4 Final | 2.0 | 9.5 | 36 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Tier 4 Final | 1.00 | 9.5 | 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 |
|---|---|---|---|---|
| Building Construction | Worker | 473 | 19 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 185 | 10 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15 | 19 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 95 | 19 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 10 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Building Construction | Worker | 473 | 19 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 185 | 10 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | Worker | 15 | 19 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | Worker | 95 | 19 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 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 | 1,689,000 | 563,000 | 48,038 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 18 |

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

| Phase Name | Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|---|
| Paving | Refrigerated Warehouse-No Rail | 0.00 | 0% |
| Paving | Unrefrigerated Warehouse-No Rail | 0.00 | 0% |
| Paving | Parking Lot | 18 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2029 | 0.00 | 532 | 0.03 | < 0.005 |
| 2030 | 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 |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| 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 |
|---|---|---|

#### 5.18.1.2. Mitigated

| 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) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| 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 | 26 | annual days of extreme heat |
| Extreme Precipitation | 8.9 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 29 | 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 | 3 | 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 | 3 | 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 | 83 |
| AQ-PM | 66 |
| AQ-DPM | 68 |
| Drinking Water | 85 |
| Lead Risk Housing | 68 |
| Pesticides | 54 |
| Toxic Releases | 75 |
| Traffic | 88 |
| Effect Indicators | — |
| CleanUp Sites | 83 |
| Groundwater | 93 |

| | |
|---|---|
| Haz Waste Facilities/Generators | 92 |
| Impaired Water Bodies | 44 |
| Solid Waste | 99 |
| Sensitive Population | — |
| Asthma | 54 |
| Cardio-vascular | 37 |
| Low Birth Weights | 36 |
| Socioeconomic Factor Indicators | — |
| Education | 70 |
| Housing | 35 |
| Linguistic | 36 |
| Poverty | 49 |
| Unemployment | 73 |

## 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 | — |
| Employed | — |
| Median HI | — |
| Education | — |
| Bachelor's or higher | — |
| High school enrollment | — |
| Preschool enrollment | — |
| Transportation | — |
| Auto Access | — |
| Active commuting | — |

| | |
|---|---|
| Social | — |
| 2-parent households | — |
| Voting | — |
| Neighborhood | — |
| Alcohol availability | — |
| Park access | — |
| Retail density | — |
| Supermarket access | — |
| Tree canopy | — |
| Housing | — |
| Homeownership | — |
| Housing habitability | — |
| Low-inc homeowner severe housing cost burden | — |
| Low-inc renter severe housing cost burden | — |
| Uncrowded housing | — |
| Health Outcomes | — |
| Insured adults | — |
| Arthritis | 0.0 |
| Asthma ER Admissions | 58.6 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 0.0 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 24.6 |

| | |
|---|---|
| Heart Attack ER Admissions | 66.5 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 0.0 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 1.3 |
| SLR Inundation Area | 0.0 |
| Children | 19.0 |
| Elderly | 62.6 |
| English Speaking | 0.0 |
| Foreign-born | 0.0 |
| Outdoor Workers | 37.5 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 29.6 |
| Traffic Density | 0.0 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 0.0 |
| Other Decision Support | — |
| 2016 Voting | 0.0 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 83 |
| Healthy Places Index Score for Project Location (b) | — |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | Yes |
| Project Located in a Low-Income Community (Assembly Bill 1550) | Yes |
| 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 based on Project Description. |
| Construction: Off-Road Equipment | Construction equipment based on the Project Description. |
| Construction: Architectural Coatings | VOC content adjusted to account for Rule 1113 limits associated with paints commonly associated with Project construction. |

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# APPENDIX 4.2:

# CALEEMOD MODEL OUTPUTS – OPERATION

# 15575 Brew Yard Ops Detailed Report

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4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.9.2. Mitigated

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

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

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

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

8.1. Justifications

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | 15575 Brew Yard Ops |
| Operational Year | 2030 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 1.8 |
| Precipitation (days) | 22 |
| Location | 34.12427934687054, -117.94387686539795 |
| County | Los Angeles-South Coast |
| City | Irwindale |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 4900 |
| EDFZ | 7 |
| 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 |
|---|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 535 | 1000sqft | 12 | 535,000 | 878,779 | — | — | HCCS |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Unrefrigerated Warehouse-No Rail | 1,556 | 1000sqft | 36 | 1,555,500 | 0.00 | — | — | HCF Sort |
| Unrefrigerated Warehouse-No Rail | 455 | 1000sqft | 10 | 454,750 | 0.00 | — | — | Warehouse |
| Unrefrigerated Warehouse-No Rail | 455 | 1000sqft | 10 | 454,750 | 0.00 | — | — | HC Short Term |
| Strip Mall | 12 | 1000sqft | 0.28 | 12,000 | 0.00 | — | — | — |
| User Defined Industrial | 3,000 | User Defined Unit | 0.00 | 0.00 | 0.00 | — | — | — |
| Parking Lot | 60 | Acre | 60 | 0.00 | 0.00 | — | — | — |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Energy | E-1 | Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards |
| Energy | E-2 | Require Energy Efficient Appliances |
| Water | W-4 | Require Low-Flow Water Fixtures |
| Water | W-5 | Design Water-Efficient Landscapes |
| Area Sources | LL-1 | Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment |

## 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. | 152 | 141 | 158 | 603 | 2.1 | 4.3 | 142 | 147 | 4.1 | 37 | 41 | 2,858 | 252,385 | 255,243 | 301 | 22 | 996 | 270,237 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mit. | 129 | 119 | 157 | 472 | 2.1 | 4.0 | 142 | 146 | 3.9 | 37 | 41 | 2,727 | 246,115 | 248,841 | 287 | 21 | 996 | 263,358 |
| % Reduced | 15% | 15% | 1% | 22% | < 0.5% | 5% | — | < 0.5% | 4% | — | < 0.5% | 5% | 2% | 3% | 5% | 2% | — | 3% |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 128 | 119 | 163 | 433 | 2.1 | 4.0 | 142 | 146 | 3.9 | 37 | 41 | 2,858 | 247,053 | 249,911 | 301 | 22 | 557 | 264,527 |
| Mit. | 128 | 119 | 163 | 433 | 2.1 | 4.0 | 142 | 146 | 3.9 | 37 | 41 | 2,727 | 241,261 | 243,987 | 287 | 22 | 557 | 258,128 |
| % Reduced | < 0.5% | — | < 0.5% | < 0.5% | — | — | — | — | — | — | — | 5% | 2% | 2% | 5% | 2% | — | 2% |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 134 | 125 | 132 | 487 | 1.9 | 3.2 | 128 | 131 | 3.1 | 33 | 36 | 2,858 | 225,766 | 228,623 | 300 | 20 | 721 | 242,772 |
| Mit. | 118 | 110 | 132 | 397 | 1.9 | 3.0 | 128 | 131 | 3.0 | 33 | 36 | 2,727 | 219,646 | 222,372 | 286 | 19 | 721 | 236,044 |
| % Reduced | 12% | 12% | 1% | 18% | < 0.5% | 5% | — | < 0.5% | 4% | — | < 0.5% | 5% | 3% | 3% | 5% | 2% | — | 3% |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 25 | 23 | 24 | 89 | 0.34 | 0.59 | 23 | 24 | 0.56 | 6.0 | 6.6 | 473 | 37,378 | 37,851 | 50 | 3.3 | 119 | 40,194 |
| Mit. | 22 | 20 | 24 | 72 | 0.34 | 0.56 | 23 | 24 | 0.54 | 6.0 | 6.5 | 451 | 36,365 | 36,816 | 47 | 3.2 | 119 | 39,080 |
| % Reduced | 12% | 12% | 1% | 18% | < 0.5% | 5% | — | < 0.5% | 4% | — | < 0.5% | 5% | 3% | 3% | 5% | 2% | — | 3% |

## 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 | 40 | 118 | 442 | 2.0 | 1.9 | 142 | 144 | 1.8 | 37 | 38 | — | 208,373 | 208,373 | 7.2 | 18 | 451 | 214,401 |
| Area | 96 | 94 | 1.1 | 131 | 0.01 | 0.23 | — | 0.23 | 0.18 | — | 0.18 | — | 539 | 539 | 0.02 | < 0.005 | — | 541 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 36,900 | 36,900 | 3.9 | 0.30 | — | 37,089 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1,331 | 3,425 | 4,756 | 137 | 3.3 | — | 9,161 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Stationary | 6.8 | 6.2 | 23 | 16 | 0.03 | 0.91 | 0.00 | 0.91 | 0.91 | 0.00 | 0.91 | 0.00 | 3,148 | 3,148 | 0.13 | 0.02 | 0.00 | 3,159 |
| Total | 152 | 141 | 158 | 603 | 2.1 | 4.3 | 142 | 147 | 4.1 | 37 | 41 | 2,858 | 252,385 | 255,243 | 301 | 22 | 996 | 270,237 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 47 | 40 | 124 | 404 | 1.9 | 1.9 | 142 | 144 | 1.8 | 37 | 38 | — | 203,579 | 203,579 | 7.3 | 18 | 12 | 209,232 |
| Area | 73 | 73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 36,900 | 36,900 | 3.9 | 0.30 | — | 37,089 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1,331 | 3,425 | 4,756 | 137 | 3.3 | — | 9,161 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Stationary | 6.8 | 6.2 | 23 | 16 | 0.03 | 0.91 | 0.00 | 0.91 | 0.91 | 0.00 | 0.91 | 0.00 | 3,148 | 3,148 | 0.13 | 0.02 | 0.00 | 3,159 |
| Total | 128 | 119 | 163 | 433 | 2.1 | 4.0 | 142 | 146 | 3.9 | 37 | 41 | 2,858 | 247,053 | 249,911 | 301 | 22 | 557 | 264,527 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 43 | 36 | 112 | 381 | 1.8 | 1.7 | 128 | 130 | 1.6 | 33 | 34 | — | 184,640 | 184,640 | 6.6 | 16 | 175 | 189,832 |
| Area | 88 | 87 | 0.75 | 90 | 0.01 | 0.16 | — | 0.16 | 0.12 | — | 0.12 | — | 369 | 369 | 0.02 | < 0.005 | — | 370 |
| Energy | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 36,900 | 36,900 | 3.9 | 0.30 | — | 37,089 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1,331 | 3,425 | 4,756 | 137 | 3.3 | — | 9,161 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Stationary | 0.93 | 0.84 | 3.1 | 2.1 | < 0.005 | 0.12 | 0.00 | 0.12 | 0.12 | 0.00 | 0.12 | 0.00 | 431 | 431 | 0.02 | < 0.005 | 0.00 | 433 |
| Total | 134 | 125 | 132 | 487 | 1.9 | 3.2 | 128 | 131 | 3.1 | 33 | 36 | 2,858 | 225,766 | 228,623 | 300 | 20 | 721 | 242,772 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 7.9 | 6.6 | 20 | 70 | 0.32 | 0.31 | 23 | 24 | 0.29 | 6.0 | 6.3 | — | 30,569 | 30,569 | 1.1 | 2.7 | 29 | 31,429 |
| Area | 16 | 16 | 0.14 | 16 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | — | 61 |
| Energy | 0.33 | 0.16 | 3.0 | 2.5 | 0.02 | 0.23 | — | 0.23 | 0.23 | — | 0.23 | — | 6,109 | 6,109 | 0.65 | 0.05 | — | 6,140 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 220 | 567 | 787 | 23 | 0.55 | — | 1,517 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 253 | 0.00 | 253 | 25 | 0.00 | — | 884 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 90 | 90 |
| Stationary | 0.17 | 0.15 | 0.57 | 0.39 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.00 | 71 | 71 | < 0.005 | < 0.005 | 0.00 | 72 |
| Total | 25 | 23 | 24 | 89 | 0.34 | 0.59 | 23 | 24 | 0.56 | 6.0 | 6.6 | 473 | 37,378 | 37,851 | 50 | 3.3 | 119 | 40,194 |

## 2.6. Operations Emissions by Sector, Mitigated

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 | 40 | 118 | 442 | 2.0 | 1.9 | 142 | 144 | 1.8 | 37 | 38 | — | 208,373 | 208,373 | 7.2 | 18 | 451 | 214,401 |
| Area | 73 | 73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 31,526 | 31,526 | 3.2 | 0.22 | — | 31,673 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1,200 | 3,068 | 4,268 | 123 | 3.0 | — | 8,239 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Stationary | 6.8 | 6.2 | 23 | 16 | 0.03 | 0.91 | 0.00 | 0.91 | 0.91 | 0.00 | 0.91 | 0.00 | 3,148 | 3,148 | 0.13 | 0.02 | 0.00 | 3,159 |
| Total | 129 | 119 | 157 | 472 | 2.1 | 4.0 | 142 | 146 | 3.9 | 37 | 41 | 2,727 | 246,115 | 248,841 | 287 | 21 | 996 | 263,358 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 47 | 40 | 124 | 404 | 1.9 | 1.9 | 142 | 144 | 1.8 | 37 | 38 | — | 203,579 | 203,579 | 7.3 | 18 | 12 | 209,232 |
| Area | 73 | 73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 31,465 | 31,465 | 3.2 | 0.22 | — | 31,612 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1,200 | 3,068 | 4,268 | 123 | 3.0 | — | 8,239 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Stationary | 6.8 | 6.2 | 23 | 16 | 0.03 | 0.91 | 0.00 | 0.91 | 0.91 | 0.00 | 0.91 | 0.00 | 3,148 | 3,148 | 0.13 | 0.02 | 0.00 | 3,159 |
| Total | 128 | 119 | 163 | 433 | 2.1 | 4.0 | 142 | 146 | 3.9 | 37 | 41 | 2,727 | 241,261 | 243,987 | 287 | 22 | 557 | 258,128 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 43 | 36 | 112 | 381 | 1.8 | 1.7 | 128 | 130 | 1.6 | 33 | 34 | — | 184,640 | 184,640 | 6.6 | 16 | 175 | 189,832 |
| Area | 73 | 73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 31,507 | 31,507 | 3.2 | 0.22 | — | 31,654 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 1,200 | 3,068 | 4,268 | 123 | 3.0 | — | 8,239 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Stationary | 0.93 | 0.84 | 3.1 | 2.1 | < 0.005 | 0.12 | 0.00 | 0.12 | 0.12 | 0.00 | 0.12 | 0.00 | 431 | 431 | 0.02 | < 0.005 | 0.00 | 433 |
| Total | 118 | 110 | 132 | 397 | 1.9 | 3.0 | 128 | 131 | 3.0 | 33 | 36 | 2,727 | 219,646 | 222,372 | 286 | 19 | 721 | 236,044 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 7.9 | 6.6 | 20 | 70 | 0.32 | 0.31 | 23 | 24 | 0.29 | 6.0 | 6.3 | — | 30,569 | 30,569 | 1.1 | 2.7 | 29 | 31,429 |
| Area | 13 | 13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.33 | 0.16 | 3.0 | 2.5 | 0.02 | 0.23 | — | 0.23 | 0.23 | — | 0.23 | — | 5,216 | 5,216 | 0.54 | 0.04 | — | 5,241 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 199 | 508 | 707 | 20 | 0.49 | — | 1,364 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 253 | 0.00 | 253 | 25 | 0.00 | — | 884 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 90 | 90 |
| Stationary | 0.17 | 0.15 | 0.57 | 0.39 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.00 | 71 | 71 | < 0.005 | < 0.005 | 0.00 | 72 |
| Total | 22 | 20 | 24 | 72 | 0.34 | 0.56 | 23 | 24 | 0.54 | 6.0 | 6.5 | 451 | 36,365 | 36,816 | 47 | 3.2 | 119 | 39,080 |

