

Appendix D

North Site Remainder Area Technical
Report and Energy Technical Report

Energy Technical Report

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EDH COSTCO PROJECT

ENERGY TECHNICAL REPORT

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ACRONYMS AND ABBREVIATIONS

| Acronym | Definition |
|-----------------|---|
| CalEEMod | California Emissions Estimator Model |
| CARB | California Air Resources Board |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| CO ₂ | carbon dioxide |
| DC | direct current |
| EDH | El Dorado Hills |
| EV | electric vehicle |
| GHG | greenhouse gas |
| GWh | gigawatt hours |
| HVAC | heating, ventilation, and air conditioning |
| kWh | kilowatt hours |
| MW | megawatt |
| MWh | megawatt hours |
| PG&E | Pacific Gas and Electric |
| TRU | Transport Refrigeration Unit |
| USEPA | United States Environmental Protection Agency |
| VMT | vehicle miles traveled |

1. INTRODUCTION

Ramboll Americas Engineering Solutions, Inc. (Ramboll) was retained to prepare an Energy Technical Report for the proposed El Dorado Hills (EDH) Costco Project (Project) located north of the Silva Valley Parkway/US 50 interchange in the El Dorado Hills community area of the unincorporated El Dorado County in California. This Energy Technical Report analyzes the energy impacts of the Project's construction and operation activities. In particular, this report describes the existing setting of the Project site, describes the relevant regulatory setting, discusses the methodology used to evaluate energy consumption of the Project, and evaluates potential impacts related to energy that would be affected as a result of implementation of the Project.

1.1 Existing Conditions

The Project site is currently vacant grassland with scattered oak trees and seasonal drainage features. There are no permanent structures on the Project site. The southern edge of the property directly abuts the US 50 right-of-way, while the western boundary is adjacent to Clarksville Crossing. An approximate 7.75-acre portion of the northern site is reserved for a planned future extension of Country Club Drive, which is not part of the proposed Project.

Surrounding land uses include:

- North: Single-family residential uses and Oak Meadow Elementary School
- East: Vacant land, Tong Road, and single-family residential uses
- South: U.S. Highway 50 and Tong Road
- West: Clarksville Crossing roadway, open space, and undeveloped land

1.2 Proposed Project

The 43.26-acre Project site is separated into two components: the North Site of approximately 24.83 acres and the South Site of approximately 18.43 acres. A membership-only Costco fuel facility and employee parking would occupy part of the North Site, while the South Site would accommodate the main Costco warehouse retail building and a partially below-grade parking structure. The majority of the North Site is not proposed to include any development as part of the Project.

1.2.1 North Site

On the North Site, approximately 3.29 acres would be developed with a Costco members-only fuel facility and an employee parking area. The remainder of the North Site would include an approximately 13.79-acre out-parcel that would remain undeveloped at this time (North Site Remainder Area). The Costco Project proposes no development for the North Site Remainder Area. The future extension of Country Club Drive (County Capital Improvement Project No. 36105008), when constructed by the County, would occupy a portion of the North Site near its northern edge, though the future extension is an independent project proposed by, and to be undertaken by, the County and is not analyzed as a part of the project.

The fuel facility would occupy a generally rectangular footprint near Silva Valley Parkway, and the employee parking would be situated immediately west of the canopy, separated by drive aisles and landscaping.

Site Access and Roadway Improvements

Primary access to the North Site would be provided via a new signalized intersection on Silva Valley Parkway, shared with the South Site's main driveway. A secondary right-in/right-out driveway north of that intersection would separate fueling operations from primary traffic flows. Fuel delivery trucks would enter the northern driveway and exit at the signal to allow safe left turns. Sidewalks, bike lanes, and pedestrian connections would be provided along the North Site's frontage, north of the signalized intersection.

Architecture

The proposed fuel facility includes a steel canopy structure of up to 13,000 square feet, covering four fueling bays with four two-sided dispensers each (32 fueling positions total). A small, up to 200-square-foot controller enclosure would house operational equipment. The canopy design features neutral colors with corporate striping to align with Costco's brand, and recessed LED lighting directing illumination downward.

Construction

Construction for the North Site is anticipated to last approximately 11 months once construction begins, which is currently estimated to be July of 2026. Construction would occur 7 days per week, with construction occurring 7:00 a.m. to 7:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on weekends.

Operations

Fuel facility hours would generally be from 5:00 a.m. to 10:00 p.m. The facility is expected to receive approximately four to five fuel truck deliveries per day. These deliveries would be staged in a striped area north of the canopy. Approximately 70 employee parking spaces would serve Costco employees; circulation is designed to keep fuel facility traffic and employee parking separate.

1.2.2 South Site

The South Site would include up to approximately 165,000 square feet of building area planned to be constructed as a Costco Wholesale Member Warehouse retail store. Within the store, Costco would offer, among other product and services, optical exams and optical sales, hearing aid testing and sales, food service preparation and sales, meat preparation and sales, bakery and sales of baked goods, alcohol sales, and tire sales and installation. Temporary outdoor sales may occur within the portion of the parking area adjacent to the warehouse retail building for seasonal sales, such as Christmas tree sales during the months of November and December. The warehouse retail building is proposed to include one customer entrance to the main Costco store, which would be located at the northwest corner of the building. The tire center would have bay doors accessible from outside of the warehouse retail building, though the tire center sales area would be accessible through the building. A promotional vehicle may be on display near the customer entrance to the building. This vehicle would be used to promote online or offsite vehicle sales; no vehicles are proposed to be sold onsite. The South Site would also include a parking structure and surface parking, which are further described below. Development on the South Site would exclude the 1.38-acre area located west of Clarksville Crossing where no development is proposed.

The South Site has been designed to use the existing slope of the site by locating the Costco warehouse retail building in the southeast corner of the site, where the elevation of existing streets adjacent to the site are the highest. Parking would be provided in two at-grade parking lots and one subterranean (below-grade) parking lot structure beneath one of the at-grade lots. Vehicle access to this lower-level parking structure would be provided by a ramp on the north side of the structure from Clarksville Crossing and a ramp on the south side of the structure from the above at-grade parking lot. The below-grade parking structure would include approximately 200 to 230 spaces. A pedestrian ramp and elevators would provide pedestrian access from the below-grade level up to the at-grade parking and entry to the warehouse retail building. The below-grade parking structure and at-grade parking lots together would include approximately 750 to 780 spaces in total parking to serve the South Site.

Site Access and Roadway Improvements

The primary entrance to the South Site would be from the new signalized intersection with Silva Valley Parkway (shared with the North Site). Northbound traffic on Silva Valley Parkway would have a left-turn pocket into Clarksville Crossing, and three driveways off Clarksville Crossing would provide direct access to the South Site. A partial traffic signal would be installed at the intersection of Silva Valley Parkway and Clarksville Crossing. In the future, when Country Club Drive is extended by the County, Clarksville Crossing's connection to Silva Valley Parkway and the traffic signal would be removed. A public access road would be developed on the South Site within the remainder parcel that was taken by the County in connection with the development of Tong Road. A maintenance agreement between the County and Costco would be created to address the maintenance of the new public access road.

Delivery truck access would be allowed at all driveway locations depending on the size of the delivery truck and direction of travel for both the North Site and South Site. Most trucks delivering to the warehouse retail building would access the site at the southwest driveway on Clarksville Crossing near the receiving docks.

Architecture

The warehouse retail building design for the South Site is proposed to be contemporary and would include a variety of massing and appropriate materials for the building. By combining concrete masonry block and architectural metal panels, Costco intends to create a scale and architectural interest to minimize the visual impact of a large retail warehouse retail building. By use of design techniques such as the location of building materials, landscaping, and the incorporation of varying parapet cap heights, Costco proposes to break the long elevations both horizontally and vertically at the appropriate height to conceal roof top mounted mechanical equipment. The proposed colors are warm natural earth tones, which would relate to the proposed surrounding development by utilizing similar building materials and architectural detailing. The tire center would be integrated into the main building, with exterior bay doors and interior retail access for sales and service. Pedestrian entries (main and employee) would be oriented to the northwest for customer convenience and the tire center from the other warehouse retail building operational areas.

The South Site truck loading dock is proposed to be located at the southwest corner of the building adjacent to US 50. The bay doors would be equipped with sealed gaskets to limit noise impacts. A smaller on-grade door would also be located on the south side of the

building. This door is to receive bread deliveries and small delivery vans/trucks. A transformer and two trash compactors would also be located along the south edge of the building proposed for the South Site. Landscape material would provide screening of this area

Parking, Circulation, and Loading

Two at-grade lots and one below-grade lot together provide approximately 750 to 780 parking stalls. Access to the South Site would consist of a signalized intersection on Silva Valley Parkway, as well as driveways provided along Clarksville Road. These driveways would provide customer access to both at-grade and below-grade parking stalls. Delivery trucks would access sealed loading docks at the building's southwest corner.

Construction

As with the North Site, construction for the South Site is anticipated to last approximately 11 months once construction begins, which is currently estimated to be July of 2026. Construction would occur 7 days per week, with construction occurring 7:00 a.m. to 7:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on weekends. In addition to these construction hours, it is anticipated that there would be up to 8 days of nighttime construction activities involving concrete pours for the building foundation.

Operations

The warehouse retail building is proposed to include one member entrance to the main Costco store, which would be located at the northwest corner. The EDH Costco is expected to include, among other features, a bakery and sales of baked goods, meat preparation and sales, alcohol sales, food service preparation and sales, pharmacy, optical center with optical exams and retail optical sales, hearing aid testing center, and food court, along with the sales of approximately 4,000 products. The warehouse retail building would include a five-bay tire center with member access via the inside of the main Costco building, which would include tire sales and a tire installation facility.

It is anticipated that the EDH Costco Project (warehouse retail building and fuel facility) would employ approximately 250 to 300 employees combined. The warehouse retail building would in general be open from 9:00 a.m. to 8:30 p.m. on weekdays and 9:00 a.m. to 7:00 p.m. on weekends. Costco anticipates an average of about 10 to 12 trucks delivering goods per day. The trucks range in size from 26 feet long for single-axle trailers to 70 feet long for double-axle trailers. Receiving time would be from 2:00 a.m. to 1:00 p.m., averaging 2 to 3 trucks per hour, with most of the deliveries completed before 10:00 a.m. Deliveries to the warehouse retail building are made primarily in Costco trucks from its freight consolidation facility in Tracy, California, coming to the site from eastbound US 50. Truck travel routes would use Silva Valley Parkway (from US 50 to Clarksville Road), Clarksville Road (from White Rock Road to Silva Valley Parkway), future Country Club Drive extension west of the South Site to access Clarksville Road, and White Rock Road (from Clarksville Road to US 50).

The tire center receives shipments of tires once or twice a week, with old tires transported offsite for recycling. Seasonal outdoor sales of items such as Christmas trees may occur in the parking area. In addition, promotional vehicle displays may appear outside, but no on-site vehicle sales would occur.

Energy Efficiency Features

As noted above, the South Site would obtain electrical and natural gas services from Pacific Gas & Electric (PG&E). The development would comply with energy efficiency standards under California Code of Regulations Title 24. Additional energy efficiency and sustainability measures incorporated into the Costco Project are noted below.

- Parking lot light standards would be designed in order to provide even light distribution, and utilize less energy compared to a greater number of fixtures at lower heights. The use of LED lamps can provide a higher level of perceived brightness with less energy than other lamps such as high-pressure sodium.
- New and renewable building materials would typically be extracted and manufactured within the region. When masonry and concrete are used, the materials purchased would be local to the Project, minimizing the transportation distances and impact to local road networks.
- The use of pre-manufactured building components, including structural framing and metal panels, would help to minimize waste during construction.
- Pre-manufactured metal wall panels with insulation carry a higher R-Value and greater solar reflectivity to help conserve energy as compared to other materials. Building heat absorption would be further reduced by a decrease in the thermal mass of the metal wall when compared to a typical masonry block wall.
- A substantial amount of the proposed landscaping material for the North Site and South Site is climate adapted to the region and would use less water than other common landscape species.
- The irrigation system proposes to include the use of deep root watering bubblers for parking lot trees to minimize usage and ensure that water goes directly to the intended planting areas.
- Storm water management plans are designed to maintain water quality, minimize erosion, and manage storm water discharge rates based on the County requirements.
- High-efficiency restroom fixtures would be installed.
- Commissioning of mechanical systems would occur to ensure that the heating, ventilation, and air conditioning (HVAC) systems are performing as designed. HVAC comfort systems would be controlled by a computerized building management system to maximize efficiency.
- HVAC units planned for the South Site are high-efficiency direct ducted units, which have phased out the use of hydrochlorofluorocarbons completely.
- Parking lot and exterior lights would be controlled by a photo sensor and time clock.
- 10 electric vehicle (EV) chargers with direct current (DC) fast chargers would be installed.
- Lighting would be controlled by the overall Project energy management system.
- Energy efficient Transformers (i.e., Square D Type EE transformers) would be used.
- Variable speed motors would be used on make-up air units and booster pumps.

- Gas water heaters would be direct vent and 94 percent efficient or greater.
- Reclaim tanks would be used to capture heat released by refrigeration equipment to heat domestic water in lieu of venting heat to the outside.
- The building structure would be a pre-engineered system that uses 100 percent recycled steel materials and would be designed to minimize the amount of material used.
- Construction waste would be recycled whenever possible.
- Floor sealant would be No-volatile organic compound and would represent over 80 percent of the floor area.
- Carbon dioxide (CO₂) would be monitored throughout the warehouse.
- Extensive recycling/reuse program would be implemented including tires, cardboard, grease, plastics, and electronic waste.
- Use of plastic shopping bags would be avoided.
- Suppliers would be required to reduce packaging and consider alternative packaging solutions.
- Distribution facilities would be strategically located to minimize miles traveled for delivery.
- Deliveries would be made in full trucks.
- All Costco trucks would be equipped with an engine idle shut off timers.
- 100 percent renewable electrical power will be supplied by PG&E, as Costco has a Clean Energy Contract with PG&E.

2. ENERGY ENVIRONMENTAL OVERVIEW

2.1 Energy Production and Distribution

Among the states, California ranks eighth in the nation in production of crude oil, fifteenth in production of natural gas, second in generation of conventional hydroelectric power, second in the production of electricity from biomass, and first in the production of electricity from geothermal and solar energy.¹ California produces approximately 10% of the natural gas used in the State and imports approximately 90% from Canada, the Southwest, and the Rocky Mountains region of the United States.² Approximately two-thirds of the crude oil refined in California is from foreign countries, including Iraq, Brazil, Guyana, and Ecuador.³ Additional crude oil is imported from Alaska.⁴ One-fifth to one-third of California's electricity supply is from outside the state.⁵

Electricity Supply

The production of electricity requires the combustion, consumption, or conversion of other energy resources, including water, wind, oil, natural gas, coal, solar, geothermal, and nuclear. Of the electricity that was generated within the State in 2024, 40% was generated by natural gas-fired power plants, 23.4% by solar, 13.5% by hydroelectric, 8.5% by nuclear power plants, 7.3% by wind, 4.8% by geothermal, 2.2% by biomass, and a remaining 0.3% by other sources.⁶

For the El Dorado County area, PG&E is the primary supplier of electricity to businesses and residents of the area. PG&E's 70,000-square-mile service area covers central and Northern California. In 2024, approximately 23% of PG&E's electricity provided to its customers came from renewable sources and about 98% came from greenhouse gas (GHG)-free resources.⁷

Transportation Fuels Supply

Most petroleum fuel refined in California is for use in on-road motor vehicles and is refined within California to meet state-specific formulations required by the California Air Resources Board (CARB). The major categories of petroleum fuels are gasoline and diesel for passenger vehicles, transit, and rail vehicles and fuel oil for industry and emergency electrical power generation. Other liquid fuels include kerosene, jet fuel, and residual fuel oil for marine vessels.

¹ U.S. Energy Information Administration (EIA). 2025. California State Profile and Energy Estimates: Profile Overview. June 20. Available at: <http://www.eia.gov/state/?sid=CA>. Accessed: October 2025.

² Ibid.

³ Ibid.

⁴ Ibid.

⁵ Ibid.

⁶ California Energy Commission. 2024. 2024 Total System Electric Generation in Gigawatt Hours. Available at: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2024-total-system-electric-generation>. Accessed: October 2025.

⁷ Pacific Gas and Electric (PG&E). 2025. 2025 Corporate Sustainability Report: Executive Summary. Available at: https://www.pgecorp.com/assets/pgecorp/csr/csr_2025/assets/PGE-CSR-2025-Executive-Summary.pdf. Accessed: October 2025.

California's oil fields make it the eight-largest petroleum-producing state in the United States, after Texas, New Mexico, North Dakota, Colorado, Alaska, Oklahoma, and Wyoming.⁸ Crude oil is transported within California through a network of pipelines that carry it from both onshore and offshore oil wells to the refineries that are located in the San Francisco Bay Area, the Los Angeles area, and the Central Valley. Currently, 13 petroleum refineries operate in California, processing approximately 1.6 million barrels per day of crude oil.⁹

Other transportation fuel sources are alternative fuels, such as methanol and denatured ethanol (alcohol mixtures that contain no less than 70% alcohol), natural gas (compressed or liquefied), liquefied petroleum gas, hydrogen, and fuels derived from biological materials (i.e., biomass).

2.2 Energy Consumption

Electricity Consumption

Californians consumed 282,783 gigawatt hours (GWh) of electricity in 2024.^{10,11} Of this total, El Dorado County consumed 1,339 GWh.¹²

Transportation Sector Fuels Consumption

The transportation sector is a major end use of energy in California, accounting for approximately 44.5% of total state-wide energy consumption in 2023, the most recent year for which data is available.¹³ In addition, there is energy consumption associated with construction and maintenance of transportation infrastructure, such as streets, highways, freeways, rail lines, and airport runways.

⁸ U.S. EIA. 2025. Rankings: Crude Oil Projection, May 2025 (thousand barrels per day). Available at: <https://www.eia.gov/state/rankings/?sid=CA#series/46>. Accessed: October 2025.

⁹ U.S. EIA. 2024. Petroleum & Other Liquids. Number and Capacity of Petroleum Refineries. June 20. Available at: https://www.eia.gov/dnav/pet/PET_PNP_CAP1_DCU_SCA_A.htm. Accessed: October 2025.

¹⁰ A watt hour is a unit of energy equivalent to one watt of power expended for one hour. For example, a typical light bulb is 60 watts, meaning that if it is left on for one hour, 60-watt hours have been used. One kilowatt equals 1,000 watts. The consumption of electrical energy by homes and businesses is usually measured in kilowatt hours (kWh). Some large businesses and institutions also use megawatt hours (MWh), where one MWh equals 1,000 kWh. One gigawatt equals one thousand (1,000) megawatts, or one million (1,000,000) kilowatts. The energy output of large power plants over long periods of time, or the energy consumption of jurisdictions, can be expressed in GWh.

¹¹ Electricity data for El Dorado County and the State of California in 2024 are obtained from the California Energy Commission, Energy Consumption Data Files. Available at: <https://www.energy.ca.gov/files/energy-consumption-data-files>. Accessed: October 2025.

¹² Ibid.

¹³ U.S. Energy Information Administration. 2025. California State Profile and Energy Estimates: California Energy Consumption by End-Use Sector, 2023. Available at: <http://www.eia.gov/state/?sid=CA#tabs-2>. Accessed: October 2025.

3. SIGNIFICANCE THRESHOLDS

The analysis provided in this report evaluates whether the Project's energy impacts would be potentially significant. The significance of the Project's energy is assessed relative to the following questions from Section VI, Energy, of Appendix G of the California Environmental Quality Act (CEQA) Guidelines as stated below.

Threshold 1. Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Threshold 2. Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

While no quantitative thresholds related to energy are included in the CEQA Guidelines, Part I of Appendix F of the CEQA Guidelines states as follows:

"The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:

1. decreasing overall per capita energy consumption;
2. decreasing reliance on fossil fuels such as coal, natural gas and oil; and
3. increasing reliance on renewable energy resources."

Appendix F of the CEQA Guidelines states that an Environmental Impact Report should include a discussion of the potential energy impacts of a project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

For purposes of this analysis, impacts to energy resources will be considered to be significant if the project would result in the wasteful, inefficient or unnecessary consumption of fuel or energy, and conversely if the project would not incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation or other project features.

To determine whether a project would result in the wasteful, inefficient or unnecessary consumption of fuel or energy, and conversely whether the project would fail to incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation or other project features, Appendix F of the CEQA Guidelines identifies six categories of potential energy-related environmental impacts:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate the energy intensiveness of materials may be discussed.
2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

This report, relative to Threshold 1, assesses the Project's electricity, natural gas, and fossil fuel consumption during construction and operation by way of the six questions above. This report, relative to Threshold 2, evaluates whether the Project would conflict with applicable plans related to renewable energy and energy efficiency (see **Appendix A**, Project Evaluation Against State and Local Plans).

4. METHODOLOGY FOR DEVELOPMENT OF ENERGY PROJECTIONS

This section describes the methodology that Ramboll used to estimate energy consumption associated with the proposed Project, which includes one-time demand from construction and annual operational demand. This section also summarizes the proposed Project's energy consumption based on compliance with applicable regulatory requirements.

Additional information regarding methodology can be found in the Greenhouse Gas Technical Report for the proposed Project;¹⁴ only the methodology specific to energy usage is discussed in this report. California Emissions Estimator Model (CalEEMod) outputs can be found in the appendices of the GHG Technical Report for the proposed Project.

4.1 Construction Equipment & Activities

Project construction is planned to begin in July 2026 and would continue for 11 months.¹⁵ Note, two scenarios are considered for the construction of the proposed Project that have different material movement amounts in the grading phase. Scenario 1 assumes that the excavated material from portions of the Project site will be used as fill during grading. Scenario 2 conservatively assumes that all the excavated material will be exported offsite and soil will be imported for fill during grading.

Construction of the proposed Project requires the use of transportation fuel, including gasoline, and diesel use in construction equipment, material transport and delivery via vendor/hauling trucks, and construction worker vehicles. Fuel consumed by off-road construction equipment would be the primary energy resource expended over the course of construction, while vehicle miles traveled (VMT) associated with the transportation of construction materials and construction worker commutes would also result in fuel consumption. All off-road construction equipment associated with construction activities would use diesel fuel except for signal boards. Construction workers would travel to and from the Project site throughout the duration of construction; this analysis assumed that construction workers would primarily use gasoline-powered passenger vehicles.

Off-road construction equipment of various types would be used during each phase of construction.

Methodology consistent with CalEEMod was used to estimate construction equipment usage, and results are included in the appendices to the GHG Technical Report for the proposed Project. Fuel consumption from off-road construction equipment were estimated by converting the exhaust CO₂ emissions from these equipment in each construction phase to gallons of diesel fuel using United States Environmental Protection Agency's (USEPA's) CO₂ emission factor for diesel engines.¹⁶ While the Project has committed to a construction mitigation measure to mitigate the significant impact of the maximum estimated cancer

¹⁴ Ramboll. 2025. EDH Costco Project Greenhouse Gas Technical Report.

¹⁵ Refer to Section 4.2 of the Greenhouse Gas Technical Report for further details on the construction schedule and activity.

¹⁶ USEPA. 2025. GHG Emission Factors Hub. Available at: <https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>. Accessed: October 2025.

risk,¹⁷ this mitigation measure does not impact greenhouse gas emissions or the fuel consumption of the construction equipment. The estimated diesel fuel usage from off-road construction equipment for construction Scenario 1 and Scenario 2 are shown in **Table 4-1** and **Table 4-2** respectively.

Fuel consumption from worker, vendor, concrete truck, and hauling trips are estimated by multiplying the trip rate by the trip length to obtain total VMT for each trip type, and then applying the average fuel consumption rate for vehicles used for each trip type to this VMT. Consistent with CalEEMod defaults, worker vehicles are assumed to include light-duty automobiles and trucks, vendor vehicles are assumed to include an equal mix of medium-heavy-duty trucks and heavy-heavy-duty trucks, and hauling vehicles are assumed to include heavy-heavy-duty trucks. Concrete trucks are assumed to be heavy-heavy duty trucks. Estimated on-road fuel usage for construction Scenario 1 and Scenario 2 are shown in **Table 4-3** and **Table 4-4** respectively.

4.2 Operational Energy Requirements

Energy requirements are evaluated for the first year of the proposed Project operations, which would be 2027. The proposed Project's energy consumption was estimated using CalEEMod default methodologies for non-mobile sources, including building energy use, which is assumed to include both natural gas and electricity consumption.

4.2.1 Electricity

Operation of the proposed Project will result in electricity demand for the warehouse, gasoline dispensing facility, parking lot, and on-site EV chargers. The annual electricity usage for each land use is presented in **Table 4-5**. The total electricity use for the Project incorporates 2019 Title 24 standards. Please note that the proposed Project would meet or exceed the Title 24 energy efficiency standards in effect at the time of building permit application, therefore it is conservative to use the 2019 Title 24 standards because newer requirements will be more stringent, leading to greater energy reductions. Additionally, the proposed Project will also meet the California Green Building Code requirements which includes a number of green building practices to reduce energy use. Additionally, the Costco Project will be powered by 100% renewable energy, as Costco has a Clean Energy Contract with PG&E. For additional details on how the electricity consumption for the proposed Project was estimated, refer to Sections 4.3.4 and 4.3.9 of the GHG Technical Report.

4.2.2 Natural Gas

Based on CalEEMod default methodologies, operation of the proposed Project will result in natural gas demand for the warehouse. The CalEEMod default annual natural gas usage for the warehouse is presented in **Table 4-6**.

4.2.3 Mobile Source Fuel Usage

Gasoline, diesel, and electricity consumption for all mobile sources associated with the proposed Project operation are shown in **Table 4-7**, **Table 4-8**, and **Table 4-9** respectively. The following mobile sources are associated with the proposed Project operation: passenger vehicle trips visiting the proposed gasoline dispensing facility and warehouse including employee vehicles, fuel delivery trucks, warehouse and tire center delivery trucks, and Transport Refrigeration Units (TRUs) that are mounted on the trailers of some warehouse

¹⁷ Refer to Section 6 of the EDH Costco Project Air Quality Technical Report for further details on Mitigation Measure 3.2-4a: Apply Tier 4 Emission Standards to Diesel-Powered Off-Road Equipment.

delivery trucks. Refer to Section 4.3.2 of the GHG Technical Report of the proposed Project for a description of the methodology used to develop activity data for these mobile sources.¹⁸ On-road vehicle fuel consumption for the proposed Project operation is calculated by dividing the VMT by each vehicle type with the respective average fuel efficiency of these vehicle types operating in El Dorado-Mountain County in calendar year 2027. TRU fuel consumption is calculated based on the hours of TRU operation and the average fuel consumption rate of TRU trailers operating in El Dorado County in calendar year 2027.

4.2.4 Landscape Equipment Fuel Usage

The proposed Project will result in gasoline usage from landscape equipment used on-site during Project operation. As shown in **Table 4-10**, the proposed Project's landscape equipment fuel consumption was estimated by converting the CO₂ emissions from these equipment to gallons of gasoline using USEPA's CO₂ emission factor for gasoline engines.¹⁹

4.2.5 Stationary Source Fuel Usage

The proposed Project includes two diesel-powered emergency generators, each rated at 250 horsepower, to support warehouse operations. Testing and maintenance of each generator is not expected to exceed 50 hours per year or 1 hour on any given day. As shown in **Table 4-11**, the proposed Project's emergency generator fuel consumption was estimated by converting the exhaust CO₂ emissions from these emergency generators to gallons of diesel using USEPA's CO₂ emission factor for diesel engines.²⁰

¹⁸ As noted in Section 4.3.2 of the GHG Technical Report, this analysis is not affected by Public Laws 119-15 and 119-16 which disapprove the Clean Air Act waivers granted by USEPA for the Advanced Clean Trucks and Advanced Clean Cars II regulations and the fuel consumption reductions associated with these regulations are not included in this analysis.

¹⁹ USEPA. 2025. GHG Emission Factors Hub. Available at: <https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>. Accessed: October 2025.

²⁰ Ibid.

5. PROJECT INVENTORY IN CONTEXT

This section discusses the assessment of the proposed Project's energy demand against the CEQA significance thresholds outlined in **Section 3**.

5.1 Threshold 1

Would the Project Result in a Potentially Significant Environmental Impact Due to Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources, During Project Construction or Operation?

5.1.1 Energy Requirements and Energy Use Efficiencies

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate the energy intensiveness of materials may be discussed.

5.1.1.1 Construction

Construction of the proposed Project would result in fuel usage as shown in **Table 5-1** and **Table 5-2**. 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).

5.1.1.2 Operations

Operation of the proposed Project would result in electricity, gasoline, natural gas, and diesel fuel usage, as shown in **Table 5-3**. There are no unusual project characteristics that would require electricity, gasoline, natural gas, and diesel consumption 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).

Over the lifetime of the proposed Project, the fuel efficiency of the vehicles being used for Project operation is expected to improve. The amount of fuel consumption from vehicular trips to and from the Project site during operation would correspondingly decrease over time as vehicles become more efficient. Numerous regulations have been adopted that encourage, and require, increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles that combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emissions vehicles in California. As such, operation of the proposed Project is expected to use decreasing amounts of fuel over time, due to advances in fuel economy.

5.1.2 Local and Regional Energy Supplies

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The effects of the project on local and regional energy supplies and on requirements for additional capacity.

5.1.2.1 Construction

The proposed Project's fuel consumption during construction is discussed in **Section 4.1**. The off-road construction equipment used during Project construction are primarily diesel-fueled (**Table 4-1** and **Table 4-2**), with the exception of signal boards that would be powered by electricity. Additionally, the fleet mix for construction mobile sources is expected to be gasoline-powered and diesel-powered, based on the CalEEMod default fleet mix for worker, vendor, and hauling vehicles (see **Table 4-3** and **Table 4-4** for additional details). Hence, the Project is not expected to use any natural gas during construction.

Countywide, the proposed Project construction in 2026 would use up to 0.02% of gasoline, 1.1% of diesel, and 0.00001% of electricity fuel. For 2027, it would use up to 0.014% of gasoline, 0.40% of diesel, and 0.000004% of electricity fuel during construction (**Table 5-1** and **Table 5-2**).

Compared to state-wide annual usage projections, the proposed Project construction would use up to 0.000078% of gasoline, 0.0037% of diesel, and 0.00000003% of electricity fuel in 2026. For 2027, it would use up to 0.000067% of gasoline, 0.0013% of diesel, and 0.00000002% of electricity fuel (**Table 5-1** and **Table 5-2**).

Therefore, fuel use during construction would be temporary and negligible. Fuel consumption was estimated using CalEEMod, which utilizes EMFAC2021 for on-road mobile source emissions, and OFFROAD2021 for off-road mobile source emissions for El Dorado County.

5.1.2.2 Operations

Electricity

The Project's electricity demand during operation is discussed in **Section 4.2.1** and **Section 4.2.3**. For comparison, based on 2024 consumption, operation of the proposed Project would equate to 0.45% of the total electricity demand countywide and 0.00213% of the total electricity demand state-wide (**Table 5-3**). Therefore, the Project is not expected to have an impact on the local utility.

In 2024, total in-state electricity consumption was 282,783 GWh.²¹ The California Energy Commission (CEC) estimates that state-wide energy demand will increase to 395,870 GWh in 2040.²² The proposed Project's anticipated electricity usage of 6,026,405 kilowatt hours (kWh)/year is 0.00213% of the state-wide demand in 2024.²³ Given that the State is growing annually, the anticipated state-wide energy demand for the proposed Project's

²¹ Electricity data for the El Dorado County and the State of California in 2024 are obtained from the California Energy Commission, Energy Consumption Data Files. Available at: <https://www.energy.ca.gov/files/energy-consumption-data-files>. Accessed: October 2025.

²² California Energy Commission. 2024. CEDU 2024 Baseline Forecast – Total State. Available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=260931>. Accessed: October 2025.

²³ Electricity data for the El Dorado County and the State of California in 2024 are obtained from the California Energy Commission, Energy Consumption Data Files. Available at: <https://www.energy.ca.gov/files/energy-consumption-data-files>. Accessed: October 2025.

operational buildout year of 2027 will likely be greater than that in 2022, and thus the proposed Project's relative percentage contribution to the state-wide energy demand would be even less.

The proposed Project's electricity use projections also represent a small percentage of regional estimates for PG&E. The CEC estimates that PG&E energy demand will increase to about 117,758 GWh in 2027.²⁴ The proposed Project's anticipated electricity usage of 6,026,405 kWh/year is approximately 0.005% of the projected PG&E planning area demand in 2027.

Overall, the proposed Project's projected electricity demand is consistent with, and a small percentage of, State and regional projections. Therefore, the Project will not require additional generation capacity beyond the general state-wide expansion.

Natural Gas Usage

As described in **Section 4.2.2**, the only natural gas consumption during Project operation is from the warehouse operation, which is approximately 1,423,224 kilo-British thermal units per year. For comparison, based on 2024 consumption, operation of the proposed Project would equate to 0.045% of the total natural gas consumption countywide and 0.00013% of the total natural gas consumption state-wide (**Table 5-3**).²⁵

Gasoline Usage

The proposed Project's gasoline usage during operation is discussed in **Section 4.2.3** and **Section 4.2.4**. The proposed Project is expected to result in approximately 285,366 gallons of gasoline consumption per year, which is 0.44% of the countywide consumption and 0.0021% of the state-wide consumption in 2027 (**Table 5-3**).

Diesel Usage

The proposed Project's diesel usage during operation is discussed in **Section 4.2.3** and **Section 4.2.5**. Project operational diesel consumption is approximately 169,371 gallons/year, which is 1.19% of the total diesel that would be used countywide and 0.0039% of the total diesel that would be use state-wide in 2027 (**Table 5-3**).

5.1.2.3 Summary

The proposed Project will not have a substantial impact on the local or regional energy supplies or require additional capacity to be constructed. Hence, the proposed Project's energy impacts on energy supplies and capacity are less than significant.

5.1.3 Peak and Base Period Demands

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The effects of the project on peak and base period demands for electricity and other forms of energy.

²⁴ California Energy Commission. 2024. CEDU 2024 Baseline Forecast - PGE. Available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=260927>. Accessed: October 2025.

²⁵ Electricity data for the El Dorado County and the State of California in 2024 are obtained from the California Energy Commission, Energy Consumption Data Files. Available at: <https://www.energy.ca.gov/files/energy-consumption-data-files>. Accessed: October 2025.

5.1.3.1 Construction

The Project does not include any electric-powered equipment, hence, there is no electricity use during project construction.

5.1.3.2 Operation

The proposed Project operation will not have a substantial impact on the peak and base period demands for electricity or other forms of energy. The proposed Project's base energy consumption compared to regional and state-wide energy consumption is discussed above in **Section 5.1.2**. Further details and reasoning on the peak demand are described below.

In 2023, California's peak grid demand was 48,323 megawatts (MW).²⁶ PG&E recorded a peak demand of 19,995 MW in 2023.²⁷ In comparison, the Project's maximum demand is expected to be approximately 1.5 MW in 2027.²⁸ Thus, the proposed Project will have a relatively negligible effect on state-wide and PG&E peak demands.

5.1.3.3 Summary

As described above, the Project will not have a substantial impact on peak and base period demands for electricity and other forms of energy. Hence, the proposed Project's impacts are less than significant.

5.1.4 Existing Energy Standards

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The degree to which the project complies with existing energy standards.

5.1.4.1 Construction

Project construction requires use of on-road trucks for soil hauling and deliveries, and off-road equipment such as excavators, tractors/loaders/backhoes, forklifts, and graders. The construction activities would comply with the five-minute idling limit in the Commercial Motor Vehicle Idling Regulation²⁹ and the Off-Road Regulation.³⁰ Additionally, on-road trucks used during Project construction would be compliant with the requirements of the Tractor-Trailer Greenhouse Gas Regulation.³¹

²⁶ California ISO. California ISO Peak Load History 1998 through 2024. Available at: <https://www.caiso.com/documents/californiaisopeakloadhistory.pdf>. Accessed: October 2025.

²⁷ California Energy Commission. 2023. Electricity and Gas Demand Forecast. Available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=253660&DocumentContentId=88907>. Accessed: October 2025.

²⁸ This is a conservative estimate since it was derived by dividing the total electricity energy required for Project operation by the annual operating hours for the proposed Costco warehouse, though some sources of electricity would operate 24 hours per day for every day of the year.

²⁹ 13 CCR 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Available at: <https://www.law.cornell.edu/regulations/california/13-CCR-2485>. Accessed: October 2025.

³⁰ CARB. Frequently Asked Questions: Regulation for In-Use Off-Road Diesel-Fueled Fleets. Available at: <https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/idlepolicyfaq.pdf>. Accessed: October 2025.

³¹ CARB. Tractor-Trailer Greenhouse Gas Regulation. Available at: <https://ww2.arb.ca.gov/our-work/programs/ttghg-regulation/regulatory-and-guidance-documents>. Accessed: October 2025.

5.1.4.2 Operation

The proposed Project's anticipated operational energy use is discussed in **Section 4.2**. There are no unusual project characteristics that would require the use of gasoline, diesel, natural gas, or electricity that would be more energy intensive than is used for comparable activities, equipment, or vehicles that would not conform to current emissions standards (and related fuel efficiencies). Additionally, the proposed Project would meet or exceed the Title 24 energy efficiency standards in effect at the time of building permit application. The proposed Project will include pre-manufactured metal wall panels with insulation which carry a higher R-Value and greater solar reflectivity to help conserve energy as compared to other materials. Building heat absorption is further reduced by a decrease in the thermal mass of the metal wall when compared to a typical masonry block wall. These features align with the El Dorado County General Plan Policy 5.6.2.2. The proposed Project will also incorporate energy conserving landscaping plans, in accordance with the El Dorado County General Plan Policy 5.6.2.1. This includes an irrigation system that uses drip rings to efficiently water the rootball while minimizing water usage and ensuring that water goes directly to the intended planting areas. A substantial amount of the proposed plant material are climate adapted to the region and would use less water than other common landscaping species. Furthermore, the proposed Project will be located in a central location and will serve local customers efficiently, which would result in less transportation energy consumption compared to warehouse locations further away from the populations they serve. Any passenger vehicles and trucks trips generated by the proposed Project would comply with existing and new state-wide vehicle efficiency regulations, such as the Advanced Clean Cars II regulation, discussed further in **Section 5.1.6**. Furthermore, the proposed delivery trucks accessing the site would comply with the State's Commercial Motor Vehicle Idling Regulation, similar to the construction vehicles discussed above. Additional detail on the proposed Project's compliance with existing State and local energy standards and policies is provided in **Appendix A**.

5.1.4.3 Summary

As described above, the proposed Project will comply with all applicable energy standards and its impacts are less than significant.

5.1.5 Energy Resources

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The effects of the project on energy resources.

The proposed Project's energy use is discussed in **Section 4** above, including electricity, gasoline, natural gas, and diesel consumption associated with on-site equipment, mobile operations, and construction activities. The proposed Project's use of energy will not have a substantial effect on state-wide or regional energy resources. Total operational energy use requirements for the proposed Project are summarized in **Table 5-3**. Programs and measures relevant to energy resources are discussed in detail above.

The proposed Project will not significantly impact energy resources and its impacts are less than significant.

5.1.6 Transportation Energy Use

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Conventional gasoline and diesel vehicles consume gasoline or diesel fuel, whereas EVs consume electricity that can be sourced by fossil fuels or renewables. EVs, including battery-electric vehicles and plug-in hybrid electric vehicles, comprise a growing fraction of the passenger vehicles on the roads in California. EV adoption is expected to increase over the upcoming decades due in part to improvements in battery technology and public initiatives and goals. This increase in EV adoption will decrease the fuel requirements due to transportation.

Gasoline and diesel fuel usage for the Project is expected to decrease over time as fleets become more fuel-efficient and switch to more electric-powered vehicles.

5.1.7 Summary

Based on the above analysis of each of the environmental impact factors identified in CEQA Guidelines Appendix F, the potential for the proposed Project to result in wasteful, inefficient, or unnecessary consumption of fuel or energy, and conversely to fail to incorporate energy efficiency measures into equipment use, transportation or other project features is less than significant.

5.2 Threshold 2

Would the Project Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency?

The proposed Project would comply with any applicable local and State plans, regulations, and policies for renewable energy or energy efficiency to the extent required by law. The proposed Project will also meet the 2025 California Green Building Standards Code Voluntary Tier 1 EV charging requirements³² by installing ten DC fast chargers that provide a total power of 1,800 kilowatts. Additionally, these chargers will be powered by 100% renewable electrical power supplied by PG&E, as Costco has a Clean Energy Contract with PG&E. Specifically, the proposed Project would not conflict with the goals set forth in the energy efficiency objectives in the El Dorado County General Plan (**Section 2.2.3.1**).³³ The Project's evaluation with the plan is provided in **Table A-1 of Appendix A** and discussed in **Section 5.1.4.2**. Additionally, the Project would not conflict with State regulations and policies as shown in the evaluation presented in **Table A-2 in Appendix A**. As such, Project impacts are less than significant.

³² 2025 California Green Building Standards Code, Title 24, Part 11. Available online at: <https://codes.iccsafe.org/content/CAGBC2025P1>. Accessed: October 2025.

³³ County of El Dorado. 2004. General Plan. Available at: <https://www.eldoradocounty.ca.gov/Land-Use/Planning-and-Building/Planning-Division/Adopted-General-Plan>. Accessed: October 2025.

TABLES

Table 4-1. Off-Road Equipment Fuel Consumption During Construction Scenario 1

El Dorado Hills Costco Project
El Dorado Hills, California

| Construction Phase Name | CO₂ Emissions^{1,2} (MT/yr) | Diesel Consumption³ (gallons/yr) |
|---|---|--|
| Site Improvements - Linear, Grubbing & Land Clearing (2026) | 7.5 | 730 |
| Scenario 1 - Site Preparation (2026) | 89 | 8,709 |
| Site Improvements - Linear, Grading & Excavation (2026) | 30 | 2,948 |
| Scenario 1 - Grading (2026) | 440 | 43,093 |
| Scenario 1 - Building Construction (2026) | 160 | 15,656 |
| Site Improvements - Linear, Drainage, Utilities, & Sub-Grade (2026) | 61 | 5,995 |
| Scenario 1 - Grading (2027) | 81 | 7,914 |
| Site Improvements - Linear, Drainage, Utilities, & Sub-Grade (2027) | 45 | 4,410 |
| Scenario 1 - Building Construction (2027) | 149 | 14,590 |
| Scenario 1 - Paving (2027) | 54 | 5,304 |
| Site Improvements - Linear, Paving (2027) | 11 | 1,064 |
| Scenario 1 - Architectural Coating (2027) | 3.8 | 368 |

Constants:

10.21 kg CO₂/gallon diesel consumed in combustion engines⁴

1,000 kg CO₂/MT CO₂

Notes:

¹ Exhaust CO₂ emissions from off-road construction equipment used during Site Preparation; Grading; Building Construction; Paving; and Architectural Coating construction phases that occur during construction scenario 1 are obtained from the CalEEMod model run shown in Appendix A-1 in the EDH Costco Project Greenhouse Gas Technical Report.

² Exhaust CO₂ emissions from off-road construction equipment used during Linear, Grubbing & Land Clearing; Linear, Grading & Excavation; Linear, Drainage, Utilities, & Sub-Grade; and Linear, Paving construction phases that occur during the site access and roadway improvement (site improvements) construction are obtained from the CalEEMod model run Appendix A-4 in the EDH Costco Project Greenhouse Gas Technical Report.

³ Diesel consumption of off-road construction equipment during each construction phase is estimated as a ratio of the CO₂ emissions from these equipment to the CO₂ emission factor per gallon of diesel consumed.

⁴ Obtained from the USEPA GHG Emission Factors Hub. Available at: <https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>. Accessed: October 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODEL

CO₂ - carbon dioxide

GHG - greenhouse gas

kg - kilograms

MT - metric ton

USEPA - United States Environmental Protection Agency

yr - year

Table 4-2. Off-Road Equipment Fuel Consumption During Construction Scenario 2

El Dorado Hills Costco Project
El Dorado Hills, California

| Construction Phase Name | CO₂ Emissions^{1,2} (MT/yr) | Diesel Consumption³ (gallons/yr) |
|---|---|--|
| Site Improvements - Linear, Grubbing & Land Clearing (2026) | 7.5 | 730 |
| Scenario 2 - Site Preparation (2026) | 89 | 8,709 |
| Site Improvements - Linear, Grading & Excavation (2026) | 30 | 2,948 |
| Scenario 2 - Grading (2026) | 440 | 43,093 |
| Scenario 2 - Building Construction (2026) | 160 | 15,656 |
| Site Improvements - Linear, Drainage, Utilities, & Sub-Grade (2026) | 61 | 5,995 |
| Scenario 2 - Grading (2027) | 81 | 7,914 |
| Site Improvements - Linear, Drainage, Utilities, & Sub-Grade (2027) | 45 | 4,410 |
| Scenario 2 - Building Construction (2027) | 149 | 14,590 |
| Scenario 2 - Paving (2027) | 54 | 5,304 |
| Site Improvements - Linear, Paving (2027) | 11 | 1,064 |
| Scenario 2 - Architectural Coating (2027) | 3.8 | 368 |

Constants:

10.21 kg CO₂/gallon diesel consumed in combustion engines⁴

1,000 kg CO₂/MT CO₂

Notes:

¹ Exhaust CO₂ emissions from off-road construction equipment used during Site Preparation; Grading; Building Construction; Paving; and Architectural Coating construction phases that occur during construction scenario 2 are obtained from the CalEEMod model run shown in Appendix A-2 in the EDH Costco Project Greenhouse Gas Technical Report.