# 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 2.2 | 0.74 | 37 | 16 | 0.38 | 0.54 | 14 | 15 | 0.52 | 3.8 | 4.3 | — | 40,981 | 40,981 | 1.4 | 5.9 | 92 | 42,871 |
| Unrefrigerated Warehouse-No Rail | 3.7 | 1.2 | 61 | 27 | 0.63 | 0.91 | 24 | 24 | 0.87 | 6.3 | 7.2 | — | 68,300 | 68,300 | 2.3 | 9.9 | 153 | 71,450 |
| Strip Mall | 2.2 | 2.0 | 1.6 | 20 | 0.05 | 0.03 | 5.4 | 5.4 | 0.03 | 1.4 | 1.4 | — | 5,561 | 5,561 | 0.22 | 0.20 | 12 | 5,638 |
| User Defined Industrial | 39 | 36 | 19 | 380 | 0.92 | 0.40 | 99 | 100 | 0.37 | 25 | 25 | — | 93,530 | 93,530 | 3.2 | 2.1 | 193 | 94,442 |
| 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 |
| Total | 47 | 40 | 118 | 442 | 2.0 | 1.9 | 142 | 144 | 1.8 | 37 | 38 | — | 208,373 | 208,373 | 7.2 | 18 | 451 | 214,401 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 2.2 | 0.72 | 38 | 16 | 0.38 | 0.55 | 14 | 15 | 0.52 | 3.8 | 4.3 | — | 40,989 | 40,989 | 1.4 | 5.9 | 2.4 | 42,790 |
| Unrefrigerated Warehouse-No Rail | 3.6 | 1.2 | 64 | 27 | 0.63 | 0.91 | 24 | 24 | 0.87 | 6.3 | 7.2 | — | 68,314 | 68,314 | 2.3 | 9.9 | 4.0 | 71,316 |
| Strip Mall | 2.2 | 1.9 | 1.7 | 18 | 0.05 | 0.03 | 5.4 | 5.4 | 0.03 | 1.4 | 1.4 | — | 5,330 | 5,330 | 0.23 | 0.21 | 0.32 | 5,398 |
| User Defined Industrial | 39 | 36 | 21 | 343 | 0.88 | 0.40 | 99 | 100 | 0.37 | 25 | 25 | — | 88,946 | 88,946 | 3.4 | 2.3 | 5.0 | 89,728 |
| 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 |
| Total | 47 | 40 | 124 | 404 | 1.9 | 1.9 | 142 | 144 | 1.8 | 37 | 38 | — | 203,579 | 203,579 | 7.3 | 18 | 12 | 209,232 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 0.35 | 0.12 | 6.2 | 2.5 | 0.06 | 0.09 | 2.2 | 2.3 | 0.08 | 0.60 | 0.68 | — | 5,925 | 5,925 | 0.20 | 0.86 | 5.8 | 6,190 |
| Unrefrigerated Warehouse-No Rail | 0.60 | 0.20 | 10 | 4.3 | 0.10 | 0.15 | 3.8 | 3.9 | 0.14 | 1.0 | 1.2 | — | 10,052 | 10,052 | 0.34 | 1.5 | 9.7 | 10,502 |
| Strip Mall | 0.35 | 0.31 | 0.28 | 3.0 | 0.01 | < 0.005 | 0.85 | 0.86 | < 0.005 | 0.22 | 0.22 | — | 784 | 784 | 0.03 | 0.03 | 0.78 | 795 |
| User Defined Industrial | 6.6 | 6.0 | 3.6 | 60 | 0.15 | 0.07 | 17 | 17 | 0.06 | 4.2 | 4.2 | — | 13,809 | 13,809 | 0.51 | 0.36 | 13 | 13,941 |
| 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 |
| Total | 7.9 | 6.6 | 20 | 70 | 0.32 | 0.31 | 23 | 24 | 0.29 | 6.0 | 6.3 | — | 30,569 | 30,569 | 1.1 | 2.7 | 29 | 31,429 |

## 4.1.2. Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 2.2 | 0.74 | 37 | 16 | 0.38 | 0.54 | 14 | 15 | 0.52 | 3.8 | 4.3 | — | 40,981 | 40,981 | 1.4 | 5.9 | 92 | 42,871 |
| Unrefrigerated Warehouse-No Rail | 3.7 | 1.2 | 61 | 27 | 0.63 | 0.91 | 24 | 24 | 0.87 | 6.3 | 7.2 | — | 68,300 | 68,300 | 2.3 | 9.9 | 153 | 71,450 |
| Strip Mall | 2.2 | 2.0 | 1.6 | 20 | 0.05 | 0.03 | 5.4 | 5.4 | 0.03 | 1.4 | 1.4 | — | 5,561 | 5,561 | 0.22 | 0.20 | 12 | 5,638 |
| User Defined Industrial | 39 | 36 | 19 | 380 | 0.92 | 0.40 | 99 | 100 | 0.37 | 25 | 25 | — | 93,530 | 93,530 | 3.2 | 2.1 | 193 | 94,442 |
| 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 |
| Total | 47 | 40 | 118 | 442 | 2.0 | 1.9 | 142 | 144 | 1.8 | 37 | 38 | — | 208,373 | 208,373 | 7.2 | 18 | 451 | 214,401 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 2.2 | 0.72 | 38 | 16 | 0.38 | 0.55 | 14 | 15 | 0.52 | 3.8 | 4.3 | — | 40,989 | 40,989 | 1.4 | 5.9 | 2.4 | 42,790 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unrefrigerated Warehouse-No Rail | 3.6 | 1.2 | 64 | 27 | 0.63 | 0.91 | 24 | 24 | 0.87 | 6.3 | 7.2 | — | 68,314 | 68,314 | 2.3 | 9.9 | 4.0 | 71,316 |
| Strip Mall | 2.2 | 1.9 | 1.7 | 18 | 0.05 | 0.03 | 5.4 | 5.4 | 0.03 | 1.4 | 1.4 | — | 5,330 | 5,330 | 0.23 | 0.21 | 0.32 | 5,398 |
| User Defined Industrial | 39 | 36 | 21 | 343 | 0.88 | 0.40 | 99 | 100 | 0.37 | 25 | 25 | — | 88,946 | 88,946 | 3.4 | 2.3 | 5.0 | 89,728 |
| 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 |
| Total | 47 | 40 | 124 | 404 | 1.9 | 1.9 | 142 | 144 | 1.8 | 37 | 38 | — | 203,579 | 203,579 | 7.3 | 18 | 12 | 209,232 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 0.35 | 0.12 | 6.2 | 2.5 | 0.06 | 0.09 | 2.2 | 2.3 | 0.08 | 0.60 | 0.68 | — | 5,925 | 5,925 | 0.20 | 0.86 | 5.8 | 6,190 |
| Unrefrigerated Warehouse-No Rail | 0.60 | 0.20 | 10 | 4.3 | 0.10 | 0.15 | 3.8 | 3.9 | 0.14 | 1.0 | 1.2 | — | 10,052 | 10,052 | 0.34 | 1.5 | 9.7 | 10,502 |
| Strip Mall | 0.35 | 0.31 | 0.28 | 3.0 | 0.01 | < 0.005 | 0.85 | 0.86 | < 0.005 | 0.22 | 0.22 | — | 784 | 784 | 0.03 | 0.03 | 0.78 | 795 |
| User Defined Industrial | 6.6 | 6.0 | 3.6 | 60 | 0.15 | 0.07 | 17 | 17 | 0.06 | 4.2 | 4.2 | — | 13,809 | 13,809 | 0.51 | 0.36 | 13 | 13,941 |
| 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 |
| Total | 7.9 | 6.6 | 20 | 70 | 0.32 | 0.31 | 23 | 24 | 0.29 | 6.0 | 6.3 | — | 30,569 | 30,569 | 1.1 | 2.7 | 29 | 31,429 |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 7,392 | 7,392 | 0.94 | 0.11 | — | 7,449 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 8,243 | 8,243 | 1.0 | 0.13 | — | 8,307 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | 84 | 84 | 0.01 | < 0.005 | — | 85 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 1,634 | 1,634 | 0.21 | 0.03 | — | 1,647 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 17,354 | 17,354 | 2.2 | 0.27 | — | 17,488 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 7,392 | 7,392 | 0.94 | 0.11 | — | 7,449 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 8,243 | 8,243 | 1.0 | 0.13 | — | 8,307 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | 84 | 84 | 0.01 | < 0.005 | — | 85 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 1,634 | 1,634 | 0.21 | 0.03 | — | 1,647 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 17,354 | 17,354 | 2.2 | 0.27 | — | 17,488 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 1,224 | 1,224 | 0.15 | 0.02 | — | 1,233 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 1,365 | 1,365 | 0.17 | 0.02 | — | 1,375 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | 14 | 14 | < 0.005 | < 0.005 | — | 14 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 271 | 271 | 0.03 | < 0.005 | — | 273 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 2,873 | 2,873 | 0.36 | 0.04 | — | 2,895 |

### 4.2.2. Electricity Emissions By Land Use - Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refriger Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 3,831 | 3,831 | 0.48 | 0.06 | — | 3,861 |
| Unrefrig erated Wareho use-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 6,469 | 6,469 | 0.82 | 0.10 | — | 6,519 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | 57 | 57 | 0.01 | < 0.005 | — | 58 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 1,634 | 1,634 | 0.21 | 0.03 | — | 1,647 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 11,992 | 11,992 | 1.5 | 0.18 | — | 12,084 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refriger ated Wareho use-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 3,820 | 3,820 | 0.48 | 0.06 | — | 3,850 |
| Unrefrig erated Wareho use-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 6,420 | 6,420 | 0.81 | 0.10 | — | 6,469 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | 57 | 57 | 0.01 | < 0.005 | — | 57 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 1,634 | 1,634 | 0.21 | 0.03 | — | 1,647 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 11,931 | 11,931 | 1.5 | 0.18 | — | 12,024 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 634 | 634 | 0.08 | 0.01 | — | 639 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | 1,068 | 1,068 | 0.14 | 0.02 | — | 1,077 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | 9.5 | 9.5 | < 0.005 | < 0.005 | — | 9.5 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 271 | 271 | 0.03 | < 0.005 | — | 273 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 1,982 | 1,982 | 0.25 | 0.03 | — | 1,998 |