² Exhaust CO₂ emissions from off-road construction equipment used during Linear, Grubbing & Land Clearing; Linear, Grading & Excavation; Linear, Drainage, Utilities, & Sub-Grade; and Linear, Paving construction phases that occur during the site access and roadway improvement (site improvements) construction are obtained from the CalEEMod model run Appendix A-4 in the EDH Costco Project Greenhouse Gas Technical Report.

³ Diesel consumption of off-road construction equipment during each construction phase is estimated as a ratio of the CO₂ emissions from these equipment to the CO₂ emission factor per gallon of diesel consumed.

⁴ Obtained from the USEPA GHG Emission Factors Hub. Available at: <https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>. Accessed: October 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODEL

CO₂ - carbon dioxide

GHG - greenhouse gas

kg - kilograms

MT - metric ton

USEPA - United States Environmental Protection Agency

yr - year

Table 4-3. On-Road Vehicle Fuel Consumption During Construction Scenario 1

El Dorado Hills Costco Project
El Dorado Hills, California

| Construction Phase Name ¹ | Phase Duration ¹ (days) | Worker Trip Rates ² (one-way trips/day) | Vendor Trip Rates ² (one-way trips/day) | Hauling Trip Number ² (one-way trips/day) | Concrete Truck Trips ² (one-way trips/day) | Worker Trip Length ³ (miles/one-way trip) | Vendor Trip Length ³ (miles/one-way trip) | Hauling Trip Length ³ (miles/one-way trip) | Concrete Truck Trip Length ³ (miles/one-way trip) | Worker Vehicle Miles Traveled ⁴ (miles) | Vendor Vehicle Miles Traveled ⁴ (miles) | Hauling Vehicle Miles Traveled ⁴ (miles) | Concrete Truck Miles Traveled ⁴ (miles) | Worker Gasoline Fuel Consumption ⁵ (gallons) | Vendor Diesel Fuel Consumption ⁵ (gallons) | Hauling Diesel Fuel Consumption ⁵ (gallons) | Concrete Truck Diesel Fuel Consumption ⁵ (gallons) |
|--|------------------------------------|--|--|--|---|--|--|---|--|--|--|---|--|---|---|--|---|
| Site Improvements - Linear, Grubbing & Land Clearing (2026) | 26 | 10.0 | - | 12.3 | - | 14.3 | - | 20.0 | - | 3,718 | - | 6,420 | - | 143 | - | 1,295 | - |
| Scenario 1 - Site Preparation (2026) | 37 | 17.5 | - | - | - | 14.3 | - | - | - | 9,259 | - | - | - | 356 | - | - | - |
| Site Improvements - Linear, Grading & Excavation (2026) | 105 | 10.0 | 1.00 | 0.09 | - | 14.3 | 8.80 | 20.0 | - | 15,015 | 924 | 180 | - | 577 | 188 | 36 | - |
| Scenario 1 - Grading (2026) | 147 | 20.0 | - | 38.8 | - | 14.3 | - | 20.0 | - | 42,042 | - | 114,052 | - | 1,617 | - | 23,009 | - |
| Scenario 1 - Building Construction (2026) | 147 | 95.5 | 43.8 | - | - | 14.3 | 8.80 | - | - | 200,799 | 56,665 | - | - | 7,721 | 11,547 | - | - |
| Scenario 1 - Concrete Truck Activity during Building Construction (2026) | 8 | - | - | - | 104 | - | - | - | 8.80 | - | - | - | 7,322 | - | - | - | 1,477 |
| Site Improvements - Linear, Drainage, Utilities, & Sub-Grade (2026) | 53 | 15.0 | - | - | - | 14.3 | - | - | - | 11,369 | - | - | - | 437 | - | - | - |
| Scenario 1 - Grading (2027) | 27 | 20.0 | - | 38.8 | - | 14.3 | - | 20.0 | - | 7,722 | - | 20,948 | - | 292 | - | 4,186 | - |
| Site Improvements - Linear, Drainage, Utilities, & Sub-Grade (2027) | 39 | 15.0 | - | - | - | 14.3 | - | - | - | 8,366 | - | - | - | 316 | - | - | - |
| Scenario 1 - Building Construction (2027) | 137 | 95.5 | 43.8 | - | - | 14.3 | 8.80 | - | - | 187,139 | 52,810 | - | - | 7,074 | 10,661 | - | - |
| Scenario 1 - Paving (2027) | 79 | 15.0 | - | - | - | 14.3 | - | - | - | 16,946 | - | - | - | 641 | - | - | - |
| Site Improvements - Linear, Paving (2027) | 39 | 7.5 | - | - | - | 14.3 | - | - | - | 4,183 | - | - | - | 158 | - | - | - |
| Scenario 1 - Architectural Coating (2027) | 62 | 19.1 | - | - | - | 14.3 | - | - | - | 16,938 | - | - | - | 640 | - | - | - |

Notes:

- ¹ Construction phases and duration are based on Project-specific information. Refer to Section 4.2 in the EDH Costco Project Greenhouse Gas Technical Report for further details.
- ² The number of worker and vendor trips represent CalEEMod defaults based on the construction equipment used in each construction phase. The number of hauling trips were estimated by CalEEMod based on volume of soil that would be imported/exported during construction and the amount of demolition debris generated. The number of concrete truck trips are based on Project-specific information. Refer to Section 4.2.2 of the EDH Costco Project Greenhouse Gas Technical Report for further details.
- ³ The trip lengths for on-road vehicles used during construction are CalEEMod default values.
- ⁴ Estimated based on trip rates, trip length, and phase duration.
- ⁵ Fuel consumption of on-road vehicles used during each construction phase are estimated as a product of the vehicle miles traveled by each vehicle type and its fuel consumption rate in gallons per mile.
- ⁶ Fuel consumption rates for on-road vehicles are calculated using vehicle class-specific fuel consumption data from EMFAC2021 (see the supporting table below, which presents EMFAC2021 outputs for 2026 and 2027 in El Dorado-Mountain County), the fleet mix for each trip type (worker, vendor, and hauling), and vehicle miles traveled. The fleet mix for the worker, vendor, and hauling trucks are based on CalEEMod defaults. Worker vehicles are assumed to be gasoline fueled and include light duty automobiles and trucks (25% LDA, 50% LDT1, 25% LDT2). Vendor vehicles are assumed to be diesel fueled and include heavy heavy-duty trucks and medium heavy duty trucks (50% HHDT and 50% MHDT), except for concrete trucks which are all heavy heavy duty-trucks (100% HHDT). Hauling vehicles are assumed to be diesel fueled and include heavy heavy-duty trucks (100% HHDT).

Abbreviations:

CalEEMod - California Emissions Estimator Model
EDH - El Dorado Hills
EMFAC - Emission FACTors model
HHDT - heavy heavy-duty trucks
LDA - light-duty automobile
LDT - light-duty truck
MHDT - medium heavy-duty trucks

Fuel Consumption Rates by Vehicle Type ⁶:

Worker Vehicles in 2026: 0.0385 gallons/mile
Worker Vehicles in 2027: 0.0378 gallons/mile
Vendor Vehicles in 2026: 0.2038 gallons/mile
Vendor Vehicles in 2027: 0.2019 gallons/mile
Haul Trucks in 2026: 0.2017 gallons/mile
Haul Trucks in 2027: 0.1998 gallons/mile
Concrete Trucks in 2026: 0.2017 gallons/mile

Table 4-3. On-Road Vehicle Fuel Consumption During Construction Scenario 1

El Dorado Hills Costco Project

El Dorado Hills, California

Supporting Table of EMFAC Outputs

| Calendar Year | EMFAC Vehicle Class | Fuel Type | EMFAC VMT Output (miles) | EMFAC Fuel Use Output (gallons) | Average Fuel Consumption (gallons/mile) |
|----------------------|----------------------------|------------------|---------------------------------|--|--|
| 2026 | LDA | Gasoline | 1,606,685 | 52,091 | 0.0324 |
| 2026 | LDT1 | Gasoline | 188,850 | 7,618 | 0.0403 |
| 2026 | LDT2 | Gasoline | 1,143,939 | 46,571 | 0.0407 |
| 2026 | MHDT | Gasoline | 5,758 | 1,185 | 0.2058 |
| 2026 | HHDT | Diesel | 28,781 | 5,806 | 0.2017 |
| 2027 | LDA | Gasoline | 1,619,691 | 51,441 | 0.0318 |
| 2027 | LDT1 | Gasoline | 181,944 | 7,232 | 0.0397 |
| 2027 | LDT2 | Gasoline | 1,158,122 | 46,256 | 0.0399 |
| 2027 | MHDT | Gasoline | 5,957 | 1,215 | 0.2039 |
| 2027 | HHDT | Diesel | 28,804 | 5,755 | 0.1998 |

Abbreviations:

EMFAC - Emission FACtors model

HHDT - heavy heavy-duty trucks

LDA - light-duty automobile

LDT - light-duty truck

MHDT - medium heavy-duty trucks

VMT - vehicle miles traveled

Table 4-4. On-Road Vehicle Fuel Consumption During Construction Scenario 2

El Dorado Hills Costco Project
El Dorado Hills, California

| Construction Phase Name ¹ | Phase Duration ¹ (days) | Worker Trip Rates ² (one-way trips/day) | Vendor Trip Rates ² (one-way trips/day) | Hauling Trip Number ² (one-way trips/day) | Concrete Truck Trips ² (one-way trips/day) | Worker Trip Length ³ (miles/one-way trip) | Vendor Trip Length ³ (miles/one-way trip) | Hauling Trip Length ³ (miles/one-way trip) | Concrete Truck Trip Length ³ (miles/one-way trip) | Worker Vehicle Miles Traveled ⁴ (miles) | Vendor Vehicle Miles Traveled ⁴ (miles) | Hauling Vehicle Miles Traveled ⁴ (miles) | Concrete Truck Miles Traveled ⁴ (miles) | Worker Gasoline Fuel Consumption ⁵ (gallons) | Vendor Diesel Fuel Consumption ⁵ (gallons) | Hauling Diesel Fuel Consumption ⁵ (gallons) | Concrete Truck Diesel Fuel Consumption ⁵ (gallons) |
|--|------------------------------------|--|--|--|---|--|--|---|--|--|--|---|--|---|---|--|---|
| Site Improvements - Linear, Grubbing & Land Clearing (2026) | 26 | 10.0 | - | 12.3 | - | 14.3 | - | 20.0 | - | 3,718 | - | 6,420 | - | 143 | - | 1,295 | - |
| Scenario 2 - Site Preparation (2026) | 37 | 17.5 | - | - | - | 14.3 | - | - | - | 9,259 | - | - | - | 356 | - | - | - |
| Site Improvements - Linear, Grading & Excavation (2026) | 105 | 10.0 | 1.00 | 0.09 | - | 14.3 | 8.80 | 20.0 | - | 15,015 | 924 | 180 | - | 577 | 188 | 36 | - |
| Scenario 2 - Grading (2026) | 147 | 20.0 | - | 115 | - | 14.3 | - | 20.0 | - | 42,042 | - | 337,931 | - | 1,617 | - | 68,175 | - |
| Scenario 2 - Building Construction (2026) | 147 | 95.5 | 43.8 | - | - | 14.3 | 8.80 | - | - | 200,799 | 56,665 | - | - | 7,721 | 11,547 | - | - |
| Scenario 2 - Concrete Truck Activity during Building Construction (2026) | 8 | - | - | - | 104 | - | - | - | 8.80 | - | - | - | 7,322 | - | - | - | 1,477 |
| Site Improvements - Linear, Drainage, Utilities, & Sub-Grade (2026) | 53 | 15.0 | - | - | - | 14.3 | - | - | - | 11,369 | - | - | - | 437 | - | - | - |
| Scenario 2 - Grading (2027) | 27 | 20.0 | - | 115 | - | 14.3 | - | 20.0 | - | 7,722 | - | 62,069 | - | 292 | - | 12,402 | - |
| Site Improvements - Linear, Drainage, Utilities, & Sub-Grade (2027) | 39 | 15.0 | - | - | - | 14.3 | - | - | - | 8,366 | - | - | - | 316 | - | - | - |
| Scenario 2 - Building Construction (2027) | 137 | 95.5 | 43.8 | - | - | 14.3 | 8.80 | - | - | 187,139 | 52,810 | - | - | 7,074 | 10,661 | - | - |
| Scenario 2 - Paving (2027) | 79 | 15.0 | - | - | - | 14.3 | - | - | - | 16,946 | - | - | - | 641 | - | - | - |
| Site Improvements - Linear, Paving (2027) | 39 | 7.5 | - | - | - | 14.3 | - | - | - | 4,183 | - | - | - | 158 | - | - | - |
| Scenario 2 - Architectural Coating (2027) | 62 | 19.1 | - | - | - | 14.3 | - | - | - | 16,938 | - | - | - | 640 | - | - | - |

Notes:

¹ Construction phases and duration are based on Project-specific information. Refer to Section 4.2 in the EDH Costco Project Greenhouse Gas Technical Report for further details.

² The number of worker and vendor trips represent CalEEMod defaults based on the construction equipment used in each construction phase. The number of hauling trips were estimated by CalEEMod based on volume of soil that would be imported/exported during construction and the amount of demolition debris generated. The number of concrete truck trips are based on Project-specific information. Refer to Section 4.2.2 of the EDH Costco Project Greenhouse Gas Technical Report for further details.

³ The trip lengths for on-road vehicles used during construction are CalEEMod default values.

⁴ Estimated based on trip rates, trip length, and phase duration.

⁵ Fuel consumption of on-road vehicles used during each construction phase are estimated as a product of the vehicle miles traveled by each vehicle type and its fuel consumption rate in gallons per mile.

⁶ Fuel consumption rates for on-road vehicles are calculated using vehicle class-specific fuel consumption data from EMFAC2021 (see the supporting table below, which presents EMFAC2021 outputs for 2026 and 2027 in El Dorado-Mountain County), the fleet mix for each trip type (worker, vendor, and hauling), and vehicle miles traveled. The fleet mix for the worker, vendor, and hauling trucks are based on CalEEMod defaults. Worker vehicles are assumed to be gasoline fueled and include light duty automobiles and trucks (25% LDA, 50% LDT1, 25% LDT2). Vendor vehicles are assumed to be diesel fueled and include heavy heavy-duty trucks and medium heavy duty trucks (50% HHDT and 50% MHDT), except for concrete trucks which are all heavy heavy duty-trucks (100% HHDT). Hauling vehicles are assumed to be diesel fueled and include heavy heavy-duty trucks (100% HHDT).

Abbreviations:

CalEEMod - California Emissions Estimator Model
EDH - El Dorado Hills
EMFAC - Emission FACTors model
HHDT - heavy heavy-duty trucks
LDA - light-duty automobile
LDT - light-duty truck
MHDT - medium heavy-duty trucks

Fuel Consumption Rates by Vehicle Type ⁶:

Worker Vehicles in 2026: 0.0385 gallons/mile
Worker Vehicles in 2027: 0.0378 gallons/mile
Vendor Vehicles in 2026: 0.2038 gallons/mile
Vendor Vehicles in 2027: 0.2019 gallons/mile
Haul Trucks in 2026: 0.2017 gallons/mile
Haul Trucks in 2027: 0.1998 gallons/mile
Concrete Trucks in 2026: 0.2017 gallons/mile

Table 4-4. On-Road Vehicle Fuel Consumption During Construction Scenario 2

El Dorado Hills Costco Project
El Dorado Hills, California

Supporting Table of EMFAC Outputs

| Calendar Year | EMFAC Vehicle Class | Fuel Type | EMFAC VMT Output (miles) | EMFAC Fuel Use Output (gallons) | Average Fuel Consumption (gallons/mile) |
|----------------------|----------------------------|------------------|---------------------------------|--|--|
| 2026 | LDA | Gasoline | 1,606,685 | 52,091 | 0.0324 |
| 2026 | LDT1 | Gasoline | 188,850 | 7,618 | 0.0403 |
| 2026 | LDT2 | Gasoline | 1,143,939 | 46,571 | 0.0407 |
| 2026 | MHDT | Gasoline | 5,758 | 1,185 | 0.2058 |
| 2026 | HHDT | Diesel | 28,781 | 5,806 | 0.2017 |
| 2027 | LDA | Gasoline | 1,619,691 | 51,441 | 0.0318 |
| 2027 | LDT1 | Gasoline | 181,944 | 7,232 | 0.0397 |
| 2027 | LDT2 | Gasoline | 1,158,122 | 46,256 | 0.0399 |
| 2027 | MHDT | Gasoline | 5,957 | 1,215 | 0.2039 |
| 2027 | HHDT | Diesel | 28,804 | 5,755 | 0.1998 |

Abbreviations:

EMFAC - Emission FACtors model
HHDT - heavy heavy-duty trucks
LDA - light-duty automobile
LDT - light-duty truck
MHDT - medium heavy-duty trucks
VMT - vehicle miles traveled

Table 4-5. Operational Electricity Consumption

El Dorado Hills Costco Project

El Dorado Hills, California

| Project Land Use | Project Electricity Demand (kWh/yr) |
|---|--|
| Discount Club ¹ | 1,437,492 |
| Gasoline/Service Station ¹ | 48,732 |
| Enclosed Parking with Elevator ¹ | 369,143 |
| Parking Lot ¹ | 327,400 |
| On-Site EV Chargers ² | 3,705,480 |
| Total | 5,888,248 |

Notes:

¹ Obtained from CalEEMod output for the proposed Project operation shown in Appendix B-1 of the EDH Costco Project Greenhouse Gas Technical Report. Refer to Section 4.3.4 of the EDH Costco Project Greenhouse Gas Technical Report for further details.

² Obtained from Table 4-16 of the EDH Costco Project Greenhouse Gas Technical Report.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

EDH - El Dorado Hills

kWh - kilowatt hour

yr - year

Table 4-6. Operational Natural Gas Consumption

El Dorado Hills Costco Project

El Dorado Hills, California

| Project Land Use | Project Natural Gas Demand ¹ (kBTU/yr) |
|--------------------------------|--|
| Discount Club | 1,423,224 |
| Gasoline/Service Station | 0 |
| Enclosed Parking with Elevator | 0 |
| Parking Lot | 0 |
| Total | 1,423,224 |

Notes:

¹ Obtained from CalEEMod output for the proposed Project operation shown in Appendix B-1 of the EDH Costco Project Greenhouse Gas Technical Report. Refer to Section 4.3.2 of the EDH Costco Project Greenhouse Gas Technical Report for further details.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODEL

EDH - El Dorado Hills

kBTU - kilo-British thermal Unit

yr - year

Table 4-7. Operational Mobile Source Gasoline Consumption

El Dorado Hills Costco Project
 El Dorado Hills, California

| Mobile Source Category | Mobile Source Activity ¹ (miles/yr) | Mobile Source Activity Associated with Gasoline Combustion ² (miles/yr) | Gasoline Consumption ³ (gallons/yr) |
|--|---|---|---|
| GDF Customer Vehicles (Passenger Vehicles) - Gasoline | 1,076,311 | 1,076,311 | 40,774 |
| GDF Customer Vehicles (Passenger Vehicles) - Plug-in Hybrid ³ | 26,211 | 11,967 | 427 |
| Warehouse and Employee Vehicles (Passenger Vehicles) - Gasoline | 6,368,290 | 6,368,290 | 241,248 |
| Warehouse and Employee Vehicles (Passenger Vehicles) - Plug-in Hybrid | 151,896 | 69,347 | 2,474 |

Constants:

Average fuel efficiency of gasoline vehicles in 2027 ⁴ 26 miles per gallon

Average fuel efficiency of plug-in hybrid electric vehicles in 2027 ⁴ 28 miles per gallon

Notes:

¹ The total miles traveled by gasoline passenger vehicles per year was obtained from Table B-1 of the EDH Costco Project Greenhouse Gas Technical Report. The value was apportioned into gasoline and plug-in-hybrid vehicle technology categories based on the Project-specific fleet mix shown in Table B-3 of the EDH Costco Project Greenhouse Gas Technical Report.

² The vehicle miles traveled by passenger vehicles that is associated with gasoline combustion for each vehicle technology category was estimated based on EMFAC default assumptions for gasoline and plug-in hybrid vehicles operating in El Dorado (MC) sub-area in calendar year 2027.

³ Gasoline consumption of passenger vehicles are estimated as a ratio of the vehicle miles traveled associated with gasoline combustion for each vehicle technology category and its average fuel efficiency in miles per gallon.

⁴ The average fuel efficiency for each gasoline vehicle technology category operating in for El Dorado (MC) sub-area in calendar year 2027 is obtained from EMFAC2021.

Abbreviations:

EDH - El Dorado Hills MC - Mountain County
 GDF - gasoline dispensing facility yr - year

Table 4-8. Operational Mobile Source Diesel Consumption

El Dorado Hills Costco Project
 El Dorado Hills, California

| Mobile Source Category | Mobile Source Activity ¹ | Diesel Consumption ² (gallons/yr) |
|--|--|---|
| Transport Refrigeration Units | 6,888 hours per year | 4,803 |
| Delivery Trucks | 440,060 miles per year | 162,002 |
| Warehouse and Employee Passenger Vehicles - Diesel | 47,306 miles per year | 1,634 |

Constants:

| | |
|--|------------------------|
| TRU fuel consumption rate ³ | 0.70 gallons per hour |
| Average fuel efficiency of diesel trucks ⁴ | 5.00 miles per gallon |
| Average fuel efficiency of passenger vehicles ⁵ | 28.95 miles per gallon |

Notes:

¹ Obtained from Table B-1 of the EDH Costco Project Greenhouse Gas Technical Report.

² Diesel consumption for TRUs is estimated as a product of the TRU activity and its fuel consumption rate in gallons per hour. Diesel consumption for delivery trucks is estimated as a ratio of vehicle miles traveled to the average fuel efficiency of diesel trucks in miles per gallon. Diesel consumption for diesel warehouse and employee passenger vehicles is estimated as a ratio of vehicle miles traveled to the average fuel efficiency of diesel passenger vehicles in miles per gallon.

³ Fuel consumption rate for TRUs on trailers operating in El Dorado (MC) sub-area in calendar year 2027 is obtained from OFFROAD2021.

⁴ The average fuel efficiency for diesel trucks operating in El Dorado (MC) sub-area in calendar year 2027 is obtained from EMFAC2021.

⁵ The average fuel efficiency for diesel passenger vehicles operating in El Dorado (MC) sub-area in calendar year 2027 is obtained from EMFAC2021.

Abbreviations:

EDH - El Dorado Hills

EMFAC - Emission FACTors model

MC - Mountain County

TRU - transport refrigeration unit

yr - year

Table 4-9. Operational Mobile Source Electricity Consumption

El Dorado Hills Costco Project
 El Dorado Hills, California

| Mobile Source Category | Mobile Source Activity ¹ (miles/yr) | Mobile Source Activity Associated with Electricity Consumption ² (electric miles/yr) | Electricity Consumption ³ (kWh/yr) |
|---|---|--|--|
| GDF Customer Vehicles (Passenger Vehicles) - Plug-in Hybrid | 26,211 | 14,245 | 4,302 |
| Warehouse and Employee Vehicles (Passenger Vehicles) - Plug-in Hybrid | 151,896 | 82,548 | 24,932 |
| Warehouse and Employee Vehicles (Passenger Vehicles) - Electric | 282,123 | 282,123 | 108,923 |

Constants:

Average fuel efficiency for plug-in hybrid electric vehicles in 2027 ⁴ 3.31 miles per kWh

Average fuel efficiency for electric vehicles in 2027 ⁵ 2.59 miles per kWh

Notes:

¹ Obtained from **Table 4-7**.