### 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 0.40 | 0.20 | 3.6 | 3.0 | 0.02 | 0.27 | — | 0.27 | 0.27 | — | 0.27 | — | 4,296 | 4,296 | 0.38 | 0.01 | — | 4,308 |
| Unrefrigerated Warehouse-No Rail | 1.4 | 0.70 | 13 | 11 | 0.08 | 0.97 | — | 0.97 | 0.97 | — | 0.97 | — | 15,228 | 15,228 | 1.3 | 0.03 | — | 15,270 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strip Mall | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 23 | 23 | < 0.005 | < 0.005 | — | 23 |
| 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 |
| 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 |
| Total | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 19,547 | 19,547 | 1.7 | 0.04 | — | 19,601 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 0.40 | 0.20 | 3.6 | 3.0 | 0.02 | 0.27 | — | 0.27 | 0.27 | — | 0.27 | — | 4,296 | 4,296 | 0.38 | 0.01 | — | 4,308 |
| Unrefrigerated Warehouse-No Rail | 1.4 | 0.70 | 13 | 11 | 0.08 | 0.97 | — | 0.97 | 0.97 | — | 0.97 | — | 15,228 | 15,228 | 1.3 | 0.03 | — | 15,270 |
| Strip Mall | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 23 | 23 | < 0.005 | < 0.005 | — | 23 |
| 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 |
| 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 |
| Total | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 19,547 | 19,547 | 1.7 | 0.04 | — | 19,601 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 0.07 | 0.04 | 0.66 | 0.55 | < 0.005 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 711 | 711 | 0.06 | < 0.005 | — | 713 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unrefrigerated Warehouse-Rail | 0.26 | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,521 | 2,521 | 0.22 | < 0.005 | — | 2,528 |
| Strip Mall | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.8 | 3.8 | < 0.005 | < 0.005 | — | 3.8 |
| 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 |
| 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 |
| Total | 0.33 | 0.16 | 3.0 | 2.5 | 0.02 | 0.23 | — | 0.23 | 0.23 | — | 0.23 | — | 3,236 | 3,236 | 0.29 | 0.01 | — | 3,245 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 0.40 | 0.20 | 3.6 | 3.0 | 0.02 | 0.27 | — | 0.27 | 0.27 | — | 0.27 | — | 4,295 | 4,295 | 0.38 | 0.01 | — | 4,307 |
| Unrefrigerated Warehouse-No Rail | 1.4 | 0.70 | 13 | 11 | 0.08 | 0.97 | — | 0.97 | 0.97 | — | 0.97 | — | 15,217 | 15,217 | 1.3 | 0.03 | — | 15,259 |
| Strip Mall | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 22 | 22 | < 0.005 | < 0.005 | — | 22 |
| 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 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| Total | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 19,534 | 19,534 | 1.7 | 0.04 | — | 19,588 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 0.40 | 0.20 | 3.6 | 3.0 | 0.02 | 0.27 | — | 0.27 | 0.27 | — | 0.27 | — | 4,295 | 4,295 | 0.38 | 0.01 | — | 4,307 |
| Unrefrigerated Warehouse-No Rail | 1.4 | 0.70 | 13 | 11 | 0.08 | 0.97 | — | 0.97 | 0.97 | — | 0.97 | — | 15,217 | 15,217 | 1.3 | 0.03 | — | 15,259 |
| Strip Mall | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 22 | 22 | < 0.005 | < 0.005 | — | 22 |
| 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 |
| 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 |
| Total | 1.8 | 0.90 | 16 | 14 | 0.10 | 1.2 | — | 1.2 | 1.2 | — | 1.2 | — | 19,534 | 19,534 | 1.7 | 0.04 | — | 19,588 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | 0.07 | 0.04 | 0.66 | 0.55 | < 0.005 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 711 | 711 | 0.06 | < 0.005 | — | 713 |
| Unrefrigerated Warehouse-No Rail | 0.26 | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,519 | 2,519 | 0.22 | < 0.005 | — | 2,526 |
| Strip Mall | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.7 | 3.7 | < 0.005 | < 0.005 | — | 3.7 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
| 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 |
| Total | 0.33 | 0.16 | 3.0 | 2.5 | 0.02 | 0.23 | — | 0.23 | 0.23 | — | 0.23 | — | 3,234 | 3,234 | 0.29 | 0.01 | — | 3,243 |

## 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 | 65 | 65 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 7.9 | 7.9 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 23 | 22 | 1.1 | 131 | 0.01 | 0.23 | — | 0.23 | 0.18 | — | 0.18 | — | 539 | 539 | 0.02 | < 0.005 | — | 541 |
| Total | 96 | 94 | 1.1 | 131 | 0.01 | 0.23 | — | 0.23 | 0.18 | — | 0.18 | — | 539 | 539 | 0.02 | < 0.005 | — | 541 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 65 | 65 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 7.9 | 7.9 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 73 | 73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 12 | 12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.4 | 1.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 2.9 | 2.7 | 0.14 | 16 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | — | 61 |
| Total | 16 | 16 | 0.14 | 16 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | — | 61 |

### 4.3.2. Mitigated

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 | 65 | 65 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 7.9 | 7.9 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 73 | 73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consum Products | 65 | 65 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 7.9 | 7.9 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 73 | 73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 12 | 12 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.4 | 1.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 13 | 13 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 237 | 648 | 886 | 24 | 0.59 | — | 1,670 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 1,092 | 2,772 | 3,865 | 112 | 2.7 | — | 7,479 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 1.7 | 4.3 | 6.0 | 0.18 | < 0.005 | — | 12 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,331 | 3,425 | 4,756 | 137 | 3.3 | — | 9,161 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 237 | 648 | 886 | 24 | 0.59 | — | 1,670 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 1,092 | 2,772 | 3,865 | 112 | 2.7 | — | 7,479 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 1.7 | 4.3 | 6.0 | 0.18 | < 0.005 | — | 12 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,331 | 3,425 | 4,756 | 137 | 3.3 | — | 9,161 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrigerated Wareho Rail | — | — | — | — | — | — | — | — | — | — | — | 39 | 107 | 147 | 4.0 | 0.10 | — | 277 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 181 | 459 | 640 | 19 | 0.45 | — | 1,238 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 0.28 | 0.72 | 1.00 | 0.03 | < 0.005 | — | 1.9 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 220 | 567 | 787 | 23 | 0.55 | — | 1,517 |

### 4.4.2. Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 214 | 565 | 778 | 22 | 0.53 | — | 1,486 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 985 | 2,499 | 3,484 | 101 | 2.4 | — | 6,743 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 1.5 | 3.9 | 5.4 | 0.16 | < 0.005 | — | 11 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,200 | 3,068 | 4,268 | 123 | 3.0 | — | 8,239 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 214 | 565 | 778 | 22 | 0.53 | — | 1,486 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 985 | 2,499 | 3,484 | 101 | 2.4 | — | 6,743 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 1.5 | 3.9 | 5.4 | 0.16 | < 0.005 | — | 11 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,200 | 3,068 | 4,268 | 123 | 3.0 | — | 8,239 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 35 | 93 | 129 | 3.6 | 0.09 | — | 246 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 163 | 414 | 577 | 17 | 0.40 | — | 1,116 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 0.25 | 0.65 | 0.90 | 0.03 | < 0.005 | — | 1.7 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 199 | 508 | 707 | 20 | 0.49 | — | 1,364 |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 271 | 0.00 | 271 | 27 | 0.00 | — | 948 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 1,249 | 0.00 | 1,249 | 125 | 0.00 | — | 4,369 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 6.8 | 0.00 | 6.8 | 0.68 | 0.00 | — | 24 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 271 | 0.00 | 271 | 27 | 0.00 | — | 948 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 1,249 | 0.00 | 1,249 | 125 | 0.00 | — | 4,369 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 6.8 | 0.00 | 6.8 | 0.68 | 0.00 | — | 24 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 45 | 0.00 | 45 | 4.5 | 0.00 | — | 157 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 207 | 0.00 | 207 | 21 | 0.00 | — | 723 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 1.1 | 0.00 | 1.1 | 0.11 | 0.00 | — | 3.9 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 253 | 0.00 | 253 | 25 | 0.00 | — | 884 |

### 4.5.2. Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 271 | 0.00 | 271 | 27 | 0.00 | — | 948 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 1,249 | 0.00 | 1,249 | 125 | 0.00 | — | 4,369 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 6.8 | 0.00 | 6.8 | 0.68 | 0.00 | — | 24 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 271 | 0.00 | 271 | 27 | 0.00 | — | 948 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 1,249 | 0.00 | 1,249 | 125 | 0.00 | — | 4,369 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 6.8 | 0.00 | 6.8 | 0.68 | 0.00 | — | 24 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,527 | 0.00 | 1,527 | 153 | 0.00 | — | 5,341 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 45 | 0.00 | 45 | 4.5 | 0.00 | — | 157 |
| Unrefrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | 207 | 0.00 | 207 | 21 | 0.00 | — | 723 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | 1.1 | 0.00 | 1.1 | 0.11 | 0.00 | — | 3.9 |
| User Defined Industrial | — | — | — | — | — | — | — | — | — | — | — | 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 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 253 | 0.00 | 253 | 25 | 0.00 | — | 884 |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 90 | 90 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 90 | 90 |

### 4.6.2. Mitigated

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 545 | 545 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Refrigerated Warehouse-No Rail | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 90 | 90 |
| Strip Mall | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 90 | 90 |

## 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.7.2. Mitigated

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 | 3.2 | 2.9 | 8.0 | 7.3 | 0.01 | 0.42 | 0.00 | 0.42 | 0.42 | 0.00 | 0.42 | 0.00 | 1,469 | 1,469 | 0.06 | 0.01 | 0.00 | 1,474 |
| Emergency Generator | 3.6 | 3.3 | 15 | 8.4 | 0.02 | 0.48 | 0.00 | 0.48 | 0.48 | 0.00 | 0.48 | 0.00 | 1,679 | 1,679 | 0.07 | 0.01 | 0.00 | 1,685 |
| Total | 6.8 | 6.2 | 23 | 16 | 0.03 | 0.91 | 0.00 | 0.91 | 0.91 | 0.00 | 0.91 | 0.00 | 3,148 | 3,148 | 0.13 | 0.02 | 0.00 | 3,159 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Fire Pump | 3.2 | 2.9 | 8.0 | 7.3 | 0.01 | 0.42 | 0.00 | 0.42 | 0.42 | 0.00 | 0.42 | 0.00 | 1,469 | 1,469 | 0.06 | 0.01 | 0.00 | 1,474 |
| Emergency Generator | 3.6 | 3.3 | 15 | 8.4 | 0.02 | 0.48 | 0.00 | 0.48 | 0.48 | 0.00 | 0.48 | 0.00 | 1,679 | 1,679 | 0.07 | 0.01 | 0.00 | 1,685 |
| Total | 6.8 | 6.2 | 23 | 16 | 0.03 | 0.91 | 0.00 | 0.91 | 0.91 | 0.00 | 0.91 | 0.00 | 3,148 | 3,148 | 0.13 | 0.02 | 0.00 | 3,159 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Fire Pump | 0.08 | 0.07 | 0.20 | 0.18 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 33 | 33 | < 0.005 | < 0.005 | 0.00 | 33 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Emergency | 0.09 | 0.08 | 0.37 | 0.21 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 38 | 38 | < 0.005 | < 0.005 | 0.00 | 38 |
| Total | 0.17 | 0.15 | 0.57 | 0.39 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.00 | 71 | 71 | < 0.005 | < 0.005 | 0.00 | 72 |

### 4.8.2. Mitigated

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 | 3.2 | 2.9 | 8.0 | 7.3 | 0.01 | 0.42 | 0.00 | 0.42 | 0.42 | 0.00 | 0.42 | 0.00 | 1,469 | 1,469 | 0.06 | 0.01 | 0.00 | 1,474 |
| Emergency Generator | 3.6 | 3.3 | 15 | 8.4 | 0.02 | 0.48 | 0.00 | 0.48 | 0.48 | 0.00 | 0.48 | 0.00 | 1,679 | 1,679 | 0.07 | 0.01 | 0.00 | 1,685 |
| Total | 6.8 | 6.2 | 23 | 16 | 0.03 | 0.91 | 0.00 | 0.91 | 0.91 | 0.00 | 0.91 | 0.00 | 3,148 | 3,148 | 0.13 | 0.02 | 0.00 | 3,159 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Fire Pump | 3.2 | 2.9 | 8.0 | 7.3 | 0.01 | 0.42 | 0.00 | 0.42 | 0.42 | 0.00 | 0.42 | 0.00 | 1,469 | 1,469 | 0.06 | 0.01 | 0.00 | 1,474 |
| Emergency Generator | 3.6 | 3.3 | 15 | 8.4 | 0.02 | 0.48 | 0.00 | 0.48 | 0.48 | 0.00 | 0.48 | 0.00 | 1,679 | 1,679 | 0.07 | 0.01 | 0.00 | 1,685 |
| Total | 6.8 | 6.2 | 23 | 16 | 0.03 | 0.91 | 0.00 | 0.91 | 0.91 | 0.00 | 0.91 | 0.00 | 3,148 | 3,148 | 0.13 | 0.02 | 0.00 | 3,159 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Fire Pump | 0.08 | 0.07 | 0.20 | 0.18 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 33 | 33 | < 0.005 | < 0.005 | 0.00 | 33 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Emergency Generator | 0.09 | 0.08 | 0.37 | 0.21 | < 0.005 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 38 | 38 | < 0.005 | < 0.005 | 0.00 | 38 |
| Total | 0.17 | 0.15 | 0.57 | 0.39 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 0.00 | 71 | 71 | < 0.005 | < 0.005 | 0.00 | 72 |

## 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
|---|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 401 | 228 | 218 | 127,877 | 16,010 | 9,094 | 8,709 | 5,102,301 |
| Unrefrigerated Warehouse-No Rail | 296 | 254 | 252 | 103,413 | 11,792 | 10,117 | 10,054 | 4,126,178 |
| Unrefrigerated Warehouse-No Rail | 273 | 127 | 119 | 83,940 | 10,887 | 5,062 | 4,736 | 3,349,220 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Unrefrigerated Warehouse-No Rail | 100 | 35 | 31 | 29,498 | 3,992 | 1,379 | 1,234 | 1,176,958 |
| Strip Mall | 653 | 504 | 245 | 209,336 | 7,622 | 5,889 | 2,862 | 2,443,556 |
| User Defined Industrial | 12,150 | 9,024 | 8,886 | 4,101,557 | 141,826 | 105,336 | 103,725 | 47,877,062 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 401 | 228 | 218 | 127,877 | 16,010 | 9,094 | 8,709 | 5,102,301 |
| Unrefrigerated Warehouse-No Rail | 296 | 254 | 252 | 103,413 | 11,792 | 10,117 | 10,054 | 4,126,178 |
| Unrefrigerated Warehouse-No Rail | 273 | 127 | 119 | 83,940 | 10,887 | 5,062 | 4,736 | 3,349,220 |
| Unrefrigerated Warehouse-No Rail | 100 | 35 | 31 | 29,498 | 3,992 | 1,379 | 1,234 | 1,176,958 |
| Strip Mall | 653 | 504 | 245 | 209,336 | 7,622 | 5,889 | 2,862 | 2,443,556 |
| User Defined Industrial | 12,150 | 9,024 | 8,886 | 4,101,557 | 141,826 | 105,336 | 103,725 | 47,877,062 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

| Land Use | Hearth Type | Unmitigated (number) | Mitigated (number) |
|---|---|---|---|
| Refrigerated Warehouse-No Rail | Wood Fireplaces | 0 | 0 |
| Refrigerated Warehouse-No Rail | Gas Fireplaces | 0 | 0 |
| Refrigerated Warehouse-No Rail | Propane Fireplaces | 0 | 0 |
| Refrigerated Warehouse-No Rail | Electric Fireplaces | 0 | 0 |

| | | | |
|---|---|---|---|
| Refrigerated Warehouse-No Rail | No Fireplaces | 0 | 0 |
| Refrigerated Warehouse-No Rail | Conventional Wood Stoves | 0 | 0 |
| Refrigerated Warehouse-No Rail | Catalytic Wood Stoves | 0 | 0 |
| Refrigerated Warehouse-No Rail | Non-Catalytic Wood Stoves | 0 | 0 |
| Refrigerated 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 |
| 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 |
| 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 |
| 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 |
| 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 |