² The fraction of electric vehicle miles traveled by passenger vehicles was estimated based on EMFAC default assumptions for plug-in hybrid vehicles operating in El Dorado (MC) sub-area in calendar year 2027.

³ The electricity consumption is estimated as the ratio of the electric miles traveled to average efficiency of a plug-in hybrid vehicle in miles per kilowatt-hour.

⁴ The average fuel efficiency for plug-in hybrid passenger vehicles operating in El Dorado (MC) sub-area in calendar year 2027 is obtained from EMFAC2021.

⁵ The average fuel efficiency for electric passenger vehicles operating in El Dorado (MC) sub-area in calendar year 2027 is obtained from EMFAC2021.

Abbreviations:

EMFAC - Emission FACtors model
 GDF - gasoline dispensing facility
 kWh - kilowatt hour

MC - Mountain County
 yr - year

Table 4-10. Operational Landscape Equipment Gasoline Consumption

El Dorado Hills Costco Project
El Dorado Hills, California

| Area Source Category | CO₂ Emissions¹ (MT/yr) | Gasoline Consumption² (gallons/yr) |
|-----------------------------|---|--|
| Landscape equipment | 3.90 | 444 |

Constants:

8.78 kg CO₂/gallon gasoline consumed in combustion engines³
1,000 kg CO₂/MT CO₂

Notes:

¹ Exhaust CO₂ emissions from landscaping equipment are obtained from the CalEEMod model run shown in Appendix B-1 in the EDH Costco Project Greenhouse Gas Technical Report.

² Gasoline consumption of landscaping equipment is estimated as a ratio of the CO₂ emissions from these equipment to the CO₂ emission factor per gallon of gasoline consumed.

³ Obtained from the USEPA GHG Emission Factors Hub. Available at:
<https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>. Accessed: October 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

CO₂ - carbon dioxide

EDH - El Dorado Hills

GHG - greenhouse gas

kg - kilograms

MT - metric ton

USEPA - United States Environmental Protection Agency

yr - year

Table 4-11. Operational Stationary Source Diesel Consumption

El Dorado Hills Costco Project
El Dorado Hills, California

| Stationary Source Category | CO₂ Emissions¹ (MT/yr) | Diesel Consumption² (gallons/yr) |
|-----------------------------------|---|--|
| Emergency Generator | 9.52 | 932 |

Conversions:

10.21 kg CO₂/gallon gasoline consumed in combustion engines³

1,000 kg CO₂/MT CO₂

Notes:

¹ Exhaust CO₂ emissions from emergency generators are obtained from the CalEEMod model run shown in Appendix B-1 in the EDH Costco Project Greenhouse Gas Technical Report.

² Diesel consumption of emergency generator is estimated as a ratio of the CO₂ emissions from these generators to the CO₂ emission factor per gallon of diesel consumed.

³ Obtained from the USEPA GHG Emission Factors Hub. Available at:

<https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>. Accessed: October 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODEl

CO₂ - carbon dioxide

EDH - El Dorado Hills

GHG - greenhouse gas

kg - kilograms

MT - metric ton

USEPA - United States Environmental Protection Agency

yr - year

Table 5-1. Energy Resource Summary for Proposed Project Construction Scenario 1

El Dorado Hills Costco Project
 El Dorado Hills, California

| Energy Resource | Year | Project Construction Energy Consumption ^{1,2} | El Dorado County Annual Consumption ^{3,4} | Project Construction Contribution to El Dorado County Annual Consumption (%) | California Annual Consumption ^{3,4} | Project Construction Contribution to California Annual Consumption (%) |
|-----------------------|------|--|--|--|--|--|
| Gasoline (gallons/yr) | 2026 | 10,851 | 65,259,604 | 0.02% | 13,896,130,020 | 0.000078% |
| Diesel (gallons/yr) | 2026 | 114,683 | 14,555,710 | 0.8% | 4,342,164,261 | 0.0026% |
| Electricity (kWh/yr) | 2026 | 88 | 1,339,206,633 | 0.00001% | 282,782,592,309 | 0.00000003% |
| Gasoline (gallons/yr) | 2027 | 9,121 | 64,229,365 | 0.014% | 13,625,442,497 | 0.000067% |
| Diesel (gallons/yr) | 2027 | 48,496 | 14,262,073 | 0.34% | 4,330,293,013 | 0.0011% |
| Electricity (kWh/yr) | 2027 | 59 | 1,339,206,633 | 0.000004% | 282,782,592,309 | 0.00000002% |

Conversions:

1,000,000 kWh/GWh

Notes:

¹ Gasoline and diesel consumption during construction estimated as a sum of the fuel consumption of the off-road construction equipment (**Table 4-1**) and on-road vehicles (**Table 4-3**) used during construction scenario 1.

² Electricity consumption during construction obtained from CalEEMod output for Project Site Access and Roadway Improvements shown in Appendix A-4 of the EDH Costco Project Greenhouse Gas Technical Report. Refer to Section 4.2 of the EDH Costco Project Greenhouse Gas Technical Report for further details.

³ Fuel consumption data for El Dorado County and the State of California are obtained from EMFAC2021 and OFFROAD2021 for calendar year 2026 and 2027.

⁴ Electricity consumption data for El Dorado County and the State of California are obtained from <https://www.energy.ca.gov/files/energy-consumption-data-files> for calendar year 2024 as that was the most recent data available. Accessed: October 2025.

Abbreviations:

% - percent

EDH - El Dorado Hills

EMFAC - California Air Resources Board Emissions Factor Model

GWh - gigawatt hour

kWh - kilowatt hour

yr - year

Table 5-2. Energy Resource Summary for Proposed Project Construction Scenario 2

El Dorado Hills Costco Project
 El Dorado Hills, California

| Energy Resource | Year | Project Construction Energy Consumption ^{1,2} | El Dorado County Annual Consumption ^{3,4} | Project Construction Contribution to El Dorado County Annual Consumption (%) | California Annual Consumption ^{3,4} | Project Construction Contribution to California Annual Consumption (%) |
|-----------------------|------|--|--|--|--|--|
| Gasoline (gallons/yr) | 2026 | 10,851 | 65,259,604 | 0.02% | 13,896,130,020 | 0.000078% |
| Diesel (gallons/yr) | 2026 | 159,850 | 14,555,710 | 1.1% | 4,342,164,261 | 0.0037% |
| Electricity (kWh/yr) | 2026 | 88 | 1,339,206,633 | 0.00001% | 282,782,592,309 | 0.00000003% |
| Gasoline (gallons/yr) | 2027 | 9,121 | 64,229,365 | 0.014% | 13,625,442,497 | 0.000067% |
| Diesel (gallons/yr) | 2027 | 56,712 | 14,262,073 | 0.40% | 4,330,293,013 | 0.0013% |
| Electricity (kWh/yr) | 2027 | 59 | 1,339,206,633 | 0.000004% | 282,782,592,309 | 0.00000002% |

Conversions:

1,000,000 kWh/GWh

Notes:

¹ Gasoline and diesel consumption during construction estimated as a sum of the fuel consumption of the off-road construction equipment (**Table 4-2**) and on-road vehicles (**Table 4-4**) used during construction scenario 2.

² Electricity consumption during construction obtained from CalEEMod output for Project Site Access and Roadway Improvements shown in Appendix A-4 of the EDH Costco Project Greenhouse Gas Technical Report. Refer to Section 4.2 of the EDH Costco Project Greenhouse Gas Technical Report for further details.

³ Fuel consumption data for El Dorado County and the State of California are obtained from EMFAC2021 and OFFROAD2021 for calendar year 2026 and 2027.

⁴ Electricity consumption data for El Dorado County and the State of California are obtained from <https://www.energy.ca.gov/files/energy-consumption-data-files> for calendar year 2024 as that was the most recent data available. Accessed: October 2025.

Abbreviations:

% - percent

EDH - El Dorado Hills

EMFAC - California Air Resources Board Emissions Factor Model

GWh - gigawatt hour

kWh - kilowatt hour

yr - year

Table 5-3. Energy Resource Summary for Proposed Project Operation

El Dorado Hills Costco Project
 El Dorado Hills, California

| Energy Resource | Project Operational Energy Consumption ¹ | El Dorado County Annual Consumption ^{2,3,4} | Project Construction Contribution to El Dorado County Annual Consumption (%) | California Annual Consumption ^{2,3,4} | Project Construction Contribution to California Annual Consumption (%) |
|-----------------------|---|--|--|--|--|
| Electricity (kWh/yr) | 6,026,405 | 1,339,206,633 | 0.45% | 282,782,592,309 | 0.00213% |
| Natural Gas (kBtu/yr) | 1,423,224 | 3,196,879,463 | 0.045% | 1,110,086,615,369 | 0.00013% |
| Gasoline (gallons/yr) | 285,366 | 64,229,365 | 0.44% | 13,625,442,497 | 0.0021% |
| Diesel (gallons/yr) | 169,371 | 14,262,073 | 1.19% | 4,330,293,013 | 0.0039% |

Conversions:

1,000,000 kWh/GWh
 99,976.1 Btu/therm
 1,000 Btu/kBtu

Notes:

¹ Estimated as a sum of the fuel consumption of Project operational sources listed in **Tables 4-5** through **4-11**.

² Diesel and gasoline consumption data for El Dorado County and the State of California are obtained from EMFAC2021 and OFFROAD2021 for calendar year 2027.

³ Electricity consumption data for El Dorado County and the State of California are obtained from <http://www.ecdms.energy.ca.gov/elecbycounty.aspx> for calendar year 2024 as that was the most recent data available. Accessed: October 2025.

⁴ Natural gas consumption data for El Dorado County and the State of California are obtained from <http://www.ecdms.energy.ca.gov/gasbycounty.aspx> for calendar year 2024 as that was the most recent data available. Accessed: October 2025.

Abbreviations:

% - percent
 Btu - British thermal unit
 EMFAC - Emission FACTors model
 GWh - gigawatt hour
 kBtu - kilo-British thermal unit
 kWh - kilowatt hour
 yr - year

APPENDIX A
PROJECT EVALUATION AGAINST STATE AND LOCAL PLANS

List of Tables

Table A-1: Project Evaluation Against Applicable County of El Dorado General Plan Energy Efficiency Strategies

Table A-2: Project Evaluation Against Applicable State Renewable Energy and Energy Efficiency Strategies

Table A-1. Project Evaluation Against Applicable County of El Dorado General Plan Energy Efficiency Strategies

El Dorado Hills Costco Project
 El Dorado Hills, California

| Objective ¹ | Policy ¹ | Does it Conflict? |
|---|--|---|
| <p>Objective 5.6.2 - Encourage Energy-Efficient Development: Encourage development of energy-efficient buildings, subdivisions, development, and landscape designs.</p> | <p>Policy 5.6.2.1 Require energy conserving landscaping plans for all projects requiring design review or other discretionary approval.</p> | <p>Does Not Conflict. As described in Section 1.2 of the Costco EDH Project Energy Technical Report, the proposed Project's irrigation system will include the use of drip rings to efficiently water the rootball while minimizing water usage and ensuring that water goes directly to the intended planting areas. Additionally, a substantial amount of the proposed plant material will be climate adapted to the region and would use less water than other common landscaping species. Finally, the Project's storm water management plans are designed to treat all runoff from new impervious surfaces and maintain storm water discharge rates based on County requirements.</p> |

Notes:

¹ The applicable goals are obtained from the 2004 County of El Dorado General Plan. Available at: <https://www.eldoradocounty.ca.gov/Land-Use/Planning-and-Building/Planning-Division/Adopted-General-Plan>. Accessed: September 2025.

Table A-2. Project Evaluation Against Applicable State Renewable Energy and Energy Efficiency Strategies

El Dorado Hills Costco Project
 El Dorado Hills, California

| # | Plan | Category Description | Does it Conflict? |
|---|---|---|---|
| 1 | California Renewables Portfolio Standard (RPS) and SB 100 | As most recently amended by SB 100 (2018), California's RPS increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020; 50 percent renewable power by 2026; and, 60 percent renewable power by 2030. SB 350 (2015) also requires the State Energy Resources Conservation and Development Commission to double (by 2030) the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation. | Does Not Conflict. The Project would not conflict with implementation of the state's RPS. The electricity for the operation of the Project would be supplied by Pacific Gas & Electric (PG&E) and powered by 100% renewable energy, as Costco has a Clean Energy Contract with PG&E. |
| 2 | California Code of Regulations, Title 24, Part 6 | Title 24, Part 6 of the California Code of Regulations establishes energy and water efficiency requirements for residential and non-residential new construction, additions to existing buildings, and alterations to existing buildings. Standards include requirements for water heating, HVAC, lighting, electrical systems, and solar design. | Consistent. The Project would meet or exceed the Title 24 energy efficiency standards in effect at the time of building permit application. As noted in Section 1.2 and listed below, the Project will include a number of energy and water efficiency features: <ul style="list-style-type: none"> • Parking lot light standards would be designed in order to provide even light distribution, and utilize less energy compared to a greater number of fixtures at lower heights. The use of LED lamps can provide a higher level of perceived brightness with less energy than other lamps such as high-pressure sodium. • Pre-manufactured metal wall panels with insulation carry a higher R-Value and greater solar reflectivity to help conserve energy as compared to other materials. Building heat absorption would be further reduced by a decrease in the thermal mass of the metal wall when compared to a typical masonry block wall. • A substantial amount of the proposed landscaping material for the North Site and South Site is climate adapted to the region and would use less water than other common landscape species. • The irrigation system proposes to include the use of deep root watering bubblers for parking lot trees to minimize usage and ensure that water goes directly to the intended planting areas. • High-efficiency restroom fixtures would be installed. • Commissioning of mechanical systems would occur to ensure that the HVAC systems are performing as designed. HVAC comfort systems would be controlled by a computerized building management system to maximize efficiency. • HVAC units planned for the South Site are high-efficiency direct ducted units, which have phased out the use of hydrochlorofluorocarbons completely. • Parking lot and exterior lights would be controlled by a photo sensor and time clock. • Lighting would be controlled by the overall project energy management system. • Energy efficient Transformers (i.e., Square D Type EE transformers) would be used. • Variable speed motors would be used on make-up air units and booster pumps. • Gas water heaters would be direct vent and 94 percent efficient or greater. • Reclaim tanks would be used to capture heat released by refrigeration equipment to heat domestic water in lieu of venting heat to the outside. |
| 3 | Assembly Bill 1109 | The Lighting Efficiency And Toxics Reduction Act (AB 1109) requires a reduction in average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018. | Does Not Conflict. The Project would not conflict with the implementation of AB 1109. Additionally, the proposed Project will incorporate several sustainability and energy efficiency measures including green building practices as required by the 2025 California Green Building Standards Code. Refer to Section 1.2 for a detailed listing of these measures. |
| 4 | California Green Building Standards Code Requirements | CalGreen establishes green building standards to meet the goals of AB 32. CalGreen includes standards for residential and nonresidential structures such as new buildings or portions of new buildings, additions and alterations, and all occupancies where no other state agency has the authority to adopt green building standards applicable to those occupancies. Standards include requirements for site development, indoor and outdoor water use, construction waste reduction, disposal and recycling and building maintenance and operation. | Consistent. The Project will comply with the CalGreen Building Standards Code that is in effect at the time of the building permit application, as applicable. Furthermore, the proposed Project will include several sustainability and energy efficiency measures, including those mandated by California Green Building Standards Code. For a detailed list of these measures, please refer to Section 1.2 . |

Table A-2. Project Evaluation Against Applicable State Renewable Energy and Energy Efficiency Strategies

El Dorado Hills Costco Project
El Dorado Hills, California

| # | Plan | Category Description | Does it Conflict? |
|-----------------------|---|---|--|
| Mobile Sources | | | |
| 5 | AB 1493 (Pavley Regulations) | Reduces GHG emissions in new passenger vehicles from model years 2012-2016 (Phase I) and model years 2017-2025 (Phase II). Also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020. | Does Not Conflict. The Project would not conflict with the implementation of the AB 1493 regulations. |
| 6 | Low Carbon Fuel Standard (LCFS) | Establishes protocols for measuring and reducing the life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels. | Does Not Conflict. The Project would not conflict with implementation of the LCFS. |
| 7 | Advanced Clean Cars (ACC) Program | In 2012, the California Air Resources Board (CARB) adopted the ACC program to reduce criteria pollutant emissions and GHG emissions for model year vehicles 2015 through 2025. ACC includes the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulations that require manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. In 2022, CARB developed the ACC II regulations which seeks to reduce criteria and greenhouse gas emissions from new light- and medium-duty vehicles beyond the 2025 model year, and increase the number of ZEVs for sale. On December 18, 2024, the U.S. EPA granted a waiver for California's ACC II regulation | Does Not Conflict. The Project would not conflict with implementation of the ACC program. Public Law 119-16, enacted on June 12, 2025, is a House joint resolution that disapproves the Clean Air Act waiver granted by USEPA for the ACC II regulation. In response to this action, CARB stated that they "will pursue every remedy available to challenge these actions". |
| 8 | Advanced Clean Trucks (ACT) | In 2021, the CARB adopted the ACT regulation to accelerate the market for on-road zero-emission vehicles and to reduce emissions of oxides of nitrogen (NOx), fine particulate matter (PM), other criteria pollutants, toxic air contaminants, and GHG from medium- and heavy-duty on-road vehicles. ACT applies to any manufacturer that certifies on-road vehicles over 8,500 lbs. gross vehicle weight rating for sale in California unless specified as exempt. | Does Not Conflict. The Project would not conflict with implementation of the ACT regulation. Public Law 119-15, enacted on June 12, 2025, is a House joint resolution that disapproves the Clean Air Act waiver granted by USEPA for the ACT Regulation. In response to this action, CARB stated that they "will pursue every remedy available to challenge these actions". |
| 9 | Advanced Clean Fleets (ACF) | In October 2022, CARB approved the Advanced Clean Fleets (ACF) regulation, which has requirements for fleets to phase in the use of ZEVs from 2024 to 2042 and beyond. The fleets required to comply with the regulation include State and local government agency fleets, high priority and federal fleets, and drayage fleets. The regulation also includes a requirement for manufacturers to only sell zero-emission trucks starting in 2036. The ACF regulation is meant to complement the ACT regulation and will contribute to meeting the goals set out in Governor Newsom's Executive Order N-79-20. | Does Not Conflict. The Project would not conflict with implementation of the ACF regulation. In January 2025, CARB withdrew its request for authorization of this rule from the USEPA. |
| 10 | Transport Refrigeration Unit (TRU) Air Toxic Control Measure (ATCM) | CARB adopted the ATCM for TRUs, TRU generator sets, and facilities where TRUs and TRU generator sets operate in 2004 (amendments in 2010, 2011, and 2022) to reduce diesel particulate matter emissions from diesel-powered TRUs and TRU generator sets. | Consistent. The Project would comply with all applicable requirements of the TRU ATCM. In January 2025, CARB withdrew its request to the USEPA for authorization of parts of this rule that require TRU owners to turnover at least 15 percent of their diesel-fueled truck TRU fleet to ZE TRU by December 31, 2023, and each year thereafter. |
| 11 | SB 375 | SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035. | Does Not Conflict. The Project would not conflict with the implementation of SB 375. |

Abbreviations:

AB - Assembly Bill
GHG - greenhouse gases
HVAC - heating, ventilation, and air conditioning
LED - light-emitting diode

SB - Senate Bill
USEPA - United States Environmental Protection Agency
ZE - zero emission

North Site Remainder Area
Technical Report

Prepared for
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Sacramento, California

Prepared by
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Project Number
1940110459

Date
October 2025

EDH COSTCO PROJECT NORTH SITE REMAINDER AREA TECHNICAL REPORT EL DORADO HILLS, CALIFORNIA

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ACRONYMS AND ABBREVIATIONS

| Acronym | Definition |
|-------------------|---|
| AQ | air quality |
| CalEEMod | California Emissions Estimator Model® |
| CAP | criteria air pollutants |
| CARB | California Air Resources Board |
| CEQA | California Environmental Quality Act |
| CO | carbon monoxide |
| CO _{2e} | carbon dioxide equivalent |
| DPM | diesel particulate matter |
| EDCAQMD | El Dorado County Air Quality Management District |
| EDH | El Dorado Hills |
| EPA | Environmental Protection Agency |
| EV | electric vehicle |
| GHG | greenhouse gas |
| H ₂ S | hydrogen sulfide |
| HI | hazard index |
| hp | horsepower |
| lb | pound |
| MT | metric tonne |
| MTP/SCS | Metropolitan Transportation Plan & Sustainable Communities Strategy |
| MW | megawatts |
| NOA | naturally occurring asbestos |
| NO _x | nitrogen oxides |
| O ₃ | ozone |
| PCAPCD | Placer County Air Pollution Control District |
| PG&E | Pacific Gas and Electric Company |
| PM ₁₀ | particulate matter less than 10 microns in diameter |
| PM _{2.5} | particulate matter less than 2.5 microns in diameter |
| ROG | reactive organic gases |
| RTP | Regional Transportation Plan |
| SACOG | Sacramento Area Council of Governments |
| SO ₂ | sulfur dioxide |
| SO _x | sulfur oxides |
| TAC | toxic air contaminant |
| TDM | Transportation Demand Management |
| VMT | vehicle miles travelled |
| VOC | volatile organic compound |

1. INTRODUCTION

Ramboll Americas Engineering Solutions, Inc. (Ramboll) was retained to prepare a Technical Report on the air quality (AQ), greenhouse gas (GHG), and energy impacts for potential future development in the North Site Remainder Area ("Remainder Area Development"), in addition to the AQ, GHG, and Energy technical reports for the proposed El Dorado Hills (EDH) Costco Project located north of the Silva Valley Parkway/US 50 interchange in the El Dorado Hills community area of the unincorporated El Dorado County in California. For simplicity, the North Site Remainder Area and the proposed EDH Costco Project are collectively referred to hereafter as the proposed Project.

This Technical Report analyzes the AQ, GHG, and energy impacts of the potential Remainder Area Development at a program/plan level. Specifically, it describes the maximum development assumptions for the Remainder Area Development and estimates criteria air pollutant emissions, GHG emissions, and energy use associated with the construction and operations of this development. Additionally, this report evaluates the potential aggregate AQ, GHG, and energy impacts of the proposed Project (both the North Site Remainder Area and the EDH Costco Project).

1.1 Existing Conditions

The Project site is currently vacant grassland with scattered oak trees and seasonal drainage features. There are no permanent structures on the site. The southern edge of the property directly abuts the US 50 right-of-way, while the western boundary is adjacent to Clarksville Crossing. An approximate 7.75-acre portion of the northern site is reserved for a planned future extension of Country Club Drive, which is not part of the proposed Project.

Surrounding land uses include:

- North: Single-family residential uses and Oak Meadow Elementary School
- East: Vacant land, Tong Road, and single-family residential uses
- South: U.S. Highway 50 and Tong Road
- West: Clarksville Crossing roadway, open space, and undeveloped land

1.2 Potential Development in the North Site Remainder Area

An approximately 13.79-acre out-parcel on the North Site would remain undeveloped at this time (North Site Remainder Area). The EDH Costco Project proposes no development for the North Site Remainder Area. However, future development of the North Site Remainder Area would be made more reasonably foreseeable by the proposed annexation of the entire North Site into the El Dorado Irrigation District and the El Dorado Hills Fire Department service areas. Since such annexations are assumed to facilitate possible future development of the North Site Remainder Area, even though there is not even a conceptual or contemplated plan for build out of that land, this analysis conservatively assumes that such land would be developed consistent with the General Plan and zoning designations and density. The assumed potential commercial development of the North Site Remainder Area is approximately 138,000 square feet and 316 employees. The future extension of Country Club Drive (County Capital Improvement Project No. 36105008), when constructed by the County, would occupy a portion of the North Site near its northern edge, though the future extension is an independent project proposed by, and to be undertaken by, the County and is not analyzed as a part of the proposed Project.

2. SIGNIFICANCE THRESHOLDS

The Remainder Area Development would be adjacent to the EDH Costco Project and is subject to the identical regulatory settings and significance thresholds previously described for the EDH Costco Project in the technical reports.^{1,2,3} The analysis provided in this technical memorandum evaluates whether the Project would result in any potentially significant impacts regarding the following questions:

- Threshold AQ-1.** Would the Project conflict with or obstruct implementation of the applicable air quality plan?
- Threshold AQ-2.** Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?
- Threshold AQ-3.** Would the Project expose sensitive receptors to substantial pollutant concentrations?
- Threshold AQ-4.** Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?
- Threshold GHG-1.** Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Threshold GHG-2.** Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?
- Threshold ENE-1.** Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?
- Threshold ENE-2.** Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

2.1 Approach to Significance

As described in Section 3.2 of the EDH Costco Project Air Quality Technical Report, the El Dorado County Air Quality Management District (EDCAQMD) has established significance thresholds to assess the impacts of project-related construction and operational emissions, in its California Environmental Quality Act (CEQA) Guide. Table 3-1 in the EDH Costco Project Air Quality Technical Report shows the quantitative mass daily thresholds for construction and operation as adopted by the EDCAQMD reactive organic gases (ROG) and nitrogen oxides (NO_x) emissions. The analysis summarized in this report estimates program/plan level construction and operational mass emissions for the proposed Project and compares the emissions to these significance thresholds.

EDCAQMD has also established significance thresholds for other criteria air pollutants (CAPs) including carbon monoxide (CO), particulate matter less than 10 microns in diameter (PM₁₀), sulfur dioxide (SO₂), nitrogen dioxide, sulfates, lead, hydrogen sulfide (H₂S), and visibility-reducing particles. Project-related emissions of these pollutants are considered to

¹ Ramboll. 2025. EDH Costco Project Air Quality Technical Report.

² Ramboll. 2025. EDH Costco Project Greenhouse Gas Technical Report.

³ Ramboll. 2025. EDH Costco Project Energy Technical Report.

have significant impacts if these emissions will cause or contribute to a violation of the applicable national or state ambient air quality standard. The EDCAQMD provides screening techniques to evaluate if a project's CAP emissions would have a less-than-significant impact in Chapters 4 and 6 of the EDCAQMD CEQA Guide.⁴ This analysis in this report estimates the program/plan level construction and operational mass emissions of CO, PM₁₀, sulfur oxides (SO_x), and NO_x for the proposed Project and evaluates the significance of their impacts using these screening techniques established in the EDCAQMD CEQA Guide.⁵

The EDCAQMD has also established significance thresholds to assess health risk impacts of TACs from project-related emission sources on nearby sensitive receptors including residents and other human populations, which are applicable to the program-level impact analysis in this report.⁶ These include a maximum incremental cancer risk of one-in-a-million (or ten-in-a-million if best available control technology for toxics (T-BACT) is applied), and incremental chronic and acute hazard indices (HIs) of 1. The analysis summarized in this report evaluates the human health risk impacts from on-site construction and operational emissions against these significance thresholds established by EDCAQMD.

This Technical Report also performs a qualitative assessment of odors from the proposed Project to evaluate if they would have the potential to generate odorous emissions that would meet the statutory definition for nuisance, in accordance with the EDCAQMD CEQA Guide.⁷

This report, relative to Threshold AQ-1, evaluates whether the proposed Project would conflict with applicable plans related to emissions, including the regional air quality attainment plans. This report, relative to Threshold AQ-2, quantifies the proposed Project's emissions during construction and operations and compares those results to the applicable EDCAQMD thresholds. Relative to Threshold AQ-3, this report includes a CO hotspots analysis and a semi-quantitative assessment of the potential health risk impacts to sensitive receptors. This report, relative to Threshold AQ-4, evaluates the potential for odor-generating activities from the proposed Project.

As discussed in Section 3.2 of the EDH Costco Greenhouse Gas Technical Report, El Dorado County provides some basic information on climate change including an overview of GHG regulations and local, state, and national efforts to address climate change; however, it has not established a quantitative or qualitative guidance to evaluate GHG emission impacts of development projects under CEQA.⁸ Additionally, EDCAQMD has also not set quantitative GHG significance thresholds. In the absence of a quantitative GHG threshold from El Dorado County and EDCAQMD, this Technical Report assessed significance of GHG impacts for Threshold GHG-1 against the Placer County Air Pollution Control District (PCAPCD) GHG significance thresholds (Table 3-1 of the EDH Costco Greenhouse Gas Technical Report), in consultation with EDCAQMD and El Dorado County.

⁴ EDCAQMD. 2002. Guide to Air Quality Assessment. February. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

PCAPCD's GHG significance thresholds are reasonable to assess significance in the absence of a quantitative threshold from EDCAQMD because Placer County is similar to El Dorado County demographically, geographically, and meteorologically. Both Placer County and El Dorado County have similar land use patterns (i.e., they are both heavily made up of rural and suburban areas), with similar rates of population growth. Additionally, both counties have similar terrain and lie within the same air basin. Because of this, PCAPCD's quantitative GHG thresholds were used to assess significance against the Project relative to Threshold GHG-1.

Relative to Threshold GHG-2, this report evaluates whether the Project would conflict with the 2022 Scoping Plan Update,⁹ Sacramento Area Council of Governments' (SACOG's) 2020 future Metropolitan Transportation Plan & Sustainable Communities Strategy (MTP/SCS),¹⁰ and the El Dorado County Regional Transportation Plan (RTP) 2020-2040.¹¹

This report evaluates the proposed Project's energy consumption against the six categories of potential energy-related environmental impacts from Appendix F of the CEQA Guidelines:

1. The Project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the Project including construction, operation, maintenance and/or removal. If appropriate the energy intensiveness of materials may be discussed.
2. The effects of the Project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the Project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the Project complies with existing energy standards.
5. The effects of the Project on energy resources.
6. The Project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

This report, relative to Threshold ENE-1, assesses the proposed Project's electricity, natural gas, and fossil fuel consumption during construction and operation by way of the six questions above. This report, relative to Threshold ENE-2, evaluates whether the proposed Project would conflict with applicable plans related to renewable energy and energy efficiency.

⁹ CARB. 2022. 2022 CARB Scoping Plan Update - Appendix D, Local Actions. Available at: <https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf>. Accessed: October 2025.

¹⁰ SACOG. 2020. 2020 SACOG MTP/SCS. Available at: <https://www.sacog.org/home/showpublisheddocument/76/638212804736270000>. Accessed: October 2025.

¹¹ El Dorado County Transportation Commission. 2020. El Dorado County Regional Transportation Plan 2020-2040. November 5. Available at: <https://www.edctc.org/files/2859e4e3f/RTP+2040.pdf>. Accessed: October 2025.

3. EMISSIONS INVENTORIES AND ENERGY PROJECTIONS

This section provides a brief description of the methodology that Ramboll used to develop CAP, GHG, and energy inventories associated with the Remainder Area Development, which include one-time emissions from construction and long-term operational emissions. This section also presents the CAP, GHG, and energy inventories of the North Site Remainder Area and the proposed Project.

The analysis in this report utilized the California Emissions Estimator Model (CalEEMod) version 2022.1 methodology to quantify CAP and GHG emissions for the Remainder Area Development (**Appendix A**). This report presents assumptions only when they differ from the analysis for the EDH Costco Project, detailed in the EDH Costco Project's technical reports. Unless otherwise stated, CalEEMod default parameters were used to estimate the emission inventories.

As presented in **Section 1**, the Remainder Area Development would, at a maximum, develop 138,000 square feet of commercial/retail land uses, categorized as regional shopping center in CalEEMod. The remaining area of the parcel is conservatively assumed to be developed into asphalt-paved parking lots, totaling approximately 10.6 acres. The land use assumptions used to generate CalEEMod default construction and operational activities are included in **Appendix A**.

Construction of the North Site Remainder Area is assumed to start as early as May 2027, immediately after the EDH Costco Project construction concludes. Operation of the North Site Remainder Area is assumed to start as soon as the construction concludes.

3.1 Construction Emission Inventories and Energy Projection

Construction schedule, off-road equipment activities and on-road vehicle trip assumptions are provided in **Appendix B**. Because the material movement volumes required to construct in the Remainder Area are currently unknown, they are conservatively assumed to be the same as EDH Costco Project's Construction Scenario 2.

Criteria Air Pollutant Inventory

Average daily construction emissions for each quarter of the North Site Remainder Area construction are calculated based on CalEEMod outputs and are included in **Appendix C**.

Table 3-1 summarizes the average daily criteria pollutant emissions from construction of the North Site Remainder Area as compared to the applicable EDCAQMD thresholds. As shown in this table, the average daily unmitigated emissions of ROG and NO_x from the construction of the Remainder Area Development are below EDCAQMD's thresholds for construction. While EDCAQMD has not adopted mass daily numerical thresholds for other CAP emissions from construction, the EDCAQMD CEQA Guide¹² states that if ROG and NO_x exhaust emissions from construction are deemed not significant, then exhaust emissions of CO and PM₁₀ may also be deemed not significant. Hence, air quality impacts of all CAPs (ROG, NO_x, CO, and

¹² EDCAQMD. 2002. Guide to Air Quality Assessment. February. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

PM₁₀) from the exhaust of construction equipment and on-road vehicles associated with the construction of the North Site Remainder Area are less than significant.

The EDCAQMD CEQA Guide¹³ states that fugitive dust PM₁₀ emissions may be assumed to be not significant, if the project complies with EDCAQMD Rule 223 and Rule 223-1 for fugitive dust control by implementing control measures that will prevent visible dust beyond the project property lines. The proposed Project will comply with these fugitive dust control rules. Hence, the air quality impacts of fugitive dust emissions from the construction North Site Remainder Area are less than significant.

North Site Remainder Area construction activities are expected to generate negligible emissions of SO₂, sulfates, lead, and H₂S. Therefore, the air quality impacts of these emissions from the construction of the North Site Remainder Area are also less than significant.

Although EDCAQMD has established separate daily mass significance thresholds for short-term construction and long-term operational phases of development projects, this analysis conservatively compares the combined average daily emissions from the construction of the Remainder Area land and the EDH Costco Project operation to EDCAQMD's mass daily construction thresholds. As shown in **Table 3-2**, these combined unmitigated average daily emissions exceed EDCAQMD's construction threshold for ROG but remain below the threshold for NO_x.

Mitigated Criteria Air Pollutant Inventory

In order to ensure that the combined average daily ROG emissions from the construction of the Remainder Area Development and the EDH Costco Project operation are below the EDCAQMD's mass daily construction thresholds, the following mitigation measure will be implemented during the construction of the Remainder Area.

- **Mitigation Measure 3.2-2: Architectural Coating Volatile Organic Compound (VOC) Limits for Development of the North Site Remainder Area**

Future building construction of the North Site Remainder Area shall only use architectural coatings with a VOC content not exceeding 100 grams per liter during construction for all interior and exterior spaces. This requirement shall be included in plans submitted for review by the County prior to the issuance of building permits.

Additionally, the following mitigation measures that will be implemented during the construction of the EDH Costco Project to address health risk impacts and asbestos dust will also apply to the construction of the Remainder Area Development:

- **Mitigation Measure 3.2-4a: Apply Tier-4 Emission Standards to Diesel-Powered Off-Road Equipment**

Construction equipment greater than 50 horsepower (hp) used at the site shall meet Environmental Protection Agency (EPA) Tier 4 Final emission standards for PM₁₀ and particulate matter less than 2.5 microns in diameter (PM_{2.5}), if available. If Tier 4 Final equipment is not available, all construction equipment larger than 50 hp used at the site shall meet EPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to California Air Resources Board (CARB) Level 3 verifiable

¹³ Ibid.

diesel emission control devices. This requirement shall apply to the construction of the Costco project and construction of the North Site Remainder Area.

- **Mitigation Measure 3.2-4b: Implement Asbestos Dust Mitigation Consistent with EDCAQMD Rule 223-1**

An Asbestos Dust Mitigation Plan shall be prepared and submitted to the EDCAQMD and the County for review and approval by EDCAQMD for implementation during construction on the Costco project, future development of the North Site Remainder Area, and for off-site roadway improvements (if the presence of naturally occurring asbestos (NOA) is confirmed). The Asbestos Dust Mitigation Plan shall comply with the El Dorado County Code Chapter 8.44 (Asbestos and Dust Protection) and EDCAQMD Rule 223-2, which provides performance standards for ensuring that adverse impacts do not result from asbestos dust during construction.

Table 3-3 summarizes the average daily mitigated criteria pollutant emissions from construction of the North Site Remainder Area as compared to the applicable EDCAQMD thresholds. As shown in this table, the average daily unmitigated emissions of ROG and NO_x from the construction of the Remainder Area Development are below EDCAQMD's thresholds for construction. While EDCAQMD has not adopted mass daily numerical thresholds for other CAP emissions from construction, the EDCAQMD CEQA Guide¹⁴ states that if ROG and NO_x exhaust emissions from construction are deemed not significant, then exhaust emissions of CO and PM₁₀ may also be deemed not significant. Hence, air quality impacts of all CAPs (ROG, NO_x, CO, and PM₁₀) from the exhaust of construction equipment and on-road vehicles associated with the construction of the North Site Remainder Area are less than significant.

The EDCAQMD CEQA Guide¹⁵ states that fugitive dust PM₁₀ emissions may be assumed to be not significant, if the project complies with EDCAQMD Rule 223 and Rule 223-1 for fugitive dust control by implementing control measures that will prevent visible dust beyond the project property lines. The proposed Project will comply with these fugitive dust control rules. Hence, the air quality impacts of fugitive dust emissions from the construction North Site Remainder Area are less than significant.

North Site Remainder Area construction activities are expected to generate negligible emissions of SO₂, sulfates, lead, and H₂S. Therefore, the air quality impacts of these emissions from the construction of the North Site Remainder Area are also less than significant.

Although EDCAQMD has established separate daily mass significance thresholds for short-term construction and long-term operational phases of development projects, this analysis conservatively compares the combined average daily mitigated emissions from the construction of the Remainder Area land and the EDH Costco Project operation to EDCAQMD's mass daily construction thresholds. As shown in **Table 3-4**, with the inclusion of **Mitigation Measure 3.2-2**, which involves using low VOC paints during construction of the Remainder Area land uses, the combined average daily construction and operation emissions are below EDCAQMD's construction mass daily significance thresholds for both ROG and NO_x.

¹⁴ EDCAQMD. 2002. Guide to Air Quality Assessment. February. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

¹⁵ Ibid.

Greenhouse Gas Emissions Inventory

GHG emissions associated with the construction of the North Site Remainder Area are estimated using CalEEMod (**Appendix A**) and summarized in **Table 3-5**. As shown in **Table 3-5**, the annual GHG emissions associated with the construction of the North Site Remainder Area are less than the PCAPCD's GHG significance threshold for construction.¹⁶

Energy Projection

Energy consumption associated with the construction of the North Site Remainder Area are estimated using methodologies described in Section 4.1 of the EDH Costco Energy Technical Report and summarized in **Table 3-6**. Additional details on the fuel consumption of off-road construction equipment and on-road vehicle use during the North Site Remainder Area construction are provided in **Appendix D**.

3.2 Operational Emission Inventories and Energy Projection

A summary of the key assumptions associated with the operation of the North Site Remainder Area including mobile source activity, County-specific consumer product emission factors, and GHG emission factors for electricity are provided in **Appendix E**. These assumptions were incorporated into the CalEEMod model run in **Appendix A**.

Criteria Air Pollutant Inventory

Table 3-7 summarizes the maximum daily criteria air pollutant emissions associated with the operation of the North Site Remainder Area and the EDH Costco Project. As shown in this table, the maximum daily ROG and NO_x emissions associated with proposed Project (North Site Remainder Area and EDH Costco Project) operation are below EDCAQMD's mass daily significance thresholds for operation.

While EDCAQMD has not adopted mass daily numerical thresholds for other CAP emissions, it considers a project to have a significant impact on air quality if it will cause or contribute significantly to a violation of the National Ambient Air Quality Standards or California Ambient Air Quality Standards for CO, PM₁₀, SO₂, sulfates, lead, H₂S.

The EDCAQMD CEQA Guide¹⁷ states that development projects, with land use types similar to the proposed Project, that are deemed less than significant for ROG and NO_x emissions based on land use size screening criteria, can also be considered less than significant for CO emissions. Using this screening approach, we can consider the air quality impacts of CO emissions from the proposed Project operation to be less than significant because the proposed Project's ROG and NO_x emissions are less than EDCAQMD's mass daily significance thresholds. Hence, the air quality impacts of operational CO emissions from the proposed Project are less than significant.

The EDCAQMD CEQA Guide¹⁸ states that PM₁₀ emissions from land development projects primarily associated with gasoline-powered vehicles may be assumed to be insignificant if the projects do not generate heavy-duty diesel vehicle trips in greater proportion than the

¹⁶ PCAPCD CEQA Handbook. 2017. Chapter 2 Thresholds of Significance. Available at: <https://www.placerair.org/DocumentCenter/View/2047/Chapter-2-Thresholds-of-Significance-PDF>. Accessed: October 2025.

¹⁷ EDCAQMD. 2002. Guide to Air Quality Assessment. February. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

¹⁸ Ibid.

general mix of such trips in public roadways. The proposed Project is not expected to generate heavy-duty diesel vehicle trips in greater proportion than the general mix of such trips in public roadways in the vicinity of the Project site and the air quality impacts of operational PM₁₀ emissions from the proposed Project are less than significant.¹⁹

The EDCAQMD CEQA Guide²⁰ states that emissions associated with project operations that are less than 10 pounds per day of a pollutant may be presumed to have impacts that are not significant for that pollutant. Since SO_x emissions associated with the proposed Project operation are less than 10 pounds per day (**Table 3-7**), emissions of these pollutants are less than significant.

The proposed Project is a development project that is not a significant source of lead, sulfates, and H₂S. Hence, the emissions of these pollutants are less than significant.

Finally, according to the EDCAQMD CEQA Guide,²¹ visibility impacts from development projects can be considered less than significant. Therefore, the proposed Project impacts on visibility are less than significant.

Greenhouse Gas Emissions Inventory

Table 3-8 summarizes the annual operational GHG emissions associated with the operation of the proposed Project (3,954 metric tonnes of carbon dioxide equivalent emissions per year (MT CO_{2e} per year) for the North Site Remainder Area and the EDH Costco Project). Because the exact energy efficiency and sustainability features of the North Site Remainder Area are not known at the time of preparation of this report, GHG reduction features of EDH Costco Project were not assumed for the Remainder Area Development.

PCAPCD CEQA Guidelines²² have a three-tiered approach for assessing GHG emissions from land use projects. For projects with annual operational GHG emissions between 1,100 and 10,000 MT CO_{2e} per year, PCAPCD recommends applying its GHG Efficiency Matrix to determine significance.

As shown in **Table 3-8**, the proposed Project's estimated annual operational emissions fall within this range. Based on a total building square footage of 303,200 square feet (138,000 square feet for the North Site Remainder Area and 165,200 square feet for the EDH Costco Project), the calculated GHG efficiency for the proposed Project is 13.04 MT CO_{2e} per 1,000 square feet.²³ This is below the applicable conservative threshold of 26.5 MT CO_{2e} per 1,000 square feet for nonresidential projects located in urban areas, as defined by PCAPCD.

¹⁹ As noted in Section 4.3.6 of the Air Quality Technical Report, the heavy-duty diesel vehicle trips generated by the EDH Costco Project are less than 0.25% of the total Project trips. Additionally, for purposes of this analysis the heavy-duty diesel vehicle trips generated by the Remainder Area as assumed to be similar to the general fleet mix in El Dorado County, based on the default fleet mix in CalEEMod. Hence, the fraction of heavy-duty diesel vehicle trips generated by the proposed Project (EDH Costco and North Site Remainder Area) will be lower than the approximately 6% of heavy-duty diesel trucks operating on the roads in El Dorado County.

²⁰ Ibid.

²¹ Ibid.

²² PCAPCD CEQA Handbook. 2017. Chapter 2 Thresholds of Significance. Available at: <https://www.placerair.org/DocumentCenter/View/2047/Chapter-2-Thresholds-of-Significance-PDF>. Accessed: October 2025.

²³ Note, the Proposed Project GHG efficiency would be 16.94 MT CO_{2e} per 1,000 square feet if the analysis accounted for the greenhouse gas emission benefits associated with only the mandatory electric vehicle charging requirements (1,097 kW total power) in the 2025 California Green Building Standards Code. This value is also below the applicable conservative threshold of 26.5 MT CO_{2e} per 1,000 square feet for non-residential projects located in urban areas, as defined by PCAPCD.

Therefore, the proposed Project's operational GHG emissions are considered to be less than significant.

Energy Projection

Energy consumption associated with the operation of the North Site Remainder Area are estimated using methodologies described in Section 4.2 of the EDH Costco Energy Technical Report and summarized in **Table 3-9**. Additional details on the operational electricity, natural gas, diesel and gasoline consumption are provided in **Appendix F**.

4. PROGRAM-LEVEL AIR QUALITY IMPACT ANALYSIS

This section assesses the significance of the proposed Project's air pollutant emissions for purposes of CEQA.

4.1 Threshold AQ-1: Would the Project conflict with or obstruct implementation of the applicable air quality plan?

According to the EDCAQMD CEQA Guide,²⁴ development projects in the Mountain Counties Air Basin portion of the County are considered consistent with the applicable air quality plan if:

1. The Project does not require a change in the existing land use designation (e.g., a general plan amendment or rezone), and projected emissions of ROG and NO_x from the Project are equal or less than the emissions anticipated for the site if developed under the existing land use designation;
2. The Project does not exceed the "project alone" significance criteria;
3. The lead agency for the Project requires the Project to implement any applicable emission reduction measures contained in and/or derived from the air quality attainment plan; and
4. The Project complies with all applicable district rules and regulations.