### 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 | 4,518,000 | 1,506,000 | 156,659 |

### 5.10.3. Landscape Equipment

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

### 5.10.4. Landscape Equipment - Mitigated

| 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) |
|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 10,345,863 | 261 | 0.0330 | 0.0040 | 13,403,913 |
| Unrefrigerated Warehouse-No Rail | 7,280,305 | 261 | 0.0330 | 0.0040 | 29,984,045 |

| | | | | | |
|---|---|---|---|---|---|
| Unrefrigerated Warehouse-No Rail | 2,128,395 | 261 | 0.0330 | 0.0040 | 8,765,827 |
| Unrefrigerated Warehouse-No Rail | 2,128,395 | 261 | 0.0330 | 0.0040 | 8,765,827 |
| Strip Mall | 117,856 | 261 | 0.0330 | 0.0040 | 71,843 |
| User Defined Industrial | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Parking Lot | 2,287,224 | 261 | 0.0330 | 0.0040 | 0.00 |

### 5.11.2. Mitigated

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) |
|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | 5,347,070 | 261 | 0.0330 | 0.0040 | 13,402,323 |
| Unrefrigerated Warehouse-No Rail | 5,669,798 | 261 | 0.0330 | 0.0040 | 29,961,336 |
| Unrefrigerated Warehouse-No Rail | 1,657,564 | 261 | 0.0330 | 0.0040 | 8,759,188 |
| Unrefrigerated Warehouse-No Rail | 1,657,564 | 261 | 0.0330 | 0.0040 | 8,759,188 |
| Strip Mall | 79,807 | 261 | 0.0330 | 0.0040 | 69,805 |
| User Defined Industrial | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Parking Lot | 2,287,224 | 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) |
|---|---|---|
| Refrigerated Warehouse-No Rail | 123,718,750 | 12,324,509 |
| Unrefrigerated Warehouse-No Rail | 359,709,375 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 105,160,938 | 0.00 |

| | | |
|---|---|---|
| Unrefrigerated Warehouse-No Rail | 105,160,938 | 0.00 |
| Strip Mall | 888,870 | 0.00 |
| User Defined Industrial | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Refrigerated Warehouse-No Rail | 111,532,453 | 5,860,879 |
| Unrefrigerated Warehouse-No Rail | 324,278,002 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 94,802,585 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 94,802,585 | 0.00 |
| Strip Mall | 802,650 | 0.00 |
| User Defined Industrial | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Refrigerated Warehouse-No Rail | 503 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 1,462 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 427 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 427 | 0.00 |
| Strip Mall | 13 | 0.00 |
| User Defined Industrial | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Refrigerated Warehouse-No Rail | 503 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 1,462 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 427 | 0.00 |
| Unrefrigerated Warehouse-No Rail | 427 | 0.00 |
| Strip Mall | 13 | 0.00 |
| User Defined Industrial | 0.00 | 0.00 |
| Parking Lot | 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 |
|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | Cold storage | User Defined | 150 | 7.5 | 7.5 | 7.5 | 25 |
| 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 |

### 5.14.2. Mitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Refrigerated Warehouse-No Rail | Cold storage | User Defined | 150 | 7.5 | 7.5 | 7.5 | 25 |
| 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 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

### 5.15.2. Mitigated

## 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 | 350 | 0.73 |
| Fire Pump | Diesel | 1.00 | 1.00 | 50 | 350 | 0.73 |
| Fire Pump | Diesel | 1.00 | 1.00 | 50 | 350 | 0.73 |
| Fire Pump | Diesel | 1.00 | 1.00 | 50 | 350 | 0.73 |
| Fire Pump | Diesel | 1.00 | 1.00 | 50 | 350 | 0.73 |
| Emergency Generator | Diesel | 1.00 | 1.00 | 50 | 2,000 | 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 |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| 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 |
|---|---|---|

#### 5.18.1.2. Mitigated

| 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) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| 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 | 23 | annual days of extreme heat |
| Extreme Precipitation | 6.0 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 0.00 | 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 | 83 |
| AQ-PM | 66 |
| AQ-DPM | 68 |
| Drinking Water | 85 |
| Lead Risk Housing | 68 |

| | |
|---|---|
| Pesticides | 54 |
| Toxic Releases | 75 |
| Traffic | 88 |
| Effect Indicators | — |
| CleanUp Sites | 83 |
| Groundwater | 93 |
| Haz Waste Facilities/Generators | 92 |
| Impaired Water Bodies | 44 |
| Solid Waste | 99 |
| Sensitive Population | — |
| Asthma | 54 |
| Cardio-vascular | 37 |
| Low Birth Weights | 36 |
| Socioeconomic Factor Indicators | — |
| Education | 70 |
| Housing | 35 |
| Linguistic | 36 |
| Poverty | 49 |
| Unemployment | 73 |

## 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 | — |
| Employed | — |
| Median HI | — |
| Education | — |

| | |
|---|---|
| Bachelor's or higher | — |
| High school enrollment | — |
| Preschool enrollment | — |
| Transportation | — |
| Auto Access | — |
| Active commuting | — |
| Social | — |
| 2-parent households | — |
| Voting | — |
| Neighborhood | — |
| Alcohol availability | — |
| Park access | — |
| Retail density | — |
| Supermarket access | — |
| Tree canopy | — |
| Housing | — |
| Homeownership | — |
| Housing habitability | — |
| Low-inc homeowner severe housing cost burden | — |
| Low-inc renter severe housing cost burden | — |
| Uncrowded housing | — |
| Health Outcomes | — |
| Insured adults | — |
| Arthritis | 0.0 |
| Asthma ER Admissions | 58.6 |
| High Blood Pressure | 0.0 |
| Cancer (excluding skin) | 0.0 |
| Asthma | 0.0 |

| | |
|---|---|
| Coronary Heart Disease | 0.0 |
| Chronic Obstructive Pulmonary Disease | 0.0 |
| Diagnosed Diabetes | 0.0 |
| Life Expectancy at Birth | 0.0 |
| Cognitively Disabled | 87.2 |
| Physically  Disabled | 24.6 |
| Heart Attack ER Admissions | 66.5 |
| Mental Health Not Good | 0.0 |
| Chronic Kidney Disease | 0.0 |
| Obesity | 0.0 |
| Pedestrian Injuries | 0.0 |
| Physical Health Not Good | 0.0 |
| Stroke | 0.0 |
| Health Risk Behaviors | — |
| Binge Drinking | 0.0 |
| Current Smoker | 0.0 |
| No Leisure Time for Physical Activity | 0.0 |
| Climate Change Exposures | — |
| Wildfire Risk | 1.3 |
| SLR Inundation Area | 0.0 |
| Children | 19.0 |
| Elderly | 62.6 |
| English Speaking | 0.0 |
| Foreign-born | 0.0 |
| Outdoor Workers | 37.5 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 29.6 |
| Traffic Density | 0.0 |

| | |
|---|---|
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 0.0 |
| Other Decision Support | — |
| 2016 Voting | 0.0 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 83 |
| Healthy Places Index Score for Project Location (b) | — |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | Yes |
| Project Located in a Low-Income Community (Assembly Bill 1550) | Yes |
| 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 |
|---|---|

| | |
|---|---|
| Operations: Vehicle Data | Trip rates adjusted consistent with the Project traffic study and to separate trucks and passenger vehicles. |
| Operations: Fleet Mix | Fleet mix adjusted to separate trucks and passenger vehicles. Truck fleet mix based on data presented in Project traffic study. |
| Operations: Refrigerants | As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater. As of 1 January 2025, all new air conditioning equipment may not use refrigerants with a GWP of 750 or greater. |

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# APPENDIX 4.3:

# EMFAC2021

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption

| Region | endar Y | hicle Categc | Model Year | Speed | Fuel | Population | Total VMT | Fuel Consumption | Fuel_Consumption | Total Fuel | VMT | Total VMT | Vehicle Class | Miles per Gallon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Los Angeles (SC) | 2025 | HHDT | Aggregate | Aggregate | Gasoline | 38.00970234 | 2730.114768 | 0.659261572 | 659.2615723 | 1161180.927 | 2730.114768 | 7131494.242 | HHD | 6.14 |
| Los Angeles (SC) | 2025 | HHDT | Aggregate | Aggregate | Diesel | 53941.61643 | 6714617.667 | 1096.961053 | 1096961.053 | | 6714617.667 | | | |
| Los Angeles (SC) | 2025 | HHDT | Aggregate | Aggregate | Electricity | 350.9297763 | 38109.97971 | 0 | 0 | | 38109.97971 | | | |
| Los Angeles (SC) | 2025 | HHDT | Aggregate | Aggregate | Natural Gas | 5971.193469 | 376036.48 | 63.56061265 | 63560.61265 | | 376036.48 | | | |
| Los Angeles (SC) | 2025 | LDA | Aggregate | Aggregate | Gasoline | 3261717.882 | 128067964.6 | 4326.798843 | 4326798.843 | 4411967.205 | 128067964.6 | 142243405 | LDA | 32.24 |
| Los Angeles (SC) | 2025 | LDA | Aggregate | Aggregate | Diesel | 8115.47098 | 234266.2649 | 5.77506153 | 5775.06153 | | 234266.2649 | | | |
| Los Angeles (SC) | 2025 | LDA | Aggregate | Aggregate | Electricity | 193284.3415 | 9414235.572 | 0 | 0 | | 9414235.572 | | | |
| Los Angeles (SC) | 2025 | LDA | Aggregate | Aggregate | Plug-in Hybric | 98452.19235 | 4526938.566 | 79.39330032 | 79393.30032 | | 4526938.566 | | | |
| Los Angeles (SC) | 2025 | LDT1 | Aggregate | Aggregate | Gasoline | 307303.6162 | 11174163.84 | 452.812407 | 452812.407 | 453446.8405 | 11174163.84 | 11256046.11 | LDT1 | 24.82 |
| Los Angeles (SC) | 2025 | LDT1 | Aggregate | Aggregate | Diesel | 107.1360043 | 2101.61697 | 0.09123334 | 91.23333958 | | 2101.61697 | | | |
| Los Angeles (SC) | 2025 | LDT1 | Aggregate | Aggregate | Electricity | 1046.875547 | 45556.73451 | 0 | 0 | | 45556.73451 | | | |
| Los Angeles (SC) | 2025 | LDT1 | Aggregate | Aggregate | Plug-in Hybric | 677.1342963 | 34223.91571 | 0.543200163 | 543.2001627 | | 34223.91571 | | | |
| Los Angeles (SC) | 2025 | LDT2 | Aggregate | Aggregate | Gasoline | 1598846.897 | 65845213.92 | 2702.160348 | 2702160.348 | 2722312.182 | 65845213.92 | 67367143.06 | LDT2 | 24.75 |
| Los Angeles (SC) | 2025 | LDT2 | Aggregate | Aggregate | Diesel | 5200.085859 | 223595.1163 | 6.948576996 | 6948.576996 | | 223595.1163 | | | |
| Los Angeles (SC) | 2025 | LDT2 | Aggregate | Aggregate | Electricity | 14017.6954 | 505882.2277 | 0 | 0 | | 505882.2277 | | | |
| Los Angeles (SC) | 2025 | LDT2 | Aggregate | Aggregate | Plug-in Hybric | 16355.85292 | 792451.7915 | 13.20325761 | 13203.25761 | | 792451.7915 | | | |
| Los Angeles (SC) | 2025 | LHDT1 | Aggregate | Aggregate | Gasoline | 123869.9548 | 4952849.986 | 357.8993576 | 357899.3576 | 484130.8044 | 4952849.986 | 7647444.842 | LHD1 | 15.80 |
| Los Angeles (SC) | 2025 | LHDT1 | Aggregate | Aggregate | Diesel | 58715.67018 | 2596323.511 | 126.2314468 | 126231.4468 | | 2596323.511 | | | |
| Los Angeles (SC) | 2025 | LHDT1 | Aggregate | Aggregate | Electricity | 1406.155134 | 98271.34501 | 0 | 0 | | 98271.34501 | | | |
| Los Angeles (SC) | 2025 | LHDT2 | Aggregate | Aggregate | Gasoline | 18894.4929 | 706862.803 | 58.68448201 | 58684.48201 | 125164.3699 | 706862.803 | 1886711.482 | LHD2 | 15.07 |
| Los Angeles (SC) | 2025 | LHDT2 | Aggregate | Aggregate | Diesel | 26698.07852 | 1155746.821 | 66.47988792 | 66479.88792 | | 1155746.821 | | | |
| Los Angeles (SC) | 2025 | LHDT2 | Aggregate | Aggregate | Electricity | 363.0686742 | 24101.85724 | 0 | 0 | | 24101.85724 | | | |
| Los Angeles (SC) | 2025 | MCY | Aggregate | Aggregate | Gasoline | 150473.4563 | 988230.8863 | 23.89776829 | 23897.76829 | 23897.76829 | 988230.8863 | 988230.8863 | MCY | 41.35 |
| Los Angeles (SC) | 2025 | MDV | Aggregate | Aggregate | Gasoline | 952282.7935 | 36302116.46 | 1830.76438 | 1830764.38 | 1855973.468 | 36302116.46 | 37711894.29 | MDV | 20.32 |
| Los Angeles (SC) | 2025 | MDV | Aggregate | Aggregate | Diesel | 11031.50419 | 427142.2782 | 17.78163752 | 17781.63752 | | 427142.2782 | | | |
| Los Angeles (SC) | 2025 | MDV | Aggregate | Aggregate | Electricity | 15185.9899 | 547666.3841 | 0 | 0 | | 547666.3841 | | | |
| Los Angeles (SC) | 2025 | MDV | Aggregate | Aggregate | Plug-in Hybric | 9770.106857 | 434969.1711 | 7.4274497 | 7427.4497 | | 434969.1711 | | | |
| Los Angeles (SC) | 2025 | MH | Aggregate | Aggregate | Gasoline | 14653.52741 | 147454.4598 | 30.47047491 | 30470.47491 | 36338.87331 | 147454.4598 | 205880.1098 | MH | 5.67 |
| Los Angeles (SC) | 2025 | MH | Aggregate | Aggregate | Diesel | 5521.467554 | 58425.64998 | 5.868398404 | 5868.398404 | | 58425.64998 | | | |
| Los Angeles (SC) | 2025 | MHDT | Aggregate | Aggregate | Gasoline | 14350.96956 | 779405.2776 | 149.5355578 | 149535.5578 | 437224.2475 | 779405.2776 | 3378237.322 | MHD | 7.73 |
| Los Angeles (SC) | 2025 | MHDT | Aggregate | Aggregate | Diesel | 60424.47324 | 2523668.137 | 282.3073209 | 282307.3209 | | 2523668.137 | | | |
| Los Angeles (SC) | 2025 | MHDT | Aggregate | Aggregate | Electricity | 556.2217861 | 31387.25683 | 0 | 0 | | 31387.25683 | | | |
| Los Angeles (SC) | 2025 | MHDT | Aggregate | Aggregate | Natural Gas | 931.9857944 | 43776.65045 | 5.381368788 | 5381.368788 | | 43776.65045 | | | |
| Los Angeles (SC) | 2025 | OBUS | Aggregate | Aggregate | Gasoline | 3574.776306 | 137680.6627 | 27.09622544 | 27096.22544 | 53416.63406 | 137680.6627 | 326343.1493 | OBUS | 6.11 |
| Los Angeles (SC) | 2025 | OBUS | Aggregate | Aggregate | Diesel | 2154.536699 | 166927.5847 | 23.99324793 | 23993.24793 | | 166927.5847 | | | |
| Los Angeles (SC) | 2025 | OBUS | Aggregate | Aggregate | Electricity | 19.22602896 | 1412.471949 | 0 | 0 | | 1412.471949 | | | |
| Los Angeles (SC) | 2025 | OBUS | Aggregate | Aggregate | Natural Gas | 344.2470166 | 20322.42992 | 2.327160685 | 2327.160685 | | 20322.42992 | | | |
| Los Angeles (SC) | 2025 | SBUS | Aggregate | Aggregate | Gasoline | 1407.566843 | 61982.31618 | 6.890584573 | 6890.584573 | 20153.09483 | 61982.31618 | 131760.7587 | SBUS | 6.54 |
| Los Angeles (SC) | 2025 | SBUS | Aggregate | Aggregate | Diesel | 1545.162913 | 30783.48004 | 4.197055222 | 4197.055222 | | 30783.48004 | | | |
| Los Angeles (SC) | 2025 | SBUS | Aggregate | Aggregate | Electricity | 25.60383708 | 817.4949517 | 0 | 0 | | 817.4949517 | | | |
| Los Angeles (SC) | 2025 | SBUS | Aggregate | Aggregate | Natural Gas | 1561.068871 | 38177.46755 | 9.065455038 | 9065.455038 | | 38177.46755 | | | |
| Los Angeles (SC) | 2025 | UBUS | Aggregate | Aggregate | Gasoline | 434.3887861 | 30651.97854 | 6.643775924 | 6643.775924 | 139008.0038 | 30651.97854 | 454294.1088 | UBUS | 3.27 |
| Los Angeles (SC) | 2025 | UBUS | Aggregate | Aggregate | Diesel | 6.356431667 | 939.4744674 | 0.16146728 | 161.4672802 | | 939.4744674 | | | |
| Los Angeles (SC) | 2025 | UBUS | Aggregate | Aggregate | Electricity | 152.2443728 | 15265.9648 | 0 | 0 | | 15265.9648 | | | |
| Los Angeles (SC) | 2025 | UBUS | Aggregate | Aggregate | Natural Gas | 3807.336326 | 407436.691 | 132.2027606 | 132202.7606 | | 407436.691 | | | |

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption

| Region | endar Y | hicle Categc | Model Year | Speed | Fuel | Population | Total VMT | Fuel Consumption | Fuel_Consumption | Total Fuel | VMT | Total VMT | Vehicle Class | Miles per Gallon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Los Angeles (SC) | 2026 | HHDT | Aggregate | Aggregate | Gasoline | 31.71483174 | 2530.344681 | 0.595008255 | 595.008255 | 1164069.716 | 2530.344681 | 7277084.666 | HHD | 6.25 |
| Los Angeles (SC) | 2026 | HHDT | Aggregate | Aggregate | Diesel | 55277.3799 | 6819808.694 | 1098.590287 | 1098590.287 | | 6819808.694 | | | |
| Los Angeles (SC) | 2026 | HHDT | Aggregate | Aggregate | Electricity | 610.8824182 | 66680.90118 | 0 | 0 | | 66680.90118 | | | |
| Los Angeles (SC) | 2026 | HHDT | Aggregate | Aggregate | Natural Gas | 6222.084708 | 388064.7258 | 64.88442099 | 64884.42099 | | 388064.7258 | | | |
| Los Angeles (SC) | 2026 | LDA | Aggregate | Aggregate | Gasoline | 3219652.786 | 125598332.2 | 4156.999113 | 4156999.113 | 4242481.146 | 125598332.2 | 140494683.9 | LDA | 33.12 |
| Los Angeles (SC) | 2026 | LDA | Aggregate | Aggregate | Diesel | 7348.716503 | 212062.0866 | 5.149764542 | 5149.764542 | | 212062.0866 | | | |
| Los Angeles (SC) | 2026 | LDA | Aggregate | Aggregate | Electricity | 209865.581 | 10019447.29 | 0 | 0 | | 10019447.29 | | | |
| Los Angeles (SC) | 2026 | LDA | Aggregate | Aggregate | Plug-in Hybric | 103430.6361 | 4664842.379 | 80.33226876 | 80332.26876 | | 4664842.379 | | | |
| Los Angeles (SC) | 2026 | LDT1 | Aggregate | Aggregate | Gasoline | 303121.7183 | 10988219.26 | 436.9194811 | 436919.4811 | 437683.1643 | 10988219.26 | 11090768.71 | LDT1 | 25.34 |
| Los Angeles (SC) | 2026 | LDT1 | Aggregate | Aggregate | Diesel | 88.7979738 | 1718.50539 | 0.074204054 | 74.20405391 | | 1718.50539 | | | |
| Los Angeles (SC) | 2026 | LDT1 | Aggregate | Aggregate | Electricity | 1265.851297 | 56656.04808 | 0 | 0 | | 56656.04808 | | | |
| Los Angeles (SC) | 2026 | LDT1 | Aggregate | Aggregate | Plug-in Hybric | 890.9485459 | 44174.8973 | 0.689479092 | 689.4790918 | | 44174.8973 | | | |
| Los Angeles (SC) | 2026 | LDT2 | Aggregate | Aggregate | Gasoline | 1632990.627 | 66847121.76 | 2677.276355 | 2677276.355 | 2698876.906 | 66847121.76 | 68582011.91 | LDT2 | 25.41 |
| Los Angeles (SC) | 2026 | LDT2 | Aggregate | Aggregate | Diesel | 5437.834714 | 230831.6694 | 7.025538956 | 7025.538956 | | 230831.6694 | | | |
| Los Angeles (SC) | 2026 | LDT2 | Aggregate | Aggregate | Electricity | 17319.28615 | 613691.4866 | 0 | 0 | | 613691.4866 | | | |
| Los Angeles (SC) | 2026 | LDT2 | Aggregate | Aggregate | Plug-in Hybric | 18786.14155 | 890366.9989 | 14.57501217 | 14575.01217 | | 890366.9989 | | | |
| Los Angeles (SC) | 2026 | LHDT1 | Aggregate | Aggregate | Gasoline | 123929.2199 | 4960391.725 | 351.17062 | 351170.62 | 481998.3017 | 4960391.725 | 7842646.775 | LHD1 | 16.27 |
| Los Angeles (SC) | 2026 | LHDT1 | Aggregate | Aggregate | Diesel | 61552.22012 | 2704306.099 | 130.8276817 | 130827.6817 | | 2704306.099 | | | |
| Los Angeles (SC) | 2026 | LHDT1 | Aggregate | Aggregate | Electricity | 2671.099104 | 177948.9511 | 0 | 0 | | 177948.9511 | | | |
| Los Angeles (SC) | 2026 | LHDT2 | Aggregate | Aggregate | Gasoline | 18802.30269 | 702537.4457 | 57.21721911 | 57217.21911 | 126318.5559 | 702537.4457 | 1956182.403 | LHD2 | 15.49 |
| Los Angeles (SC) | 2026 | LHDT2 | Aggregate | Aggregate | Diesel | 28207.89186 | 1209848.539 | 69.10133677 | 69101.33677 | | 1209848.539 | | | |
| Los Angeles (SC) | 2026 | LHDT2 | Aggregate | Aggregate | Electricity | 691.3171043 | 43796.419 | 0 | 0 | | 43796.419 | | | |
| Los Angeles (SC) | 2026 | MCY | Aggregate | Aggregate | Gasoline | 153887.3138 | 1005181.469 | 24.23505076 | 24235.05076 | 24235.05076 | 1005181.469 | 1005181.469 | MCY | 41.48 |
| Los Angeles (SC) | 2026 | MDV | Aggregate | Aggregate | Gasoline | 964398.5458 | 36646219.44 | 1803.349906 | 1803349.906 | 1829186.939 | 36646219.44 | 38233993.02 | MDV | 20.90 |
| Los Angeles (SC) | 2026 | MDV | Aggregate | Aggregate | Diesel | 11199.92317 | 428851.9709 | 17.49813003 | 17498.13003 | | 428851.9709 | | | |
| Los Angeles (SC) | 2026 | MDV | Aggregate | Aggregate | Electricity | 18645.2319 | 659895.0843 | 0 | 0 | | 659895.0843 | | | |
| Los Angeles (SC) | 2026 | MDV | Aggregate | Aggregate | Plug-in Hybric | 11391.54804 | 499026.5259 | 8.338902977 | 8338.902977 | | 499026.5259 | | | |
| Los Angeles (SC) | 2026 | MH | Aggregate | Aggregate | Gasoline | 14307.03368 | 146047.5722 | 30.18050526 | 30180.50526 | 36235.25834 | 146047.5722 | 206291.2031 | MH | 5.69 |
| Los Angeles (SC) | 2026 | MH | Aggregate | Aggregate | Diesel | 5685.026918 | 60243.63088 | 6.054753085 | 6054.753085 | | 60243.63088 | | | |
| Los Angeles (SC) | 2026 | MHDT | Aggregate | Aggregate | Gasoline | 14018.64483 | 760040.5963 | 144.2836857 | 144283.6857 | 432346.7032 | 760040.5963 | 3398646.229 | MHD | 7.86 |
| Los Angeles (SC) | 2026 | MHDT | Aggregate | Aggregate | Diesel | 61381.38023 | 2536950.689 | 282.4978542 | 282497.8542 | | 2536950.689 | | | |
| Los Angeles (SC) | 2026 | MHDT | Aggregate | Aggregate | Electricity | 1016.757423 | 56341.7981 | 0 | 0 | | 56341.7981 | | | |
| Los Angeles (SC) | 2026 | MHDT | Aggregate | Aggregate | Natural Gas | 983.1551606 | 45313.1448 | 5.565163339 | 5565.163339 | | 45313.1448 | | | |
| Los Angeles (SC) | 2026 | OBUS | Aggregate | Aggregate | Gasoline | 3466.029388 | 130669.0411 | 25.46693943 | 25466.93943 | 51620.84435 | 130669.0411 | 320927.8184 | OBUS | 6.22 |
| Los Angeles (SC) | 2026 | OBUS | Aggregate | Aggregate | Diesel | 2204.359751 | 167083.6645 | 23.79556615 | 23795.56615 | | 167083.6645 | | | |
| Los Angeles (SC) | 2026 | OBUS | Aggregate | Aggregate | Electricity | 32.17174938 | 2316.377191 | 0 | 0 | | 2316.377191 | | | |
| Los Angeles (SC) | 2026 | OBUS | Aggregate | Aggregate | Natural Gas | 358.9603738 | 20858.73557 | 2.358338765 | 2358.338765 | | 20858.73557 | | | |
| Los Angeles (SC) | 2026 | SBUS | Aggregate | Aggregate | Gasoline | 1439.394428 | 63136.50277 | 6.985775097 | 6985.775097 | 20245.30514 | 63136.50277 | 133175.7822 | SBUS | 6.58 |
| Los Angeles (SC) | 2026 | SBUS | Aggregate | Aggregate | Diesel | 1484.919634 | 29449.64017 | 4.00274451 | 4002.74451 | | 29449.64017 | | | |
| Los Angeles (SC) | 2026 | SBUS | Aggregate | Aggregate | Electricity | 43.7276656 | 1385.007139 | 0 | 0 | | 1385.007139 | | | |
| Los Angeles (SC) | 2026 | SBUS | Aggregate | Aggregate | Natural Gas | 1619.758995 | 39204.63215 | 9.256785533 | 9256.785533 | | 39204.63215 | | | |
| Los Angeles (SC) | 2026 | UBUS | Aggregate | Aggregate | Gasoline | 435.2433216 | 30711.79502 | 6.645484972 | 6645.484972 | 138225.3819 | 30711.79502 | 455208.2004 | UBUS | 3.29 |
| Los Angeles (SC) | 2026 | UBUS | Aggregate | Aggregate | Diesel | 6.30137858 | 935.3704801 | 0.161043189 | 161.0431889 | | 935.3704801 | | | |
| Los Angeles (SC) | 2026 | UBUS | Aggregate | Aggregate | Electricity | 172.837956 | 17147.4887 | 0 | 0 | | 17147.4887 | | | |
| Los Angeles (SC) | 2026 | UBUS | Aggregate | Aggregate | Natural Gas | 3794.807103 | 406413.5462 | 131.4188537 | 131418.8537 | | 406413.5462 | | | |