El Dorado County's General Plan designates the Project site as Commercial (C). Zoning includes Commercial Regional-Planned Development (CR-PD), with smaller areas of Commercial Limited and Transportation Corridor. Once operational, the proposed Project would be a regional commercial center, which is consistent with the existing designation of the County's General Plan and zoning. Hence, the anticipated growth associated with the Project is generally accounted for in the 2023 Ozone Plan²⁵ and would be accounted for in forthcoming attainment plans.

As described in **Section 3.1** and **Section 3.2**, the air quality impacts of CAPs associated with the proposed Project construction and operation are less than significant. Therefore, the proposed Project does not exceed the "project alone" significance criteria.

The applicable air quality attainment plans for the Project area are the Sacramento Regional 8-hour Ozone Attainment and Reasonable Further Progress Plan²⁶ and PM_{2.5} Maintenance Plan and Redesignation Request.²⁷ As such the proposed Project would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under these plans (see **Section 4.2** below for further details). Hence, the

²⁴ EDCAQMD. 2002. Guide to Air Quality Assessment. February. Available at:

<https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

²⁵ Sacramento Region Air Quality Plans. Available at: <https://ww2.arb.ca.gov/our-work/programs/california-state-implementation-plans/nonattainment-area-plans/sacramento-region>. Accessed: October 2025.

²⁶ Ibid.

²⁷ EDCAQMD, Placer County Air Pollution Control District, SMAQMD, and Yolo-Solano Air Quality Management District. PM_{2.5} Implementation/Maintenance Plan and Redesignation Request for Sacramento PM_{2.5} Nonattainment Area. October 24. Available at: <http://www.airquality.org/ProgramCoordination/Documents/PM2.5%20Imp%20and%20Redesignation%202013.pdf>. Accessed: October 2025.

proposed Project is not required to implement any additional mitigation measures contained in these plans.

As described in **Section 3.1** of this report and Sections 4.2.3 and 5.1.1 of the EDH Costco Project Air Quality Technical Report the proposed Project would comply with EDCAQMD Rules 223-1 and 223-2 for fugitive dust control²⁸ and asbestos hazard mitigation²⁹ during construction. The proposed Project is located in an area where NOA could be present.³⁰ Although the proposed Project's Geotechnical Study³¹ concluded that the potential for NOA to be encountered at levels at or exceeding regulatory threshold level is considered low, the proposed Project would implement asbestos dust mitigation measures consistent with EDCAQMD Rule 223-1 through the implementation of **Mitigation Measure 3.2-4b**. The proposed Project would also comply with all other applicable EDCAQMD rules.

Therefore, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plans for the Project region.

4.2 Threshold AQ-2: Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

As discussed in the EDH Costco Project Air Quality Technical Report, the Project region is currently designated as non-attainment for the State 1-hour ozone (O₃) standard, the federal and the State 8-hour O₃ standard, the State PM₁₀ standards, and the federal 24-hour PM_{2.5} standard.

The two primary precursors for O₃ formation are ROG and NO_x. Table 4-12 of the EDH Costco Air Quality Report, and **Table 3-1** and **Table 3-7** of this report present the average daily and maximum daily ROG and NO_x emissions associated with the proposed Project construction and operation. Emissions of these O₃ precursors (ROG and NO_x) are below the EDCAQMD mass daily significance thresholds. Additionally, as described in Section 4.2.6 of the EDH Costco Air Quality Report and **Section 3** of this report, impacts of particulate matter emissions from the proposed Project construction and operation are less than significant. Hence, the proposed Project would not result in a cumulatively considerable net increase in any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard.

²⁸ EDCAQMD. 2005. Rule 223-1 Fugitive Dust – Construction, Bulk Material Handling, Blasting, Other Earthmoving Activities and Carryout and Trackout Prevention. Available at: <https://ww2.arb.ca.gov/sites/default/files/classic/technology-clearinghouse/rules/RuleID809.pdf>. Accessed: October 2025.

²⁹ EDCAQMD. 2005. Rule 223-2 Fugitive Dust – Asbestos Hazard Mitigation. Available at: <https://ww2.arb.ca.gov/sites/default/files/classic/technology-clearinghouse/rules/RuleID810.pdf>. Accessed: October 2025.

³⁰ El Dorado County. Asbestos Review Areas, Western Slope, County of El Dorado, State of California. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/construction-dust-rules/asbestos-review-map-8-22-18.pdf>. Accessed: October 2025.

³¹ Kleinfelder, 2024. Geotechnical Study, Proposed Costco Fuel Facility, Silva Valley Parkway, El Dorado Hills, California, CW# 18-0487. December 2024.

4.3 Threshold AQ-3: Would the Project expose sensitive receptors to substantial pollutant concentrations?

4.3.1 CO Hotspots

As discussed in Section 6.2 of the AQ Technical Report, according to the PCAPCD guidance, the CO emissions from a proposed Project's operations would be less than significant if CO emissions from vehicle operations are less than 550 pounds per day (lbs/day). As shown in **Table 3-7**, the CO emissions from mobile sources associated with the proposed Project are less than 550 lbs/day. Thus, the increase in CO emissions from the project-related increased traffic volumes at affected intersections and the on-site gasoline fueling station are less than significant and the proposed Project would not expose sensitive receptors to substantial concentrations of localized CO.

4.3.2 Health Risk Thresholds

As described in Section 7.3.1 of the EDH Costco Project Air Quality Technical Report, the cancer risk, non-cancer chronic and acute HIs at the maximally impacted residential and other sensitive receptors associated with the mitigated toxic air contaminant (TAC) emissions from the EDH Costco Project construction and operation are below EDCAQMD significance thresholds. Specifically, the maximum incremental cancer risk, non-cancer chronic and acute HIs for the Costco EDH Project are estimated to be 4.13 in a million, 0.02, and 0.50 respectively (Refer to Table 5-5 in the EDH Costco Project Air Quality Technical Report).

The primary sources of TAC emissions associated with the North Site Remainder Parcel are diesel particulate matter (DPM) emissions from construction equipment, construction trucks, and operational trucks. The construction equipment, construction truck activity, and operational truck activity associated with the development of the North Site Remainder Parcel are generally expected to be similar/lower than that of the EDH Costco Project as maximum square footage of the of commercial/retail land uses that would be developed on the North Site Remainder Area (138,000 square feet) is lower than the square footage of the warehouse that would be developed by the EDH Costco Project (165,000 square foot). Hence, the DPM emissions from the North Site Remainder Parcel and its associated cancer and chronic impacts will be similar or less than that associated with the EDH Costco Project. As a result, the maximum cancer risk and chronic HI associated with the proposed Project (North Site Remainder Area and EDH Costco Project) are expected to be less than 8.5 in a million and 0.05 respectively which are below EDCAQMD significance thresholds.

Additionally, since the North Site Remainder Parcel is expected to be developed as general retail land uses, we do not expect it to be a significant source of TACs that have acute impacts. Therefore, the acute HI for the proposed Project (North Site Remainder Area and EDH Costco Project) is expected to be similar to that of the EDH Costco Project which is below EDCAQMD significance threshold.

Therefore, the Project is not expected to expose sensitive receptors to substantial TAC concentrations.

4.4 Threshold AQ-4: Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

According to the EDCAQMD CEQA Guide,³² common types of facilities known to produce odors include wastewater treatment plants, landfills and composting facilities, petroleum refineries, manufacturing plants such as asphalt batch plants and chemical/fiberglass manufacturing, painting and coating operations, food processing plants, rendering plants, and coffee roasters. The proposed Project would not include any of these land uses that have been identified by the EDCAQMD as being associated with odor generation and thus would not result in odors adversely affecting a substantial number of people. In addition, the proposed Project does not propose to locate any sensitive receptors near an existing source of objectional odors.

4.4.1 Construction Odors

Construction activities associated with potential odor include equipment exhaust (i.e., from off-road construction equipment), paving, and architectural coating. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more fuel intensive than is used for comparable construction activities, nor equipment that would not conform to current emission standards. It is expected that these impacts would be short-term in duration and typical of comparable activities, therefore the impacts would not adversely affect a substantial number of people and would be less than significant.

4.4.2 Operational Odors

As discussed above, the proposed Project is a commercial and retail development and does not propose any odor-generating facilities identified by the EDCAQMD. However, the proposed Project does include a gasoline fueling station. During the operation of the Project, VOCs released at the gasoline station due to refueling, spillage, and hose permeation would be controlled to minimize odors (i.e., nozzles equipped with Phase II Enhanced Vapor Recovery systems). Therefore, odor impact from the gasoline fueling station would not affect a substantial number of people and would be less than significant.

There may be some potential for other small-scale, localized odor issues to emerge around some of the proposed Project sources, such as solid waste collection, wastewater or stormwater collection/conveyance, or food preparation. However, these localized short-term odors would not affect a substantial number of people. Therefore, the proposed Project's operational odor impact is considered less than significant.

³² EDCAQMD. 2002. Guide to Air Quality Assessment. February. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

5. PROGRAM-LEVEL GREENHOUSE GAS EMISSIONS IMPACT ANALYSIS

This section discusses the assessment of the proposed Project's GHG emissions against the CEQA significance thresholds outlined in **Section 2**.

5.1 Threshold GHG-1: Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

As noted in **Section 2.1**, in the absence of a quantitative GHG threshold from El Dorado County and EDCAQMD, this Technical Report assesses significance of the proposed Project's GHG impacts for Threshold 1 against the PCAPCD's GHG significance thresholds.

Total GHG emissions for each year of the proposed Project construction are summarized in Table 4-13 of the EDH Costco Project Greenhouse Gas Technical Report and **Table 3-5** of this report. As shown in these tables, the annual GHG emissions associated with the construction of the proposed Project (1,708 MT CO₂e in 2026, 1,866 MT CO₂e in 2027, and 197 MT CO₂e in 2028) are less than the PCAPCD's bright-line GHG significance threshold of 10,000 MT CO₂e/year for construction.

The proposed Project's annual operational GHG emissions were estimated to be 3,954 MT CO₂e per year (**Table 3-8**). These emissions are between PCAPCD's de minimis GHG emissions level (1,100 MT CO₂e/yr) and bright-line GHG significance threshold (10,000 MT CO₂e/yr) for project operation. Therefore, to evaluate the GHG impacts we estimated the proposed Project's efficiency metric in accordance with the PCAPCD's Air Quality Handbook.³³ This calculated efficiency metric (13.04 MT CO₂e per 1,000 square feet) shown in **Table 3-8**, is less than the lower of the two applicable efficiency matrix thresholds in PCAPCD's Air Quality Handbook for the operational phase of land use projects:

1. 26.5 MT CO₂e/1,000 square feet for a project in an urban land use setting; and
2. 27.3 MT CO₂e/1,000 square feet for a project in rural land use setting.

Therefore, the GHG emissions associated with the construction and operation of the proposed Project would not have a significant impact on the environment.

5.2 Threshold GHG-2: Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

As noted in **Section 2.1**, this Technical Report assesses the significance of the proposed Project's GHG impacts for Threshold 2 based on whether it would conflict with the 2022 Scoping Plan Update,³⁴ SACOG's 2020 MTP/SCS,³⁵ and El Dorado County RTP 2020-2040.³⁶

³³ PCAPCD. 2017. 2017 CEQA Handbook Chapters. Available at: <https://www.placerair.org/1801/CEQA-Handbook>. Accessed: October 2025.

³⁴ CARB. 2022. 2022 CARB Scoping Plan Update - Appendix D, Local Actions. Available at: <https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf>. Accessed: October 2025.

³⁵ SACOG. 2020. 2020 SACOG MTP/SCS. Available at: <https://www.sacog.org/home/showpublisheddocument/76/638212804736270000>. Accessed: October 2025.

³⁶ El Dorado County Transportation Commission. 2020. El Dorado County Regional Transportation Plan 2020-2040. November 5. Available at: <https://www.edctc.org/files/2859e4e3f/RTP+2040.pdf>. Accessed: October 2025.

5.2.1 2022 Scoping Plan Update

The 2022 Scoping Plan Update has a table of priority GHG reduction strategies that can be utilized by local governments. The three main priority areas addressed in this table are “Transportation Electrification”, “vehicle miles travelled (VMT) Reduction”, and “Building Decarbonization”.³⁷ These measures represent the core strategies that local jurisdictions in California can implement to reduce GHGs in alignment with State goals.

The proposed Project would not conflict with the implementation of the 2022 Scoping Plan Update and Statewide Emission Reduction Targets and includes the several features and mitigation measures that support the three main priority areas for GHG reduction as described below.

While project-level design features and details are not available for the potential developments in the North Site Remainder Area at the time of preparation of this program-level analysis, the North Site Remainder Area would introduce retail/commercial land uses that are consistent with the zoning designation in a highway hub. Hence, the proposed Project, i.e., the North Site Remainder Area and the Costco EDH Project, would create new employment opportunities. Additionally, the Project site is an infill development located near an El Dorado Transit bus route (50 Express) and bus stop (El Dorado Transit Park & Ride), therefore placing jobs that are accessible via public transit. The El Dorado bus route connects to the larger Sacramento Metropolitan transit network and encourages use of local transit and rail to commute to the proposed Project. Furthermore, the proposed Project is located adjacent to homes, therefore the proposed Project would provide retail and jobs near a housing-rich area served by El Dorado Transit. Lastly, the proposed Project will implement **Mitigation Measure 3.14-2c: Develop a Transportation Demand Management (TDM) Program and Implement VMT Reduction Measures for Subsequent Developments in the North Site Remainder Area** which requires each project applicant of future proposed projects located within the North Site Remainder Area to either demonstrate through a technical analysis that its project would not exceed County VMT thresholds or implement VMT-reducing infrastructure and/or strategies within the commercial facility to mitigate those impacts. If VMT thresholds are exceeded, the applicant shall prepare and submit a TDM Plan to the County for approval, which shall include a series of measures to reduce project-related VMT. Measures may include strategies such as ridesharing initiatives (e.g., carpooling), subsidizing employee use of public transit, and promoting bicycling, walking, and the use of public transit. As noted in Section 5.2.1 of the GHG Technical Report, the EDH Costco Project will meet the Voluntary Tier 1 Electric Vehicle Charging Standards as defined in the 2025 California Green Building Standards Code³⁸ by installing ten direct current fast chargers that provide a total power of 1,800 kW. Additionally, these chargers will be powered by 100% renewable electrical power supplied by Pacific Gas & Electric (PG&E), as Costco has a Clean Energy Contract with PG&E. Furthermore, the Remainder Area will be required to meet the Mandatory Electric Vehicle Charging Standards as defined in the California Green Building Standards Code.

³⁷ CARB. 2022. Final 2022 Scoping Plan Update and Appendices. December. Available at: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>. Accessed: October 2025.

³⁸ 2025 California Green Building Standards Code, Title 24, Part 11. Available online at: <https://codes.iccsafe.org/content/CAGBC2025P1>. Accessed: October 2025.

Additionally, as noted in Section 5.2.1 of the GHG Technical Report, the EDH Costco Project will incorporate several sustainability and energy efficiency measures including green building practices as required by the 2025 California Green Building Standards Code.³⁹ Refer to Section 1.2 of the GHG Technical Report for a detailed listing of these measures. Notably, the EDH Costco Project operations will be powered 100% renewable electrical power supplied by PG&E, as Costco has a Clean Energy Contract with PG&E. Furthermore, the Remainder Area will be required to meet the California Green Building Standards Code, which includes a number of energy-saving requirements for new developments.

Based on the proposed Project elements described above, the Project would not interfere with the implementation of the 2022 Scoping Plan Update and would include elements that support the goals of the plan.

5.2.2 SACOG 2020 MTP/SCS

The proposed Project would not conflict with the State's GHG reduction goals and strategies as discussed in the SACOG's 2020 MTP/SCS,⁴⁰ which fall into four priority policy areas:

1. Build vibrant places for today's and tomorrow's residents;
2. Foster the next generation of mobility solutions;
3. Modernize the way we pay for transportation infrastructure; and
4. Build and maintain a safe, reliable, and multimodal transportation system.

The proposed Project would not conflict with the implementation of the SACOG's 2020 MTP/SCS and has several elements that are expected to support the main priority policy in SACOG's 2020 MTP/SCS. As noted in **Section 5.2.1**, the Project is an infill development that would create new employment opportunities and is located near an El Dorado Transit bus route (50 Express) and bus stop (El Dorado Transit Park & Ride), therefore placing jobs that are accessible via public transit. The El Dorado bus route connects to the larger Sacramento Metropolitan transit network and encourages use of local transit and rail to commute to the Project. Furthermore, the Project is located adjacent to homes, therefore the Project would provide retail and jobs near a housing-rich area served by El Dorado Transit.

Moreover, as noted in **Section 5.2.1**, the proposed Project will implement **Mitigation Measure 3.14-2c: Develop a TDM Program and Implement VMT Reduction Measures for Subsequent Developments in the North Site Remainder Area** which requires each project applicant of future proposed projects located within the North Site Remainder Area to either demonstrate through a technical analysis that its project would not exceed County VMT thresholds or implement VMT-reducing infrastructure and/or strategies within the commercial facility to mitigate those impacts. If VMT thresholds are exceeded, the applicant shall prepare and submit a TDM Plan to the County for approval, which shall include a series of measures to reduce project-related VMT. Measures may include strategies such as ridesharing initiatives (e.g., carpooling), subsidizing employee use of public transit, and promoting bicycling, walking, and the use of public transit.

³⁹ 2025 California Green Building Standards Code, Title 24, Part 11. Available online at: <https://codes.iccsafe.org/content/CAGBC2025P1>. Accessed: October 2025.

⁴⁰ SACOG. 2020. Metropolitan Transportation Plan/Sustainable Communities Strategy. Available at: <https://www.sacog.org/home/showpublisheddocument/76/638212804736270000>. Accessed: October 2025.

Additionally, as noted in Section 5.2.2 of the GHG Technical Report, the EDH Costco Project would implement pedestrian network improvements as part of **Mitigation Measure 3.14-2b**, and would implement several off-site transportation improvements in coordination with the County to address the existing and future needs of the region in the immediate vicinity of the Project site.

Based on the proposed Project elements described above, the Project would not interfere with the implementation of the SACOG's 2020 MTP/SCS and would include elements that support the goals of the plan.

5.2.3 El Dorado County RTP 2020-2040

The proposed Project would not conflict with the El Dorado County 2020-2040 RTP,⁴¹ which includes the following main goals: to improve highways, streets, and regional/inter-regional roadways, public transit, aviation, freight movement, non-motorized transportation, transportation systems management, integrated land use, air quality, and transportation planning, and funding.

The Project supports the objectives of the El Dorado County Regional Transportation Plan by providing sidewalks, bike lanes, and pedestrian connections. As noted in **Section 5.2.1**, the Project is an infill development that would create new employment opportunities and is located near an El Dorado Transit bus route (50 Express) and bus stop (El Dorado Transit Park & Ride), thereby creating jobs that are accessible via public transit. The El Dorado bus route connects to the larger Sacramento Metropolitan transit network and encourages use of local transit and rail to commute to the Project. Furthermore, the Project is located adjacent to homes, therefore the Project would provide retail and jobs near a housing-rich area served by El Dorado Transit.

Additionally, as noted in **Section 5.2.1**, the proposed Project will implement **Mitigation Measure 3.14-2c: Develop a TDM Program and Implement VMT Reduction Measures for Subsequent Developments in the North Site Remainder Area** which requires each project applicant of future proposed projects located within the North Site Remainder Area to either demonstrate through a technical analysis that its project would not exceed County VMT thresholds or implement VMT-reducing infrastructure and/or strategies within the commercial facility to mitigate those impacts. If VMT thresholds are exceeded, the applicant shall prepare and submit a TDM Plan to the County for approval, which shall include a series of measures to reduce project-related VMT. Measures may include strategies such as ridesharing initiatives (e.g., carpooling), subsidizing employee use of public transit, and promoting bicycling, walking, and the use of public transit.

Further, as described in Section 5.2.2 of the GHG Technical Report, the Project would include pedestrian network improvements as part of **Mitigation Measure 3.14-2b**, and would implement several off-site transportation improvements in coordination with the County to address the existing and future needs of the region in the immediate vicinity of the Project site.

Based on the proposed Project elements described above, the proposed Project would not interfere with the implementation of the El Dorado County 2020-2040 RTP and would include elements that support the goals of the plan.

⁴¹ El Dorado County Transportation Commission. 2020. El Dorado County Regional Transportation Plan 2020-2040. November 5. Available at: <https://www.edctc.org/files/2859e4e3f/RTP+2040.pdf>. Accessed: October 2025.

5.3 Summary

As discussed in **Section 5.1**, the proposed Project is expected to result in GHG emissions that are below PCAPCD GHG thresholds for operation and construction. Additionally, as described in **Section 5.2**, the proposed Project would not conflict with the 2022 Scoping Plan Update, SACOG's 2020 MTP/SCS, or the El Dorado County RTP 2020-2040. Therefore, the proposed Project's GHG emissions will be less than significant in the context of Threshold 1 and Threshold 2. Based on the analysis above, the proposed Project's GHG emissions are not cumulatively considerable, and the proposed Project is less than significant for cumulative GHG impacts.

6. PROGRAM-LEVEL ENERGY IMPACT ANALYSIS

This section discusses the assessment of the Project's energy demand against the CEQA significance thresholds outlined in **Section 2**.

6.1 **Threshold ENE-1: Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?**

6.1.1 **Energy Requirements and Energy Use Efficiencies**

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate the energy intensiveness of materials may be discussed.

Construction of the proposed Project (North Site Remainder Area and the EDH Costco Project) would result in one-time energy consumption in the form of gasoline and diesel, shown in **Table 3-6**. There are no unusual characteristics 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 the current emissions standards (and related fuel efficiencies).

The operational energy use of the proposed Project is summarized in **Table 3-7**. As expected, the program-level energy use would be greater than the energy use from the EDH Costco Project. However, neither the EDH Costco Project nor the Remainder Area Development would have unusual project characteristics that would require electricity, gasoline, natural gas, and diesel consumption 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). For example, CARB has adopted an approach to passenger vehicles that combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emissions vehicles in California. As such, operation of the proposed Project is expected to use decreasing amounts of fuel over time, due to advances in fuel economy.

6.1.2 **Local and Regional Energy Supplies**

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The effects of the project on local and regional energy supplies and on requirements for additional capacity.

The off-road construction equipment used during Project construction are primarily diesel-fueled. (see **Table D-1** for additional details on construction of the North Site Remainder Area and Table 4-2 of the EDH Costco Project Energy Technical Report for construction of the EDH Costco Project). Additionally, the fleet mix for construction mobile sources is expected to be gasoline-powered and diesel-powered, based on the CalEEMod default fleet mix for worker, vendor, and hauling vehicles (see **Table D-2** for additional

details on the construction of the North Site Remainder Area and Table 4-4 of the EDH Costco Project Energy Technical Report for construction of the EDH Costco Project). Hence, the proposed Project is not expected to use any natural gas during construction.