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units:  miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption

| Region | endar Y | hicle Categc | Model Year | Speed | Fuel | Population | Total VMT | Fuel Consumption | Fuel_Consumption | Total Fuel | VMT | Total VMT | Vehicle Class | Miles per Gallon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Los Angeles (SC) | 2027 | HHDT | Aggregate | Aggregate | Gasoline | 28.46043311 | 2392.872562 | 0.550702282 | 550.7022818 | 1164600.43 | 2392.872562 | 7425699.004 | HHD | 6.38 |
| Los Angeles (SC) | 2027 | HHDT | Aggregate | Aggregate | Diesel | 56384.30241 | 6917995.933 | 1098.556913 | 1098556.913 | | 6917995.933 | | | |
| Los Angeles (SC) | 2027 | HHDT | Aggregate | Aggregate | Electricity | 980.6476537 | 107461.5922 | 0 | 0 | | 107461.5922 | | | |
| Los Angeles (SC) | 2027 | HHDT | Aggregate | Aggregate | Natural Gas | 6429.376629 | 397848.6065 | 65.49281424 | 65492.81424 | | 397848.6065 | | | |
| Los Angeles (SC) | 2027 | LDA | Aggregate | Aggregate | Gasoline | 3179092.826 | 123505266.4 | 4009.438092 | 4009438.092 | 4095082.03 | 123505266.4 | 139100776.7 | LDA | 33.97 |
| Los Angeles (SC) | 2027 | LDA | Aggregate | Aggregate | Diesel | 6534.724386 | 191083.9151 | 4.56398353 | 4563.98353 | | 191083.9151 | | | |
| Los Angeles (SC) | 2027 | LDA | Aggregate | Aggregate | Electricity | 226006.5991 | 10613840.63 | 0 | 0 | | 10613840.63 | | | |
| Los Angeles (SC) | 2027 | LDA | Aggregate | Aggregate | Plug-in Hybric | 107928.2631 | 4790585.814 | 81.07995446 | 81079.95446 | | 4790585.814 | | | |
| Los Angeles (SC) | 2027 | LDT1 | Aggregate | Aggregate | Gasoline | 299305.2204 | 10834971.77 | 422.9642527 | 422964.2527 | 423856.1927 | 10834971.77 | 10961385.3 | LDT1 | 25.86 |
| Los Angeles (SC) | 2027 | LDT1 | Aggregate | Aggregate | Diesel | 45.23949508 | 892.2827514 | 0.037128442 | 37.12844208 | | 892.2827514 | | | |
| Los Angeles (SC) | 2027 | LDT1 | Aggregate | Aggregate | Electricity | 1533.530787 | 70048.26106 | 0 | 0 | | 70048.26106 | | | |
| Los Angeles (SC) | 2027 | LDT1 | Aggregate | Aggregate | Plug-in Hybric | 1135.428964 | 55472.98057 | 0.854811555 | 854.8115555 | | 55472.98057 | | | |
| Los Angeles (SC) | 2027 | LDT2 | Aggregate | Aggregate | Gasoline | 1666211.776 | 67880593.69 | 2659.957346 | 2659957.346 | 2683058.295 | 67880593.69 | 69838287.02 | LDT2 | 26.03 |
| Los Angeles (SC) | 2027 | LDT2 | Aggregate | Aggregate | Diesel | 5647.118826 | 237466.0947 | 7.099804527 | 7099.804527 | | 237466.0947 | | | |
| Los Angeles (SC) | 2027 | LDT2 | Aggregate | Aggregate | Electricity | 20892.07314 | 727697.1044 | 0 | 0 | | 727697.1044 | | | |
| Los Angeles (SC) | 2027 | LDT2 | Aggregate | Aggregate | Plug-in Hybric | 21318.0193 | 992530.1388 | 16.00114517 | 16001.14517 | | 992530.1388 | | | |
| Los Angeles (SC) | 2027 | LHDT1 | Aggregate | Aggregate | Gasoline | 123790.2824 | 4944074.819 | 343.253308 | 343253.308 | 477458.955 | 4944074.819 | 8024960.505 | LHD1 | 16.81 |
| Los Angeles (SC) | 2027 | LHDT1 | Aggregate | Aggregate | Diesel | 64077.47622 | 2787685.885 | 134.205647 | 134205.647 | | 2787685.885 | | | |
| Los Angeles (SC) | 2027 | LHDT1 | Aggregate | Aggregate | Electricity | 4540.547639 | 293199.8015 | 0 | 0 | | 293199.8015 | | | |
| Los Angeles (SC) | 2027 | LHDT2 | Aggregate | Aggregate | Gasoline | 18663.23138 | 695273.9383 | 55.5644299 | 55564.4299 | 126634.9134 | 695273.9383 | 2020334.934 | LHD2 | 15.95 |
| Los Angeles (SC) | 2027 | LHDT2 | Aggregate | Aggregate | Diesel | 29570.22458 | 1252646.951 | 71.07048352 | 71070.48352 | | 1252646.951 | | | |
| Los Angeles (SC) | 2027 | LHDT2 | Aggregate | Aggregate | Electricity | 1178.754467 | 72414.04476 | 0 | 0 | | 72414.04476 | | | |
| Los Angeles (SC) | 2027 | MCY | Aggregate | Aggregate | Gasoline | 157033.573 | 1019766.116 | 24.52211084 | 24522.11084 | 24522.11084 | 1019766.116 | 1019766.116 | MCY | 41.59 |
| Los Angeles (SC) | 2027 | MDV | Aggregate | Aggregate | Gasoline | 976608.911 | 37034848.01 | 1781.876783 | 1781876.783 | 1808380.115 | 37034848.01 | 38799546.51 | MDV | 21.46 |
| Los Angeles (SC) | 2027 | MDV | Aggregate | Aggregate | Diesel | 11332.66965 | 430680.9504 | 17.26010389 | 17260.10389 | | 430680.9504 | | | |
| Los Angeles (SC) | 2027 | MDV | Aggregate | Aggregate | Electricity | 22186.78667 | 771017.0637 | 0 | 0 | | 771017.0637 | | | |
| Los Angeles (SC) | 2027 | MDV | Aggregate | Aggregate | Plug-in Hybric | 13026.49459 | 563000.4861 | 9.243228581 | 9243.228581 | | 563000.4861 | | | |
| Los Angeles (SC) | 2027 | MH | Aggregate | Aggregate | Gasoline | 14005.69734 | 144781.4642 | 29.92997464 | 29929.97464 | 36143.18767 | 144781.4642 | 206641.5616 | MH | 5.72 |
| Los Angeles (SC) | 2027 | MH | Aggregate | Aggregate | Diesel | 5836.820009 | 61860.09744 | 6.213213033 | 6213.213033 | | 61860.09744 | | | |
| Los Angeles (SC) | 2027 | MHDT | Aggregate | Aggregate | Gasoline | 13674.91053 | 739072.9664 | 138.9224355 | 138922.4355 | 426562.581 | 739072.9664 | 3420666.835 | MHD | 8.02 |
| Los Angeles (SC) | 2027 | MHDT | Aggregate | Aggregate | Diesel | 62151.43046 | 2541697.739 | 281.9342075 | 281934.2075 | | 2541697.739 | | | |
| Los Angeles (SC) | 2027 | MHDT | Aggregate | Aggregate | Electricity | 1706.137105 | 93290.7971 | 0 | 0 | | 93290.7971 | | | |
| Los Angeles (SC) | 2027 | MHDT | Aggregate | Aggregate | Natural Gas | 1030.856303 | 46605.33254 | 5.705938052 | 5705.938052 | | 46605.33254 | | | |
| Los Angeles (SC) | 2027 | OBUS | Aggregate | Aggregate | Gasoline | 3356.977295 | 123908.583 | 23.90263812 | 23902.63812 | 49854.25296 | 123908.583 | 316117.7337 | OBUS | 6.34 |
| Los Angeles (SC) | 2027 | OBUS | Aggregate | Aggregate | Diesel | 2251.051352 | 167338.1278 | 23.57468951 | 23574.68951 | | 167338.1278 | | | |
| Los Angeles (SC) | 2027 | OBUS | Aggregate | Aggregate | Electricity | 51.09363126 | 3625.308364 | 0 | 0 | | 3625.308364 | | | |
| Los Angeles (SC) | 2027 | OBUS | Aggregate | Aggregate | Natural Gas | 371.9283173 | 21245.71448 | 2.376925334 | 2376.925334 | | 21245.71448 | | | |
| Los Angeles (SC) | 2027 | SBUS | Aggregate | Aggregate | Gasoline | 1466.79361 | 64088.6419 | 7.059930766 | 7059.930766 | 20288.45825 | 64088.6419 | 134531.9473 | SBUS | 6.63 |
| Los Angeles (SC) | 2027 | SBUS | Aggregate | Aggregate | Diesel | 1416.231608 | 28030.62768 | 3.79611078 | 3796.11078 | | 28030.62768 | | | |
| Los Angeles (SC) | 2027 | SBUS | Aggregate | Aggregate | Electricity | 71.55685635 | 2257.450349 | 0 | 0 | | 2257.450349 | | | |
| Los Angeles (SC) | 2027 | SBUS | Aggregate | Aggregate | Natural Gas | 1676.629213 | 40155.22736 | 9.432416707 | 9432.416707 | | 40155.22736 | | | |
| Los Angeles (SC) | 2027 | UBUS | Aggregate | Aggregate | Gasoline | 433.2360292 | 30482.51385 | 6.572380998 | 6572.380998 | 134064.8238 | 30482.51385 | 456123.3104 | UBUS | 3.40 |
| Los Angeles (SC) | 2027 | UBUS | Aggregate | Aggregate | Diesel | 6.273852036 | 933.3184865 | 0.160747972 | 160.747972 | | 933.3184865 | | | |
| Los Angeles (SC) | 2027 | UBUS | Aggregate | Aggregate | Electricity | 294.3792467 | 28836.71203 | 0 | 0 | | 28836.71203 | | | |
| Los Angeles (SC) | 2027 | UBUS | Aggregate | Aggregate | Natural Gas | 3684.164474 | 395870.766 | 127.3316948 | 127331.6948 | | 395870.766 | | | |

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2028
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption

| Region | endar Y | hicle Categc | Model Year | Speed | Fuel | Population | Total VMT | Fuel Consumption | Fuel_Consumption | Total Fuel | VMT | Total VMT | Vehicle Class | Miles per Gallon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Los Angeles (SC) | 2028 | HHDT | Aggregate | Aggregate | Gasoline | 25.44926558 | 2268.374659 | 0.51084264 | 510.8426405 | 1161993.453 | 2268.374659 | 7577807.084 | HHD | 6.52 |
| Los Angeles (SC) | 2028 | HHDT | Aggregate | Aggregate | Diesel | 57257.80612 | 7006667.238 | 1095.262107 | 1095262.107 | | 7006667.238 | | | |
| Los Angeles (SC) | 2028 | HHDT | Aggregate | Aggregate | Electricity | 1491.868023 | 163138.8979 | 0 | 0 | | 163138.8979 | | | |
| Los Angeles (SC) | 2028 | HHDT | Aggregate | Aggregate | Natural Gas | 6600.854666 | 405732.574 | 66.22050345 | 66220.50345 | | 405732.574 | | | |
| Los Angeles (SC) | 2028 | LDA | Aggregate | Aggregate | Gasoline | 3140409.083 | 121531275.9 | 3875.571643 | 3875571.643 | 3961326.527 | 121531275.9 | 137794771.6 | LDA | 34.79 |
| Los Angeles (SC) | 2028 | LDA | Aggregate | Aggregate | Diesel | 5730.385828 | 171445.5754 | 4.015544239 | 4015.544239 | | 171445.5754 | | | |
| Los Angeles (SC) | 2028 | LDA | Aggregate | Aggregate | Electricity | 242133.5654 | 11195915.06 | 0 | 0 | | 11195915.06 | | | |
| Los Angeles (SC) | 2028 | LDA | Aggregate | Aggregate | Plug-in Hybric | 112008.9029 | 4896135.1 | 81.73933994 | 81739.33994 | | 4896135.1 | | | |
| Los Angeles (SC) | 2028 | LDT1 | Aggregate | Aggregate | Gasoline | 295789.8982 | 10688845.77 | 410.092255 | 410092.255 | 411153.6227 | 10688845.77 | 10842908.93 | LDT1 | 26.37 |
| Los Angeles (SC) | 2028 | LDT1 | Aggregate | Aggregate | Diesel | 28.25879369 | 568.5264623 | 0.022852413 | 22.85241305 | | 568.5264623 | | | |
| Los Angeles (SC) | 2028 | LDT1 | Aggregate | Aggregate | Electricity | 1850.793917 | 85592.56471 | 0 | 0 | | 85592.56471 | | | |
| Los Angeles (SC) | 2028 | LDT1 | Aggregate | Aggregate | Plug-in Hybric | 1409.691443 | 67902.06675 | 1.038515283 | 1038.515283 | | 67902.06675 | | | |
| Los Angeles (SC) | 2028 | LDT2 | Aggregate | Aggregate | Gasoline | 1698089.402 | 68789491.93 | 2643.97758 | 2643977.58 | 2668601.915 | 68789491.93 | 70976935.18 | LDT2 | 26.60 |
| Los Angeles (SC) | 2028 | LDT2 | Aggregate | Aggregate | Diesel | 5838.43534 | 243275.111 | 7.151570294 | 7151.570294 | | 243275.111 | | | |
| Los Angeles (SC) | 2028 | LDT2 | Aggregate | Aggregate | Electricity | 24770.0671 | 848796.585 | 0 | 0 | | 848796.585 | | | |
| Los Angeles (SC) | 2028 | LDT2 | Aggregate | Aggregate | Plug-in Hybric | 23929.64409 | 1095371.549 | 17.47276463 | 17472.76463 | | 1095371.549 | | | |
| Los Angeles (SC) | 2028 | LHDT1 | Aggregate | Aggregate | Gasoline | 123514.8081 | 4906577.088 | 335.3460481 | 335346.0481 | 471936.4065 | 4906577.088 | 8198046.424 | LHD1 | 17.37 |
| Los Angeles (SC) | 2028 | LHDT1 | Aggregate | Aggregate | Diesel | 66273.45759 | 2847269.923 | 136.5903584 | 136590.3584 | | 2847269.923 | | | |
| Los Angeles (SC) | 2028 | LHDT1 | Aggregate | Aggregate | Electricity | 7078.582149 | 444199.4134 | 0 | 0 | | 444199.4134 | | | |
| Los Angeles (SC) | 2028 | LHDT2 | Aggregate | Aggregate | Gasoline | 18493.46928 | 685455.8299 | 53.92810432 | 53928.10432 | 126451.5894 | 685455.8299 | 2080219.364 | LHD2 | 16.45 |
| Los Angeles (SC) | 2028 | LHDT2 | Aggregate | Aggregate | Diesel | 30779.95102 | 1284692.724 | 72.5234851 | 72523.4851 | | 1284692.724 | | | |
| Los Angeles (SC) | 2028 | LHDT2 | Aggregate | Aggregate | Electricity | 1843.198599 | 110070.8101 | 0 | 0 | | 110070.8101 | | | |
| Los Angeles (SC) | 2028 | MCY | Aggregate | Aggregate | Gasoline | 160132.4304 | 1032520.196 | 24.77976253 | 24779.76253 | 24779.76253 | 1032520.196 | 1032520.196 | MCY | 41.67 |
| Los Angeles (SC) | 2028 | MDV | Aggregate | Aggregate | Gasoline | 988545.5796 | 37378798.2 | 1762.204626 | 1762204.626 | 1789317.682 | 37378798.2 | 39316976.55 | MDV | 21.97 |
| Los Angeles (SC) | 2028 | MDV | Aggregate | Aggregate | Diesel | 11427.46283 | 431397.9419 | 16.98064648 | 16980.64648 | | 431397.9419 | | | |
| Los Angeles (SC) | 2028 | MDV | Aggregate | Aggregate | Electricity | 25829.54462 | 881887.1927 | 0 | 0 | | 881887.1927 | | | |
| Los Angeles (SC) | 2028 | MDV | Aggregate | Aggregate | Plug-in Hybric | 14652.2037 | 624893.2135 | 10.13240981 | 10132.40981 | | 624893.2135 | | | |
| Los Angeles (SC) | 2028 | MH | Aggregate | Aggregate | Gasoline | 13737.8769 | 143564.1869 | 29.67250668 | 29672.50668 | 36033.61617 | 143564.1869 | 206872.5561 | MH | 5.74 |
| Los Angeles (SC) | 2028 | MH | Aggregate | Aggregate | Diesel | 5981.722201 | 63308.36922 | 6.36110949 | 6361.10949 | | 63308.36922 | | | |
| Los Angeles (SC) | 2028 | MHDT | Aggregate | Aggregate | Gasoline | 13309.14864 | 715457.69 | 133.1693014 | 133169.3014 | 418588.2788 | 715457.69 | 3444768.831 | MHD | 8.23 |
| Los Angeles (SC) | 2028 | MHDT | Aggregate | Aggregate | Diesel | 62608.21554 | 2532865.166 | 279.6077417 | 279607.7417 | | 2532865.166 | | | |
| Los Angeles (SC) | 2028 | MHDT | Aggregate | Aggregate | Electricity | 2743.218394 | 148973.8917 | 0 | 0 | | 148973.8917 | | | |
| Los Angeles (SC) | 2028 | MHDT | Aggregate | Aggregate | Natural Gas | 1070.013059 | 47472.08291 | 5.81123562 | 5811.23562 | | 47472.08291 | | | |
| Los Angeles (SC) | 2028 | OBUS | Aggregate | Aggregate | Gasoline | 3248.288828 | 117255.0327 | 22.41881877 | 22418.81877 | 48178.26208 | 117255.0327 | 312021.511 | OBUS | 6.48 |
| Los Angeles (SC) | 2028 | OBUS | Aggregate | Aggregate | Diesel | 2290.725844 | 167642.9272 | 23.37570702 | 23375.70702 | | 167642.9272 | | | |
| Los Angeles (SC) | 2028 | OBUS | Aggregate | Aggregate | Electricity | 79.61401844 | 5584.825541 | 0 | 0 | | 5584.825541 | | | |
| Los Angeles (SC) | 2028 | OBUS | Aggregate | Aggregate | Natural Gas | 383.0211137 | 21538.72555 | 2.383736287 | 2383.736287 | | 21538.72555 | | | |
| Los Angeles (SC) | 2028 | SBUS | Aggregate | Aggregate | Gasoline | 1490.849724 | 64884.29173 | 7.120377974 | 7120.377974 | 20273.50936 | 64884.29173 | 135931.9099 | SBUS | 6.70 |
| Los Angeles (SC) | 2028 | SBUS | Aggregate | Aggregate | Diesel | 1341.562637 | 26534.03988 | 3.578854946 | 3578.854946 | | 26534.03988 | | | |
| Los Angeles (SC) | 2028 | SBUS | Aggregate | Aggregate | Electricity | 113.0451849 | 3573.929977 | 0 | 0 | | 3573.929977 | | | |
| Los Angeles (SC) | 2028 | SBUS | Aggregate | Aggregate | Natural Gas | 1728.664065 | 40939.64835 | 9.574276435 | 9574.276435 | | 40939.64835 | | | |
| Los Angeles (SC) | 2028 | UBUS | Aggregate | Aggregate | Gasoline | 431.6536764 | 30444.26876 | 6.551518372 | 6551.518372 | 127511.786 | 30444.26876 | 457038.4205 | UBUS | 3.58 |
| Los Angeles (SC) | 2028 | UBUS | Aggregate | Aggregate | Diesel | 0.21774371 | 22.86192822 | 0.00287857 | 2.878570418 | | 22.86192822 | | | |
| Los Angeles (SC) | 2028 | UBUS | Aggregate | Aggregate | Electricity | 441.1335681 | 47325.46386 | 0 | 0 | | 47325.46386 | | | |
| Los Angeles (SC) | 2028 | UBUS | Aggregate | Aggregate | Natural Gas | 3553.912457 | 379245.8259 | 120.9573891 | 120957.3891 | | 379245.8259 | | | |

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2029
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units:  miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption

| Region | endar Y | hicle Categc | Model Year | Speed | Fuel | Population | Total VMT | Fuel Consumption | Fuel_Consumption | Total Fuel | VMT | Total VMT | Vehicle Class | Miles per Gallon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Los Angeles (SC) | 2029 | HHDT | Aggregate | Aggregate | Gasoline | 22.86269746 | 2160.740713 | 0.476117973 | 476.117973 | 1157642.523 | 2160.740713 | 7733268.924 | HHD | 6.68 |
| Los Angeles (SC) | 2029 | HHDT | Aggregate | Aggregate | Diesel | 57887.51556 | 7085328.226 | 1090.450798 | 1090450.798 | | 7085328.226 | | | |
| Los Angeles (SC) | 2029 | HHDT | Aggregate | Aggregate | Electricity | 2152.512889 | 233750.2682 | 0 | 0 | | 233750.2682 | | | |
| Los Angeles (SC) | 2029 | HHDT | Aggregate | Aggregate | Natural Gas | 6738.432011 | 412029.6887 | 66.71560733 | 66715.60733 | | 412029.6887 | | | |
| Los Angeles (SC) | 2029 | LDA | Aggregate | Aggregate | Gasoline | 3102473.073 | 119675203.1 | 3753.22642 | 3753226.42 | 3838884.785 | 119675203.1 | 136568003.4 | LDA | 35.57 |
| Los Angeles (SC) | 2029 | LDA | Aggregate | Aggregate | Diesel | 5037.227479 | 153869.8141 | 3.540913479 | 3540.913479 | | 153869.8141 | | | |
| Los Angeles (SC) | 2029 | LDA | Aggregate | Aggregate | Electricity | 258061.723 | 11758448.9 | 0 | 0 | | 11758448.9 | | | |
| Los Angeles (SC) | 2029 | LDA | Aggregate | Aggregate | Plug-in Hybric | 115602.8153 | 4980481.616 | 82.11745109 | 82117.45109 | | 4980481.616 | | | |
| Los Angeles (SC) | 2029 | LDT1 | Aggregate | Aggregate | Gasoline | 292304.9003 | 10550107.6 | 398.0792994 | 398079.2994 | 399330.9595 | 10550107.6 | 10735232.88 | LDT1 | 26.88 |
| Los Angeles (SC) | 2029 | LDT1 | Aggregate | Aggregate | Diesel | 14.46421411 | 309.6928262 | 0.012304307 | 12.30430661 | | 309.6928262 | | | |
| Los Angeles (SC) | 2029 | LDT1 | Aggregate | Aggregate | Electricity | 2220.315421 | 103349.1765 | 0 | 0 | | 103349.1765 | | | |
| Los Angeles (SC) | 2029 | LDT1 | Aggregate | Aggregate | Plug-in Hybric | 1714.335227 | 81466.41087 | 1.2393557 | 1239.3557 | | 81466.41087 | | | |
| Los Angeles (SC) | 2029 | LDT2 | Aggregate | Aggregate | Gasoline | 1728062.987 | 69581205.83 | 2628.474029 | 2628474.029 | 2654616.664 | 69581205.83 | 72004320.4 | LDT2 | 27.12 |
| Los Angeles (SC) | 2029 | LDT2 | Aggregate | Aggregate | Diesel | 6017.696462 | 248508.7804 | 7.195943389 | 7195.943389 | | 248508.7804 | | | |
| Los Angeles (SC) | 2029 | LDT2 | Aggregate | Aggregate | Electricity | 28943.06465 | 976407.5161 | 0 | 0 | | 976407.5161 | | | |
| Los Angeles (SC) | 2029 | LDT2 | Aggregate | Aggregate | Plug-in Hybric | 26599.16321 | 1198198.276 | 18.94669168 | 18946.69168 | | 1198198.276 | | | |
| Los Angeles (SC) | 2029 | LHDT1 | Aggregate | Aggregate | Gasoline | 122696.9825 | 4844120.989 | 326.4263898 | 326426.3898 | 464470.0774 | 4844120.989 | 8357415.896 | LHD1 | 17.99 |
| Los Angeles (SC) | 2029 | LHDT1 | Aggregate | Aggregate | Diesel | 68150.90355 | 2886068.985 | 138.0436876 | 138043.6876 | | 2886068.985 | | | |
| Los Angeles (SC) | 2029 | LHDT1 | Aggregate | Aggregate | Electricity | 10273.91163 | 627225.9207 | 0 | 0 | | 627225.9207 | | | |
| Los Angeles (SC) | 2029 | LHDT2 | Aggregate | Aggregate | Gasoline | 18284.71133 | 673428.1989 | 52.23891164 | 52238.91164 | 125691.5345 | 673428.1989 | 2136066.894 | LHD2 | 16.99 |
| Los Angeles (SC) | 2029 | LHDT2 | Aggregate | Aggregate | Diesel | 31822.33307 | 1306702.184 | 73.45262283 | 73452.62283 | | 1306702.184 | | | |
| Los Angeles (SC) | 2029 | LHDT2 | Aggregate | Aggregate | Electricity | 2683.24542 | 155936.5107 | 0 | 0 | | 155936.5107 | | | |
| Los Angeles (SC) | 2029 | MCY | Aggregate | Aggregate | Gasoline | 163246.2714 | 1043899.012 | 25.01475547 | 25014.75547 | 25014.75547 | 1043899.012 | 1043899.012 | MCY | 41.73 |
| Los Angeles (SC) | 2029 | MDV | Aggregate | Aggregate | Gasoline | 1000112.432 | 37685775.9 | 1744.138365 | 1744138.365 | 1771876.396 | 37685775.9 | 39795682.33 | MDV | 22.46 |
| Los Angeles (SC) | 2029 | MDV | Aggregate | Aggregate | Diesel | 11514.2932 | 432010.3026 | 16.7253889 | 16725.3889 | | 432010.3026 | | | |
| Los Angeles (SC) | 2029 | MDV | Aggregate | Aggregate | Electricity | 29557.09916 | 992080.5768 | 0 | 0 | | 992080.5768 | | | |
| Los Angeles (SC) | 2029 | MDV | Aggregate | Aggregate | Plug-in Hybric | 16295.37845 | 685815.5521 | 11.01264166 | 11012.64166 | | 685815.5521 | | | |
| Los Angeles (SC) | 2029 | MH | Aggregate | Aggregate | Gasoline | 13474.29589 | 142266.5116 | 29.39787577 | 29397.87577 | 35896.05608 | 142266.5116 | 206915.8702 | MH | 5.76 |
| Los Angeles (SC) | 2029 | MH | Aggregate | Aggregate | Diesel | 6126.94779 | 64649.35855 | 6.498180311 | 6498.180311 | | 64649.35855 | | | |
| Los Angeles (SC) | 2029 | MHDT | Aggregate | Aggregate | Gasoline | 12914.60716 | 689258.5384 | 127.108865 | 127108.865 | 408623.1307 | 689258.5384 | 3470909.641 | MHD | 8.49 |
| Los Angeles (SC) | 2029 | MHDT | Aggregate | Aggregate | Diesel | 62682.7455 | 2508943.582 | 275.6302419 | 275630.2419 | | 2508943.582 | | | |
| Los Angeles (SC) | 2029 | MHDT | Aggregate | Aggregate | Electricity | 4164.421785 | 224646.5129 | 0 | 0 | | 224646.5129 | | | |
| Los Angeles (SC) | 2029 | MHDT | Aggregate | Aggregate | Natural Gas | 1102.159637 | 48061.00717 | 5.88402388 | 5884.02388 | | 48061.00717 | | | |
| Los Angeles (SC) | 2029 | OBUS | Aggregate | Aggregate | Gasoline | 3134.965571 | 110539.5544 | 20.9589551 | 20958.9551 | 46536.73623 | 110539.5544 | 308475.6602 | OBUS | 6.63 |
| Los Angeles (SC) | 2029 | OBUS | Aggregate | Aggregate | Diesel | 2321.111393 | 168013.9305 | 23.1925957 | 23192.5957 | | 168013.9305 | | | |
| Los Angeles (SC) | 2029 | OBUS | Aggregate | Aggregate | Electricity | 117.9269338 | 8178.792039 | 0 | 0 | | 8178.792039 | | | |
| Los Angeles (SC) | 2029 | OBUS | Aggregate | Aggregate | Natural Gas | 391.2316095 | 21743.38319 | 2.385185427 | 2385.185427 | | 21743.38319 | | | |
| Los Angeles (SC) | 2029 | SBUS | Aggregate | Aggregate | Gasoline | 1510.633541 | 65496.37025 | 7.163597903 | 7163.597903 | 20193.12654 | 65496.37025 | 137342.5697 | SBUS | 6.80 |
| Los Angeles (SC) | 2029 | SBUS | Aggregate | Aggregate | Diesel | 1263.556868 | 25014.60118 | 3.358737681 | 3358.737681 | | 25014.60118 | | | |
| Los Angeles (SC) | 2029 | SBUS | Aggregate | Aggregate | Electricity | 168.1253647 | 5330.389439 | 0 | 0 | | 5330.389439 | | | |
| Los Angeles (SC) | 2029 | SBUS | Aggregate | Aggregate | Natural Gas | 1773.755815 | 41501.20886 | 9.670790955 | 9670.790955 | | 41501.20886 | | | |
| Los Angeles (SC) | 2029 | UBUS | Aggregate | Aggregate | Gasoline | 429.7885354 | 30381.3794 | 6.527771424 | 6527.771424 | 115880.0661 | 30381.3794 | 457953.5305 | UBUS | 3.95 |
| Los Angeles (SC) | 2029 | UBUS | Aggregate | Aggregate | Diesel | 0.21774371 | 22.86192822 | 0.00287857 | 2.878570418 | | 22.86192822 | | | |
| Los Angeles (SC) | 2029 | UBUS | Aggregate | Aggregate | Electricity | 691.3763319 | 78376.62483 | 0 | 0 | | 78376.62483 | | | |
| Los Angeles (SC) | 2029 | UBUS | Aggregate | Aggregate | Natural Gas | 3314.398676 | 349172.6643 | 109.3494161 | 109349.4161 | | 349172.6643 | | | |