As shown in **Table 3-6**, relative to annual countywide fuel usage projections, the proposed Project construction would use up to 0.02% of gasoline, 1.23% of diesel, and 0.000004% of electricity in the year when the most construction would occur (2027). Relative to annual statewide fuel usage projections, the proposed Project construction would use up to 0.00010% of gasoline, 0.00405% of diesel, and 0.00000002% of electricity in the year when the most construction would occur (2027). Because construction of the proposed Project is expected to occur in three years, fuel use during construction would also be temporary and negligible.

Table 3-9 summarizes the proposed Project's operational energy use compared to countywide and statewide fuel usage projections. The estimated electricity usage for the proposed Project operations are anticipated to be approximately 0.57% of the projected countywide demand in 2028, and 0.00272% of the statewide energy demand. The natural gas usage of the proposed Project operations are estimated to be 0.08% of the total countywide natural gas consumption and 0.00024% of the total statewide natural gas consumption. The proposed Project's anticipated gasoline usage is anticipated to be 0.68% of the countywide consumption and 0.00323% of the statewide consumption. As far as the proposed Project's diesel consumption goes, it is estimated to be 1.39% of the projected countywide consumption and 0.0045% of the statewide consumption. Based on these relative percentages, the proposed Project's operational energy usage would not have a substantial impact on the local or regional energy supplies or capacity.

6.1.3 Peak and Base Period Demands

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The effects of the project on peak and base period demands for electricity and other forms of energy.

The proposed Project construction would only include minor pieces of electric-powered equipment and hence would not impact the peak and base period demands for electricity.

The proposed Project operation will not have a substantial impact on the peak and base period demands for electricity or other forms of energy. Further details and reasoning on the peak demand are described below.

In 2023, California's peak grid demand was 44,534 megawatts (MW).⁴² PG&E recorded a peak demand of 19,995 MW in 2023.⁴³ In comparison, the Project's maximum demand is

⁴² California ISO. California ISO Peak Load History 1998 through 2024. Available at: <https://www.caiso.com/documents/californiaisopeakloadhistory.pdf>. Accessed: October 2025.

⁴³ California Energy Commission. 2023. Electricity and Gas Demand Forecast. Available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=253660&DocumentContentId=88907>. Accessed: October 2025.

expected to be approximately 1.9 MW in 2028,⁴⁴ Therefore, the proposed Project's operations will have a relatively negligible effect on statewide and PG&E peak demands.

6.1.4 Existing Energy Standards

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The degree to which the project complies with existing energy standards.

The proposed Project construction requires use of on-road trucks for soil hauling and deliveries, and off-road equipment such as excavators, tractors/loaders/backhoes, forklifts, and graders. The construction activities would comply with the five-minute idling limit in the Commercial Motor Vehicle Idling Regulation⁴⁵ and the Off-Road Regulation.⁴⁶ Additionally, on-road trucks used during Project construction would be compliant with the requirements of the Tractor-Trailer Greenhouse Gas Regulation.⁴⁷

The proposed Project's anticipated operational energy use is summarized in **Table 3-9**. There are no unusual project characteristics that would require the use of gasoline, diesel, natural gas, or electricity that would be more energy intensive than is used for comparable activities, equipment, or vehicles that would not conform to current emissions standards (and related fuel efficiencies). Additionally, as described in Section 5.1.4.2 of the EDH Costco Project Energy Technical Report, the proposed Project would meet or exceed the Title 24 energy efficiency standards in effect at the time of building permit application. Any passenger vehicles and trucks trips generated by the proposed Project would comply with existing and new state-wide vehicle efficiency regulations discussed further in **Section 6.1.6**. Furthermore, the proposed delivery trucks accessing the site would comply with the State's Commercial Motor Vehicle Idling Regulation, similar to the construction vehicles discussed above.

Therefore, the proposed Project will comply with all applicable energy standards and its energy impacts are less than significant.

6.1.5 Energy Resources

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The effects of the project on energy resources.

As discussed in **Sections 6.1.2** and **6.1.3**, the proposed Project's use of energy will not have a substantial effect on statewide or regional energy resources. Hence, the proposed Project will not significantly impact energy resources, and its energy impacts are less than significant.

⁴⁴ This is a conservative estimate since it was derived by dividing the total electricity energy required for the proposed Project operation by the annual operating hours for the proposed Costco warehouse, though some sources of electricity would operate 24 hours per day for every day of the year.

⁴⁵ 13 CCR 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Available at: <https://www.law.cornell.edu/regulations/california/13-CCR-2485>. Accessed: October 2025.

⁴⁶ CARB. Frequently Asked Questions: Regulation for In-Use Off-Road Diesel-Fueled Fleets. Available at: <https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/faq/idlepolicyfaq.pdf>. Accessed: October 2025.

⁴⁷ CARB. Tractor-Trailer Greenhouse Gas Regulation. Available here: <https://ww2.arb.ca.gov/our-work/programs/ttghg-regulation/regulatory-and-guidance-documents>. Accessed: October 2025.

6.1.6 Transportation Energy Use

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Conventional gasoline, diesel, and natural gas vehicles consume gasoline, diesel, or natural gas, whereas electric vehicles (EVs) consume electricity that can be sourced by fossil fuels or renewables. EVs, including battery-electric vehicles and plug-in hybrid electric vehicles, comprise a growing fraction of the passenger vehicles on the roads in California. EV adoption is expected to increase over the upcoming decades due in part to improvements in battery technology and public initiatives and goals. This increase in EV adoption will decrease the fuel requirements due to transportation. New statewide regulations have been instated which will reduce emissions and fuel requirements from cars and trucks. Gasoline, diesel, and natural gas usage for the mobile sources associated with the proposed Project operation are expected to decrease over time as fleets become more fuel-efficient and switch to more electric-powered vehicles. Overall, the proposed Project would not result in wasteful, inefficient, or unnecessary consumption of transportation energy.

6.1.7 Summary

Based on the above analysis of each of the environmental impact factors identified in CEQA Guidelines Appendix F, the potential for the proposed Project to result in wasteful, inefficient, or unnecessary consumption of fuel or energy, and conversely to fail to incorporate energy efficiency measures into equipment use, transportation or other project features is less than significant.

6.2 Threshold ENE-2: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The proposed Project would comply with any applicable local and state plans, regulations, and policies for renewable energy or energy efficiency to the extent required by law. However, because project-level design features and details are not available for the potential developments in the North Site Remainder Area at the time of preparation of this program-level analysis, specific energy efficiency features for the Remainder Area Development will be described in any future applications filed with the County and the associated project-level review of potential environmental impacts under CEQA.

Furthermore, as show in Appendix A of the EDH Costco Project Energy Technical Report, the EDH Costco Project will commit to specific energy efficiency and renewable energy features, including but not limited to, meeting the Voluntary Tier 1 Electric Vehicle Charging Standards as defined in the 2025 California Green Building Standards Code,⁴⁸ installation of efficient irrigation systems and high-efficiency restroom fixtures, use of LED lamps, and use of building surface materials with greater solar reflectivity. Therefore, considered as a whole, the proposed Project would not conflict with or obstruct a state or local Plan for renewable energy or energy efficiency.

⁴⁸ 2025 California Green Building Standards Code, Title 24, Part 11. Available online at: <https://codes.iccsafe.org/content/CAGBC2025P1>. Accessed: October 2025.

TABLES

Table 3-1. Unmitigated Average Daily CAP Emissions for Construction of North Site Remainder Area

El Dorado Hills Costco Project
 El Dorado Hills, California

| North Site Remainder Area Construction Time Period | ROG Emissions ¹ (lbs/day) | NO _x Emissions ¹ (lbs/day) | CO Emissions ¹ (lbs/day) | SO _x Emissions ^{1,2} (lbs/day) | PM ₁₀ Emissions ¹ (lbs/day) | PM _{2.5} Emissions ¹ (lbs/day) |
|---|--------------------------------------|--|-------------------------------------|--|---|--|
| First Quarter | 2.4 | 45 | 24 | 0.24 | 13 | 3.4 |
| Second Quarter | 1.2 | 11 | 15 | 0.028 | 2.1 | 0.58 |
| Third Quarter | 1.2 | 10 | 15 | 0.028 | 2.1 | 0.56 |
| Fourth Quarter | 21 | 7.6 | 12 | 0.020 | 1.5 | 0.40 |
| EDCAQMD Mass Daily Significance Thresholds³ | 82 | 82 | - | - | - | - |
| Do Emissions Exceed Threshold for any quarter of Construction? | NO | NO | - | - | - | - |

Notes:

¹ Obtained from **Table C-1**. Average daily emissions per quarter calculated as the total construction emissions, which include construction of the regional shopping center and parking lot, divided by the number of construction days in each quarter. Project construction emissions assume watering control consistent with EDCAQMD Rule 223-1.

² For purposes of this analysis SO_x emissions are assumed to be equal to SO₂.

³ Obtained from EDCAQMD Guide to Air Quality Assessment Determining Significance of Air Quality Impact Under the California Environmental Quality Act. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

Abbreviations:

CAP - Criteria Air Pollutant

CO - carbon monoxide

EDCAQMD - El Dorado County Air Quality Management District

lb - pound

NO_x - nitrogen oxide compounds

PM₁₀ - particulate matter less than 10 microns in diameter

PM_{2.5} - particulate matter less than 2.5 microns in diameter

ROG - reactive organic gases

SO₂ - sulfur dioxide

SO_x - sulfur oxide compounds

Table 3-2. Unmitigated Combined Average Daily CAP Emissions for Construction of North Site Remainder Area and Operation of Costco EDH Project

El Dorado Hills Costco Project
 El Dorado Hills, California

| North Site Remainder Area Construction Time Period | ROG Emissions ¹ (lbs/day) | NO _x Emissions ¹ (lbs/day) | CO Emissions ¹ (lbs/day) | SO _x Emissions ^{1,2} (lbs/day) | PM ₁₀ Emissions ¹ (lbs/day) | PM _{2.5} Emissions ¹ (lbs/day) |
|---|--------------------------------------|--|-------------------------------------|--|---|--|
| First Quarter | 68.9 | 79.3 | 205.9 | 0.5 | 49.3 | 10.4 |
| Second Quarter | 67.7 | 44.8 | 196.8 | 0.3 | 38.8 | 7.5 |
| Third Quarter | 67.7 | 44.5 | 196.5 | 0.3 | 38.8 | 7.5 |
| Fourth Quarter | 87.3 | 41.8 | 193.2 | 0.3 | 38.1 | 7.4 |
| EDCAQMD Mass Daily Significance Thresholds³ | 82 | 82 | - | - | - | - |
| Do Emissions Exceed Threshold for any quarter of Construction? | YES | NO | - | - | - | - |

Notes:

¹ Estimated as a sum of the average daily construction emissions for the North Site Remainder Area in **Table 3-1** and the maximum daily operational emissions for the Costco EDH Project in Table 4-16 of the EDH Costco Project Air Quality Technical Report.

² For purposes of this analysis SO_x emissions are assumed to be equal to SO₂.

³ Obtained from EDCAQMD Guide to Air Quality Assessment Determining Significance of Air Quality Impact Under the California Environmental Quality Act. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

Abbreviations:

CAP - Criteria Air Pollutant

CO - carbon monoxide

EDCAQMD - El Dorado County Air Quality Management District

EDH - El Dorado Hills

lb - pound

NO_x - nitrogen oxide compounds

PM₁₀ - particulate matter less than 10 microns in diameter

PM_{2.5} - particulate matter less than 2.5 microns in diameter

ROG - reactive organic gases

SO₂ - sulfur dioxide

SO_x - sulfur oxide compounds

Table 3-3. Mitigated Average Daily CAP Emissions for Construction of North Site Remainder Area

El Dorado Hills Costco Project
 El Dorado Hills, California

| North Site Remainder Area Construction Time Period | ROG Emissions ¹ (lbs/day) | NO _x Emissions ¹ (lbs/day) | CO Emissions ¹ (lbs/day) | SO _x Emissions ^{1,2} (lbs/day) | PM ₁₀ Emissions ¹ (lbs/day) | PM _{2.5} Emissions ¹ (lbs/day) |
|---|--------------------------------------|--|-------------------------------------|--|---|--|
| First Quarter | 1.4 | 48 | 28 | 0.24 | 12 | 3.0 |
| Second Quarter | 0.81 | 13 | 17 | 0.028 | 1.9 | 0.38 |
| Third Quarter | 0.79 | 13 | 17 | 0.028 | 1.9 | 0.38 |
| Fourth Quarter | 14 | 10 | 13 | 0.020 | 1.3 | 0.27 |
| EDCAQMD Mass Daily Significance Thresholds³ | 82 | 82 | - | - | - | - |
| Do Emissions Exceed Threshold for any quarter of Construction? | NO | NO | - | - | - | - |

Notes:

¹ Obtained from **Table C-2**. Average daily emissions per quarter calculated as the total construction emissions, which include construction of the regional shopping center and parking lot, divided by the number of construction days in each quarter. Project construction emissions assume watering control consistent with EDCAQMD Rule 223-1.

² For purposes of this analysis SO_x emissions are assumed to be equal to SO₂.

³ Obtained from EDCAQMD Guide to Air Quality Assessment Determining Significance of Air Quality Impact Under the California Environmental Quality Act. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

Abbreviations:

CAP - Criteria Air Pollutant

CO - carbon monoxide

EDCAQMD - El Dorado County Air Quality Management District

lb - pound

NO_x - nitrogen oxide compounds

PM₁₀ - particulate matter less than 10 microns in diameter

PM_{2.5} - particulate matter less than 2.5 microns in diameter

ROG - reactive organic gases

SO₂ - sulfur dioxide

SO_x - sulfur oxide compounds

Table 3-4. Mitigated Combined Average Daily CAP Emissions for Construction of North Site Remainder Area and Operation of Costco EDH Project

El Dorado Hills Costco Project
El Dorado Hills, California

| North Site Remainder Area Construction Time Period | ROG Emissions ¹ (lbs/day) | NO _x Emissions ¹ (lbs/day) | CO Emissions ¹ (lbs/day) | SO _x Emissions ^{1,2} (lbs/day) | PM ₁₀ Emissions ¹ (lbs/day) | PM _{2.5} Emissions ¹ (lbs/day) |
|---|--------------------------------------|--|-------------------------------------|--|---|--|
| First Quarter | 67.9 | 81.8 | 209.7 | 0.5 | 48.8 | 9.9 |
| Second Quarter | 67.3 | 47.6 | 198.9 | 0.3 | 38.6 | 7.3 |
| Third Quarter | 67.3 | 47.5 | 198.5 | 0.3 | 38.6 | 7.3 |
| Fourth Quarter | 80.9 | 44.1 | 194.6 | 0.3 | 38.0 | 7.2 |
| EDCAQMD Mass Daily Significance Thresholds³ | 82 | 82 | - | - | - | - |
| Do Emissions Exceed Threshold for any quarter of Construction? | NO | NO | - | - | - | - |

Notes:

¹ Estimated as a sum of the average daily construction emissions for the North Site Remainder Area in **Table 3-3** and the maximum daily operational emissions for the Costco EDH Project in Table 4-16 of the EDH Costco Project Air Quality Technical Report.

² For purposes of this analysis SO_x emissions are assumed to be equal to SO₂.

³ Obtained from EDCAQMD Guide to Air Quality Assessment Determining Significance of Air Quality Impact Under the California Environmental Quality Act. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

Abbreviations:

CAP - Criteria Air Pollutant

CO - carbon monoxide

EDCAQMD - El Dorado County Air Quality Management District

EDH - El Dorado Hills

lb - pound

NO_x - nitrogen oxide compounds

PM₁₀ - particulate matter less than 10 microns in diameter

PM_{2.5} - particulate matter less than 2.5 microns in diameter

ROG - reactive organic gases

SO₂ - sulfur dioxide

SO_x - sulfur oxide compounds

Table 3-5. Summary of Construction Greenhouse Gas Emissions - North Site Remainder Area

El Dorado Hills Costco Project
El Dorado Hills, California

| Emissions Category | Emissions ^{1,2,3} (MT CO₂e/yr) |
|---|---|
| Construction Emissions (2027) | 1,232 |
| Construction Emissions (2028) | 197 |
| Construction GHG Threshold ⁴ | 10,000 |
| Do Either Year of Construction Exceed the Threshold? | NO |

Notes:

¹ Emissions are presented as CO₂e, which include CO₂, CH₄, and N₂O emissions, weighted by their respective global warming potentials.

² Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.

³ Obtained from CalEEMod output file for the North Site Remainder Area Development in **Appendix A**.

⁴ Placer County Thresholds of Significance - Chapter 2. Available at:

<https://www.placerair.org/DocumentCenter/View/2047/Chapter-2-Thresholds-of-Significance-PDF>.

Accessed: October 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

CH₄ - methane

CO₂ - carbon dioxide

CO₂e - carbon dioxide equivalents

GHG - greenhouse gas

MT - metric tons

N₂O - nitrous oxide

yr - year

Table 3-6. Energy Resource Summary for Proposed Project Construction

El Dorado Hills Costco Project
 El Dorado Hills, California

| Energy Resource | Year | Energy Consumption for the North Site Remainder Area Construction ¹ | Energy Consumption for the EDH Costco Project Construction ² | Total Energy Consumption for Proposed Project Construction ³ (gallons) | El Dorado County Annual Consumption ^{4,5} (gallons) | Proposed Project Contribution to El Dorado County Annual Consumption (%) | California Annual Consumption ^{4,5} (gallons) | Proposed Project Contribution to California Annual Consumption (%) |
|-----------------------|------|--|---|---|--|--|--|--|
| Gasoline (gallons/yr) | 2026 | - | 10,851 | 10,851 | 65,259,604 | 0.02% | 13,896,130,020 | 0.00008% |
| Diesel (gallons/yr) | 2026 | - | 159,850 | 159,850 | 14,555,710 | 1.10% | 4,342,164,261 | 0.00368% |
| Electricity (kWh/yr) | 2026 | - | 88 | 88 | 1,339,206,633 | 0.00001% | 282,782,592,309 | 0.00000003% |
| Gasoline (gallons/yr) | 2027 | 4,906 | 9,121 | 14,027 | 64,229,365 | 0.02% | 13,625,442,497 | 0.00010% |
| Diesel (gallons/yr) | 2027 | 118,647 | 56,712 | 175,359 | 14,262,073 | 1.23% | 4,330,293,013 | 0.00405% |
| Electricity (kWh/yr) | 2027 | - | 59 | 59 | 1,339,206,633 | 0.000004% | 282,782,592,309 | 0.00000002% |
| Gasoline (gallons/yr) | 2028 | 2,873 | - | 2,873 | 63,126,214 | 0.00% | 13,365,596,850 | 0.00002% |
| Diesel (gallons/yr) | 2028 | 17,852 | - | 17,852 | 13,968,581 | 0.13% | 4,312,144,863 | 0.00041% |

Conversion Factors:

1,000,000 kWh/GWh

Notes:

- ¹ Estimated as a sum of the fuel consumption of the off-road construction equipment (**Table D-1**) and on-road vehicles (**Table D-2**) used during construction of the North Site Remainder Area.
- ² Obtained from Table 5-2 in the EDH Costco Energy Technical Report.
- ³ Estimated as a sum of the energy consumption for construction of the North Site Remainder Area and the EDH Costco Project.
- ⁴ Fuel consumption data for El Dorado County and the State of California are obtained from EMFAC2021 and OFFROAD2021 for calendar years 2026, 2027, and 2028.
- ⁵ Electricity consumption data for El Dorado County and the State of California are obtained from <https://www.energy.ca.gov/files/energy-consumption-data-files> for calendar year 2024 as that was the most recent data available. Accessed: October 2025.

Abbreviations:

- % - percent
- EDH - El Dorado Hills
- EMFAC - California Air Resources Board Emissions Factor Model
- GWh - gigawatt hour
- kWh - kilowatt hour
- yr - year

Table 3-7. Maximum Daily Criteria Air Pollutant Emissions for Operations of the Proposed Project

El Dorado Hills Costco Project
El Dorado Hills, California

| Proposed Project Land Use | Emission Category ¹ | ROG Emissions (lbs/day) | NO _x Emissions (lbs/day) | CO Emissions (lbs/day) | SO _x Emissions ² (lbs/day) | PM ₁₀ Emissions (lbs/day) | PM _{2.5} Emissions (lbs/day) |
|--|---|-------------------------|-------------------------------------|------------------------|--|--------------------------------------|---------------------------------------|
| EDH Costco Project | Area ³ | 4.7 | 0.1 | 11.6 | 0.00 | 0.02 | 0.02 |
| EDH Costco Project | Energy ³ | 0.02 | 0.4 | 0.3 | 0.00 | 0.03 | 0.03 |
| EDH Costco Project | Mobile ³ | 41.7 | 31 | 167.5 | 0.30 | 36.5 | 6.8 |
| EDH Costco Project | Stationary Sources ³ | 0.8 | 2.3 | 2.1 | 0.00 | 0.12 | 0.12 |
| EDH Costco Project | Gasoline Dispensing Facility ³ | 19.3 | - | - | - | - | - |
| North Site Remainder Area | Area ⁴ | 3.3 | 0.05 | 6.0 | 0.00 | 0.01 | 0.01 |
| North Site Remainder Area | Energy ⁴ | 0.02 | 0.3 | 0.3 | 0.00 | 0.02 | 0.02 |
| North Site Remainder Area | Mobile ⁴ | 11.6 | 7.1 | 52.3 | 0.10 | 16.8 | 3.0 |
| Total Daily Emissions (lb/day) | | 81.4 | 41.7 | 240 | 0.40 | 53.5 | 10.0 |
| EDCAQMD Mass Daily Significance Thresholds ⁵ | | 82 | 82 | NA | NA | NA | NA |
| Exceeds Threshold? | | NO | NO | - | - | - | - |

Notes:

¹ Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.

² For purposes of this analysis SO_x emissions are assumed to be equal to SO₂.

³ Obtained from Table 4-16 in the EDH Costco Project Air Quality Technical Report.

⁴ Obtained from the CalEEMod output file for the North Site Remainder Area Development in **Appendix A**.