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2030
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units:  miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption

| Region | endar Y | hicle Categc | Model Year | Speed | Fuel | Population | Total VMT | Fuel Consumption | Fuel_Consumption | Total Fuel | VMT | Total VMT | Vehicle Class | Miles per Gallon |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Los Angeles (SC) | 2030 | HHDT | Aggregate | Aggregate | Gasoline | 19.94994694 | 2049.507874 | 0.44228502 | 442.28502 | 1152295.722 | 2049.507874 | 7892135.489 | HHD | 6.85 |
| Los Angeles (SC) | 2030 | HHDT | Aggregate | Aggregate | Diesel | 58321.1661 | 7155713.629 | 1084.906809 | 1084906.809 | | 7155713.629 | | | |
| Los Angeles (SC) | 2030 | HHDT | Aggregate | Aggregate | Electricity | 2944.130852 | 318047.6552 | 0 | 0 | | 318047.6552 | | | |
| Los Angeles (SC) | 2030 | HHDT | Aggregate | Aggregate | Natural Gas | 6835.860525 | 416324.6973 | 66.94662815 | 66946.62815 | | 416324.6973 | | | |
| Los Angeles (SC) | 2030 | LDA | Aggregate | Aggregate | Gasoline | 3065870.615 | 117929999.6 | 3641.515138 | 3641515.138 | 3726844.261 | 117929999.6 | 135419780.5 | LDA | 36.34 |
| Los Angeles (SC) | 2030 | LDA | Aggregate | Aggregate | Diesel | 4404.535506 | 138048.5679 | 3.117174298 | 3117.174298 | | 138048.5679 | | | |
| Los Angeles (SC) | 2030 | LDA | Aggregate | Aggregate | Electricity | 273853.9912 | 12308601.92 | 0 | 0 | | 12308601.92 | | | |
| Los Angeles (SC) | 2030 | LDA | Aggregate | Aggregate | Plug-in Hybric | 118687.3495 | 5043130.464 | 82.21194808 | 82211.94808 | | 5043130.464 | | | |
| Los Angeles (SC) | 2030 | LDT1 | Aggregate | Aggregate | Gasoline | 288856.689 | 10415644.31 | 386.8093521 | 386809.3521 | 388272.0976 | 10415644.31 | 10635479.74 | LDT1 | 27.39 |
| Los Angeles (SC) | 2030 | LDT1 | Aggregate | Aggregate | Diesel | 5.308215418 | 141.8002095 | 0.00545138 | 5.451380246 | | 141.8002095 | | | |
| Los Angeles (SC) | 2030 | LDT1 | Aggregate | Aggregate | Electricity | 2647.54481 | 123532.2683 | 0 | 0 | | 123532.2683 | | | |
| Los Angeles (SC) | 2030 | LDT1 | Aggregate | Aggregate | Plug-in Hybric | 2050.041853 | 96161.35648 | 1.457294097 | 1457.294097 | | 96161.35648 | | | |
| Los Angeles (SC) | 2030 | LDT2 | Aggregate | Aggregate | Gasoline | 1756014.178 | 70256791.12 | 2612.863974 | 2612863.974 | 2640509.295 | 70256791.12 | 72922154.51 | LDT2 | 27.62 |
| Los Angeles (SC) | 2030 | LDT2 | Aggregate | Aggregate | Diesel | 6176.053471 | 252947.6066 | 7.223190618 | 7223.190618 | | 252947.6066 | | | |
| Los Angeles (SC) | 2030 | LDT2 | Aggregate | Aggregate | Electricity | 33440.8921 | 1111423.869 | 0 | 0 | | 1111423.869 | | | |
| Los Angeles (SC) | 2030 | LDT2 | Aggregate | Aggregate | Plug-in Hybric | 29324.52043 | 1300991.918 | 20.42213072 | 20422.13072 | | 1300991.918 | | | |
| Los Angeles (SC) | 2030 | LHDT1 | Aggregate | Aggregate | Gasoline | 121567.502 | 4762184.081 | 316.9316988 | 316931.6988 | 455513.1962 | 4762184.081 | 8506015.434 | LHD1 | 18.67 |
| Los Angeles (SC) | 2030 | LHDT1 | Aggregate | Aggregate | Diesel | 69687.91575 | 2904638.704 | 138.5814974 | 138581.4974 | | 2904638.704 | | | |
| Los Angeles (SC) | 2030 | LHDT1 | Aggregate | Aggregate | Electricity | 14114.45537 | 839192.6495 | 0 | 0 | | 839192.6495 | | | |
| Los Angeles (SC) | 2030 | LHDT2 | Aggregate | Aggregate | Gasoline | 18044.54269 | 659437.4029 | 50.51001495 | 50510.01495 | 124376.8883 | 659437.4029 | 2187619.064 | LHD2 | 17.59 |
| Los Angeles (SC) | 2030 | LHDT2 | Aggregate | Aggregate | Diesel | 32680.47142 | 1318877.665 | 73.86687337 | 73866.87337 | | 1318877.665 | | | |
| Los Angeles (SC) | 2030 | LHDT2 | Aggregate | Aggregate | Electricity | 3696.826543 | 209303.9957 | 0 | 0 | | 209303.9957 | | | |
| Los Angeles (SC) | 2030 | MCY | Aggregate | Aggregate | Gasoline | 166034.0037 | 1053619.998 | 25.21103297 | 25211.03297 | 25211.03297 | 1053619.998 | 1053619.998 | MCY | 41.79 |
| Los Angeles (SC) | 2030 | MDV | Aggregate | Aggregate | Gasoline | 1011493.824 | 37959421.88 | 1727.681039 | 1727681.039 | 1756021.333 | 37959421.88 | 40239381.18 | MDV | 22.92 |
| Los Angeles (SC) | 2030 | MDV | Aggregate | Aggregate | Diesel | 11580.9928 | 432036.2883 | 16.46763542 | 16467.63542 | | 432036.2883 | | | |
| Los Angeles (SC) | 2030 | MDV | Aggregate | Aggregate | Electricity | 33393.86767 | 1102660.831 | 0 | 0 | | 1102660.831 | | | |
| Los Angeles (SC) | 2030 | MDV | Aggregate | Aggregate | Plug-in Hybric | 17938.01761 | 745262.1882 | 11.8726588 | 11872.6588 | | 745262.1882 | | | |
| Los Angeles (SC) | 2030 | MH | Aggregate | Aggregate | Gasoline | 13280.83654 | 141309.8818 | 29.19592147 | 29195.92147 | 35819.86238 | 141309.8818 | 207188.9521 | MH | 5.78 |
| Los Angeles (SC) | 2030 | MH | Aggregate | Aggregate | Diesel | 6271.699809 | 65879.07026 | 6.623940906 | 6623.940906 | | 65879.07026 | | | |
| Los Angeles (SC) | 2030 | MHDT | Aggregate | Aggregate | Gasoline | 12498.97076 | 660270.4024 | 120.7185364 | 120718.5364 | 396631.9739 | 660270.4024 | 3498600.731 | MHD | 8.82 |
| Los Angeles (SC) | 2030 | MHDT | Aggregate | Aggregate | Diesel | 62375.55283 | 2470045.064 | 269.995238 | 269995.238 | | 2470045.064 | | | |
| Los Angeles (SC) | 2030 | MHDT | Aggregate | Aggregate | Electricity | 5963.170599 | 319969.593 | 0 | 0 | | 319969.593 | | | |
| Los Angeles (SC) | 2030 | MHDT | Aggregate | Aggregate | Natural Gas | 1127.765877 | 48315.67128 | 5.918199528 | 5918.199528 | | 48315.67128 | | | |
| Los Angeles (SC) | 2030 | OBUS | Aggregate | Aggregate | Gasoline | 3017.51154 | 103767.213 | 19.52212356 | 19522.12356 | 44959.32383 | 103767.213 | 305422.4849 | OBUS | 6.79 |
| Los Angeles (SC) | 2030 | OBUS | Aggregate | Aggregate | Diesel | 2338.342558 | 168416.5145 | 23.05359867 | 23053.59867 | | 168416.5145 | | | |
| Los Angeles (SC) | 2030 | OBUS | Aggregate | Aggregate | Electricity | 165.5662826 | 11343.2681 | 0 | 0 | | 11343.2681 | | | |
| Los Angeles (SC) | 2030 | OBUS | Aggregate | Aggregate | Natural Gas | 397.2251135 | 21895.48936 | 2.383601596 | 2383.601596 | | 21895.48936 | | | |
| Los Angeles (SC) | 2030 | SBUS | Aggregate | Aggregate | Gasoline | 1522.748821 | 65771.0434 | 7.170875676 | 7170.875676 | 20027.31828 | 65771.0434 | 138605.9027 | SBUS | 6.92 |
| Los Angeles (SC) | 2030 | SBUS | Aggregate | Aggregate | Diesel | 1182.981915 | 23513.81569 | 3.140853078 | 3140.853078 | | 23513.81569 | | | |
| Los Angeles (SC) | 2030 | SBUS | Aggregate | Aggregate | Electricity | 235.6202857 | 7504.648101 | 0 | 0 | | 7504.648101 | | | |
| Los Angeles (SC) | 2030 | SBUS | Aggregate | Aggregate | Natural Gas | 1811.13212 | 41816.3955 | 9.715589529 | 9715.589529 | | 41816.3955 | | | |
| Los Angeles (SC) | 2030 | UBUS | Aggregate | Aggregate | Gasoline | 424.0146281 | 30262.45025 | 6.491346774 | 6491.346774 | 99083.11902 | 30262.45025 | 458868.6405 | UBUS | 4.63 |
| Los Angeles (SC) | 2030 | UBUS | Aggregate | Aggregate | Diesel | 0.216177208 | 22.79632199 | 0.002875046 | 2.87504553 | | 22.79632199 | | | |
| Los Angeles (SC) | 2030 | UBUS | Aggregate | Aggregate | Electricity | 1139.954457 | 129717.5163 | 0 | 0 | | 129717.5163 | | | |
| Los Angeles (SC) | 2030 | UBUS | Aggregate | Aggregate | Natural Gas | 2880.459868 | 298865.8777 | 92.5888972 | 92588.8972 | | 298865.8777 | | | |

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