⁵ EDCAQMD Guide to Air Quality Assessment Determining Significance of Air Quality Impact Under the California Environmental Quality Act. Available at: <https://www.eldoradocounty.ca.gov/files/assets/county/v/1/documents/government/air-quality/guide-to-air-quality-assessment.pdf>. Accessed: October 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODeL

CO - carbon monoxide

EDCAQMD - El Dorado County Air Quality Management District

EDH - El Dorado Hills

lb - pound

NA - not applicable

NO_x - nitrogen oxide compounds

PM₁₀ - particulate matter less than 10 microns in diameter

PM_{2.5} - particulate matter less than 2.5 microns in diameter

ROG - reactive organic gases

SO₂ - sulfur dioxide

SO_x - sulfur oxide compounds

Table 3-8. Summary of Greenhouse Gas Emissions for Proposed Project Operations

El Dorado Hills Costco Project

El Dorado Hills, California

| Proposed Project Land Use | Emissions Category | Emissions ^{1,2} | Unit |
|---|--|--------------------------|--------------------------------------|
| EDH Costco Project | Area Sources ³ | 3.9 | MT CO ₂ e/yr |
| EDH Costco Project | Energy Usage ³ | 78 | MT CO ₂ e/yr |
| EDH Costco Project | Mobile ³ | 4,731 | MT CO ₂ e/yr |
| EDH Costco Project | Water ³ | 17 | MT CO ₂ e/yr |
| EDH Costco Project | Waste Disposed ³ | 224 | MT CO ₂ e/yr |
| EDH Costco Project | Refrigerant ³ | 0.13 | MT CO ₂ e/yr |
| EDH Costco Project | Vegetation ³ | 11 | MT CO ₂ e/yr |
| EDH Costco Project | Generators ³ | 9.6 | MT CO ₂ e/yr |
| EDH Costco Project | On-Site Electric Vehicle Chargers ³ | -2,908 | MT CO ₂ e/yr |
| North Site Remainder Area | Area Sources ⁴ | 2.0 | MT CO ₂ e/yr |
| North Site Remainder Area | Energy Usage ⁴ | 122.9 | MT CO ₂ e/yr |
| North Site Remainder Area | Mobile ⁴ | 1,601 | MT CO ₂ e/yr |
| North Site Remainder Area | Water ⁴ | 15.1 | MT CO ₂ e/yr |
| North Site Remainder Area | Waste Disposed ⁴ | 45.2 | MT CO ₂ e/yr |
| North Site Remainder Area | Refrigerant ⁴ | 0.1 | MT CO ₂ e/yr |
| North Site Remainder Area | Vegetation ⁴ | 0.0 | MT CO ₂ e/yr |
| Operational Emissions | | 3,954 | MT CO₂e/yr |
| Calculated Efficiency Metric ⁵ | | 13.04 | MT CO₂e/1,000 sqft |
| Operational GHG Efficiency Metric Threshold ⁶ | | 26.50 | MT CO₂e/1,000 sqft |
| Exceeds Threshold? | | NO | - |

Notes:

¹ Emissions are presented as CO₂e, which include CO₂, CH₄, and N₂O emissions, weighted by their respective global warming potentials.

² Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.

³ Obtained from Table 4-17 in the EDH Costco Project Greenhouse Gas Technical Report.

⁴ Obtained from CalEEMod output file for the North Site Remainder Area Development in **Appendix A**.

⁵ Efficiency metric is calculated as the total operational emissions divided by the sum of the building square footage of the regional shopping center and the building square footage of the EDH Costco Project (303,200 sqft).

⁶ Placer County Thresholds of Significance - Chapter 2. Available at: <https://www.placerair.org/DocumentCenter/View/2047/Chapter-2-Thresholds-of-Significance-PDF>. Accessed: October 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODEL

CH₄ - methane

CO₂ - carbon dioxide

CO₂e - carbon dioxide equivalents

EDH - El Dorado Hills

GHG - greenhouse gas

MT - metric tons

N₂O - nitrous oxide

sqft - square feet

yr - year

Table 3-9. Energy Resource Summary for Proposed Project Operation

El Dorado Hills Costco Project
 El Dorado Hills, California

| Energy Resource | Energy Consumption for the North Site Remainder Area Operation ¹ | Energy Consumption for the EDH Costco Project Operation ² | Total Energy Consumption for Proposed Project Operation ³ | El Dorado County Annual Consumption ^{4,5,6} | Proposed Project Operation Contribution to El Dorado County Annual Consumption (%) | California Annual Consumption ^{4,5,6} | Proposed Project Operation Contribution to California Annual Consumption (%) |
|-----------------------|---|--|--|--|--|--|--|
| Electricity (kWh/yr) | 1,673,392 | 6,026,405 | 7,699,797 | 1,339,206,633 | 0.57% | 282,782,592,309 | 0.00272% |
| Natural Gas (kBtu/yr) | 1,192,913 | 1,423,224 | 2,616,137 | 3,196,879,463 | 0.08% | 1,110,086,615,369 | 0.00024% |
| Gasoline (gallons/yr) | 145,697 | 285,366 | 431,064 | 63,126,214 | 0.68% | 13,365,596,850 | 0.00323% |
| Diesel (gallons/yr) | 24,867 | 169,371 | 194,238 | 13,968,581 | 1.39% | 4,312,144,863 | 0.00450% |

Conversion Factors:

- 1,000,000 kWh/GWh
- 99,976.1 Btu/therm
- 1,000 Btu/kBtu

Notes:

- ¹ Estimated as a sum of the fuel consumption of Remainder Parcel operational sources listed in **Tables F-1, F-2, and F-5** through **F-9**.
- ² Obtained from Table 5-3 in the EDH Costco Energy Technical Report.
- ³ Estimated as a sum of the energy consumption for operation of the North Site Remainder Area and the EDH Costco Project.
- ⁴ Diesel and gasoline consumption data for El Dorado County and the State of California are obtained from EMFAC2021 and OFFROAD2021 for calendar year 2028.
- ⁵ Electricity consumption data for El Dorado County and the State of California are obtained from <https://www.energy.ca.gov/files/energy-consumption-data-files> for calendar year 2024 as that was the most recent data available. Accessed: October 2025.
- ⁶ Natural gas consumption data for El Dorado County and the State of California are obtained from <https://www.energy.ca.gov/files/energy-consumption-data-files> for calendar year 2024 as that was the most recent data available. Accessed: October 2025.

Abbreviations:

- % - percent
- Btu - British thermal unit
- EDH - El Dorado Hills
- EMFAC - Emission FACTors model
- GWh - gigawatt hour
- kBtu - kilo-British thermal unit
- kWh - kilowatt hour
- yr - year

APPENDIX A
NORTH SITE REMAINDER AREA CALEEMOD MODEL RUN

North Site Remainder Area Custom Report

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1. Basic Project Information

1.1. Basic Project Information

| Data Field | Value |
|-----------------------------|--------------------------------|
| Project Name | North Site Remainder Area |
| Construction Start Date | 5/18/2027 |
| Operational Year | 2028 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 2.70 |
| Precipitation (days) | 9.40 |
| Location | 38.659852, -121.056799 |
| County | El Dorado-Mountain County |
| City | Unincorporated |
| Air District | El Dorado County AQMD |
| Air Basin | Mountain Counties |
| TAZ | 406 |
| EDFZ | 4 |
| Electric Utility | Pacific Gas & Electric Company |
| Gas Utility | Pacific Gas & Electric |
| App Version | 2022.1.1.29 |

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 |
|--------------------------|------|----------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
| Regional Shopping Center | 138 | 1000sqft | 3.17 | 138,000 | 0.00 | — | — | — |

| | | | | | | | | |
|-------------|------|------|------|------|------|---|---|---|
| Parking Lot | 10.6 | Acre | 10.6 | 0.00 | 0.00 | — | — | — |
|-------------|------|------|------|------|------|---|---|---|

1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|--------------|------|-------------------------------------|
| Construction | C-5 | Use Advanced Engine Tiers |
| Construction | C-6 | Use Diesel Particulate Filters |
| Construction | C-13 | Use Low-VOC Paints for Construction |

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. | 103 | 103 | 111 | 37.9 | 0.66 | 1.63 | 30.4 | 32.1 | 1.55 | 6.29 | 7.83 | — | 63,577 | 63,577 | 0.61 | 9.01 | 85.6 | 66,363 |
| Mit. | 70.6 | 70.6 | 115 | 46.0 | 0.66 | 0.80 | 30.4 | 31.2 | 0.78 | 6.29 | 7.06 | — | 63,577 | 63,577 | 0.61 | 9.01 | 85.6 | 66,363 |
| % Reduced | 31% | 31% | -4% | -21% | — | 51% | — | 3% | 50% | — | 10% | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.43 | 1.22 | 10.6 | 15.0 | 0.03 | 0.34 | 1.75 | 2.09 | 0.31 | 0.26 | 0.58 | — | 3,516 | 3,516 | 0.11 | 0.14 | 0.08 | 3,561 |
| Mit. | 0.87 | 0.80 | 13.4 | 17.0 | 0.03 | 0.12 | 1.75 | 1.88 | 0.11 | 0.26 | 0.38 | — | 3,516 | 3,516 | 0.11 | 0.14 | 0.08 | 3,561 |
| % Reduced | 39% | 34% | -26% | -13% | — | 63% | — | 10% | 64% | — | 35% | — | — | — | — | — | — | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|--------------|------|------|------|------|------|------|------|------|------|------|------|---|-------|-------|------|------|------|-------|
| Unmit. | 6.17 | 6.10 | 15.6 | 11.7 | 0.07 | 0.34 | 3.58 | 3.92 | 0.32 | 0.76 | 1.07 | — | 7,190 | 7,190 | 0.11 | 0.81 | 3.72 | 7,439 |
| Mit. | 4.24 | 4.21 | 17.3 | 13.4 | 0.07 | 0.13 | 3.58 | 3.71 | 0.13 | 0.76 | 0.88 | — | 7,190 | 7,190 | 0.11 | 0.81 | 3.72 | 7,439 |
| % Reduced | 31% | 31% | -11% | -15% | — | 61% | — | 5% | 60% | — | 18% | — | — | — | — | — | — | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.13 | 1.11 | 2.85 | 2.13 | 0.01 | 0.06 | 0.65 | 0.71 | 0.06 | 0.14 | 0.20 | — | 1,190 | 1,190 | 0.02 | 0.13 | 0.62 | 1,232 |
| Mit. | 0.77 | 0.77 | 3.16 | 2.44 | 0.01 | 0.02 | 0.65 | 0.68 | 0.02 | 0.14 | 0.16 | — | 1,190 | 1,190 | 0.02 | 0.13 | 0.62 | 1,232 |
| % Reduced | 31% | 31% | -11% | -15% | — | 61% | — | 5% | 60% | — | 18% | — | — | — | — | — | — | — |

2.2. Construction Emissions by Year, Unmitigated

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

| Year | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|----------------------|------|------|------|------|---------|-------|-------|-------|--------|--------|--------|------|--------|--------|------|------|------|--------|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 5.19 | 4.25 | 111 | 37.9 | 0.66 | 1.63 | 30.4 | 32.1 | 1.55 | 6.29 | 7.83 | — | 63,577 | 63,577 | 0.61 | 9.01 | 85.6 | 66,363 |
| 2028 | 103 | 103 | 9.94 | 15.4 | 0.03 | 0.30 | 1.75 | 2.06 | 0.28 | 0.26 | 0.54 | — | 3,538 | 3,538 | 0.11 | 0.14 | 2.74 | 3,586 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 1.43 | 1.22 | 10.6 | 15.0 | 0.03 | 0.34 | 1.75 | 2.09 | 0.31 | 0.26 | 0.58 | — | 3,516 | 3,516 | 0.11 | 0.14 | 0.08 | 3,561 |
| 2028 | 1.38 | 1.16 | 10.0 | 14.9 | 0.03 | 0.30 | 1.75 | 2.06 | 0.28 | 0.26 | 0.54 | — | 3,492 | 3,492 | 0.11 | 0.14 | 0.07 | 3,537 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 1.26 | 1.06 | 15.6 | 11.7 | 0.07 | 0.34 | 3.58 | 3.92 | 0.32 | 0.76 | 1.07 | — | 7,190 | 7,190 | 0.11 | 0.81 | 3.72 | 7,439 |
| 2028 | 6.17 | 6.10 | 3.48 | 5.24 | 0.01 | 0.11 | 0.57 | 0.68 | 0.10 | 0.09 | 0.19 | — | 1,177 | 1,177 | 0.04 | 0.04 | 0.38 | 1,192 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 0.23 | 0.19 | 2.85 | 2.13 | 0.01 | 0.06 | 0.65 | 0.71 | 0.06 | 0.14 | 0.20 | — | 1,190 | 1,190 | 0.02 | 0.13 | 0.62 | 1,232 |
| 2028 | 1.13 | 1.11 | 0.63 | 0.96 | < 0.005 | 0.02 | 0.10 | 0.12 | 0.02 | 0.02 | 0.03 | — | 195 | 195 | 0.01 | 0.01 | 0.06 | 197 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 2.97 | 2.56 | 115 | 46.0 | 0.66 | 0.80 | 30.4 | 31.2 | 0.78 | 6.29 | 7.06 | — | 63,577 | 63,577 | 0.61 | 9.01 | 85.6 | 66,363 |
| 2028 | 70.6 | 70.6 | 13.2 | 17.4 | 0.03 | 0.12 | 1.75 | 1.87 | 0.11 | 0.26 | 0.37 | — | 3,538 | 3,538 | 0.11 | 0.14 | 2.74 | 3,586 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 0.87 | 0.80 | 13.4 | 17.0 | 0.03 | 0.12 | 1.75 | 1.88 | 0.11 | 0.26 | 0.38 | — | 3,516 | 3,516 | 0.11 | 0.14 | 0.08 | 3,561 |
| 2028 | 0.85 | 0.77 | 13.2 | 16.9 | 0.03 | 0.12 | 1.75 | 1.87 | 0.11 | 0.26 | 0.37 | — | 3,492 | 3,492 | 0.11 | 0.14 | 0.07 | 3,537 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 0.72 | 0.65 | 17.3 | 13.4 | 0.07 | 0.13 | 3.58 | 3.71 | 0.13 | 0.76 | 0.88 | — | 7,190 | 7,190 | 0.11 | 0.81 | 3.72 | 7,439 |
| 2028 | 4.24 | 4.21 | 4.55 | 5.90 | 0.01 | 0.04 | 0.57 | 0.61 | 0.04 | 0.09 | 0.12 | — | 1,177 | 1,177 | 0.04 | 0.04 | 0.38 | 1,192 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2027 | 0.13 | 0.12 | 3.16 | 2.44 | 0.01 | 0.02 | 0.65 | 0.68 | 0.02 | 0.14 | 0.16 | — | 1,190 | 1,190 | 0.02 | 0.13 | 0.62 | 1,232 |
| 2028 | 0.77 | 0.77 | 0.83 | 1.08 | < 0.005 | 0.01 | 0.10 | 0.11 | 0.01 | 0.02 | 0.02 | — | 195 | 195 | 0.01 | 0.01 | 0.06 | 197 |

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. | 15.5 | 14.9 | 6.54 | 58.5 | 0.10 | 0.14 | 16.7 | 16.8 | 0.13 | 2.93 | 3.06 | 97.7 | 10,797 | 10,895 | 10.6 | 0.58 | 30.1 | 11,362 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|--------|------|------|------|--------|
| Unmit. | 13.2 | 12.6 | 7.46 | 52.5 | 0.09 | 0.13 | 16.7 | 16.8 | 0.12 | 2.93 | 3.05 | 97.7 | 10,089 | 10,186 | 10.7 | 0.63 | 1.42 | 10,644 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 13.8 | 13.2 | 7.16 | 53.2 | 0.10 | 0.13 | 16.4 | 16.6 | 0.12 | 2.89 | 3.02 | 97.7 | 10,231 | 10,329 | 10.6 | 0.61 | 13.4 | 10,791 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 2.52 | 2.41 | 1.31 | 9.70 | 0.02 | 0.02 | 3.00 | 3.02 | 0.02 | 0.53 | 0.55 | 16.2 | 1,694 | 1,710 | 1.76 | 0.10 | 2.21 | 1,787 |

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 | 12.1 | 11.6 | 6.17 | 52.3 | 0.10 | 0.10 | 16.7 | 16.8 | 0.10 | 2.93 | 3.02 | — | 10,033 | 10,033 | 0.57 | 0.52 | 29.4 | 10,230 |
| Area | 3.36 | 3.28 | 0.05 | 6.00 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 24.7 | 24.7 | < 0.005 | < 0.005 | — | 24.8 |
| Energy | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 732 | 732 | 0.18 | 0.02 | — | 742 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | 15.5 | 14.9 | 6.54 | 58.5 | 0.10 | 0.14 | 16.7 | 16.8 | 0.13 | 2.93 | 3.06 | 97.7 | 10,797 | 10,895 | 10.6 | 0.58 | 30.1 | 11,362 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 10.9 | 10.3 | 7.14 | 52.2 | 0.09 | 0.10 | 16.7 | 16.8 | 0.10 | 2.93 | 3.02 | — | 9,349 | 9,349 | 0.69 | 0.57 | 0.76 | 9,536 |
| Area | 2.29 | 2.29 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 732 | 732 | 0.18 | 0.02 | — | 742 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |

| | | | | | | | | | | | | | | | | | | |
|---------------|------|---------|---------|------|---------|---------|------|---------|---------|------|---------|------|--------|--------|---------|---------|------|--------|
| Total | 13.2 | 12.6 | 7.46 | 52.5 | 0.09 | 0.13 | 16.7 | 16.8 | 0.12 | 2.93 | 3.05 | 97.7 | 10,089 | 10,186 | 10.7 | 0.63 | 1.42 | 10,644 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 11.0 | 10.4 | 6.81 | 49.9 | 0.09 | 0.10 | 16.4 | 16.5 | 0.10 | 2.89 | 2.99 | — | 9,480 | 9,480 | 0.64 | 0.55 | 12.7 | 9,671 |
| Area | 2.82 | 2.78 | 0.02 | 2.96 | < 0.005 | 0.01 | — | 0.01 | < 0.005 | — | < 0.005 | — | 12.2 | 12.2 | < 0.005 | < 0.005 | — | 12.2 |
| Energy | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 732 | 732 | 0.18 | 0.02 | — | 742 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | 13.8 | 13.2 | 7.16 | 53.2 | 0.10 | 0.13 | 16.4 | 16.6 | 0.12 | 2.89 | 3.02 | 97.7 | 10,231 | 10,329 | 10.6 | 0.61 | 13.4 | 10,791 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 2.00 | 1.90 | 1.24 | 9.11 | 0.02 | 0.02 | 3.00 | 3.02 | 0.02 | 0.53 | 0.55 | — | 1,569 | 1,569 | 0.11 | 0.09 | 2.10 | 1,601 |
| Area | 0.51 | 0.51 | < 0.005 | 0.54 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.02 | 2.02 | < 0.005 | < 0.005 | — | 2.02 |
| Energy | 0.01 | < 0.005 | 0.06 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 121 | 121 | 0.03 | < 0.005 | — | 123 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 1.16 | 4.40 | 0.33 | 0.01 | — | 15.1 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 12.9 | 0.00 | 12.9 | 1.29 | 0.00 | — | 45.2 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.11 | 0.11 |
| Total | 2.52 | 2.41 | 1.31 | 9.70 | 0.02 | 0.02 | 3.00 | 3.02 | 0.02 | 0.53 | 0.55 | 16.2 | 1,694 | 1,710 | 1.76 | 0.10 | 2.21 | 1,787 |

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 | 12.1 | 11.6 | 6.17 | 52.3 | 0.10 | 0.10 | 16.7 | 16.8 | 0.10 | 2.93 | 3.02 | — | 10,033 | 10,033 | 0.57 | 0.52 | 29.4 | 10,230 |
| Area | 3.36 | 3.28 | 0.05 | 6.00 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 24.7 | 24.7 | < 0.005 | < 0.005 | — | 24.8 |
| Energy | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 732 | 732 | 0.18 | 0.02 | — | 742 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |

| | | | | | | | | | | | | | | | | | | |
|---------------------|------|---------|---------|------|---------|---------|------|---------|---------|------|---------|------|--------|--------|---------|---------|------|--------|
| Waste | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | 15.5 | 14.9 | 6.54 | 58.5 | 0.10 | 0.14 | 16.7 | 16.8 | 0.13 | 2.93 | 3.06 | 97.7 | 10,797 | 10,895 | 10.6 | 0.58 | 30.1 | 11,362 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 10.9 | 10.3 | 7.14 | 52.2 | 0.09 | 0.10 | 16.7 | 16.8 | 0.10 | 2.93 | 3.02 | — | 9,349 | 9,349 | 0.69 | 0.57 | 0.76 | 9,536 |
| Area | 2.29 | 2.29 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 732 | 732 | 0.18 | 0.02 | — | 742 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | 13.2 | 12.6 | 7.46 | 52.5 | 0.09 | 0.13 | 16.7 | 16.8 | 0.12 | 2.93 | 3.05 | 97.7 | 10,089 | 10,186 | 10.7 | 0.63 | 1.42 | 10,644 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 11.0 | 10.4 | 6.81 | 49.9 | 0.09 | 0.10 | 16.4 | 16.5 | 0.10 | 2.89 | 2.99 | — | 9,480 | 9,480 | 0.64 | 0.55 | 12.7 | 9,671 |
| Area | 2.82 | 2.78 | 0.02 | 2.96 | < 0.005 | 0.01 | — | 0.01 | < 0.005 | — | < 0.005 | — | 12.2 | 12.2 | < 0.005 | < 0.005 | — | 12.2 |
| Energy | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 732 | 732 | 0.18 | 0.02 | — | 742 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | 13.8 | 13.2 | 7.16 | 53.2 | 0.10 | 0.13 | 16.4 | 16.6 | 0.12 | 2.89 | 3.02 | 97.7 | 10,231 | 10,329 | 10.6 | 0.61 | 13.4 | 10,791 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 2.00 | 1.90 | 1.24 | 9.11 | 0.02 | 0.02 | 3.00 | 3.02 | 0.02 | 0.53 | 0.55 | — | 1,569 | 1,569 | 0.11 | 0.09 | 2.10 | 1,601 |
| Area | 0.51 | 0.51 | < 0.005 | 0.54 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.02 | 2.02 | < 0.005 | < 0.005 | — | 2.02 |
| Energy | 0.01 | < 0.005 | 0.06 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 121 | 121 | 0.03 | < 0.005 | — | 123 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 1.16 | 4.40 | 0.33 | 0.01 | — | 15.1 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 12.9 | 0.00 | 12.9 | 1.29 | 0.00 | — | 45.2 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.11 | 0.11 |

| | | | | | | | | | | | | | | | | | | |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|-------|
| Total | 2.52 | 2.41 | 1.31 | 9.70 | 0.02 | 0.02 | 3.00 | 3.02 | 0.02 | 0.53 | 0.55 | 16.2 | 1,694 | 1,710 | 1.76 | 0.10 | 2.21 | 1,787 |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|------|-------|

3. Construction Emissions Details

3.1. Site Preparation (2027) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|-----------------------------|------|------|------|------|---------|-------|-------|-------|--------|--------|--------|------|-------|-------|------|---------|------|-------|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.63 | 3.05 | 28.0 | 28.3 | 0.05 | 1.17 | — | 1.17 | 1.08 | — | 1.08 | — | 5,298 | 5,298 | 0.21 | 0.04 | — | 5,316 |
| Dust From Material Movement | — | — | — | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — | — | — | — | — | — | — |
| 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 | 0.10 | 0.08 | 0.77 | 0.77 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 145 | 145 | 0.01 | < 0.005 | — | 146 |
| Dust From Material Movement | — | — | — | — | — | — | 0.21 | 0.21 | — | 0.11 | 0.11 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | | |
|-----------------------------|---------|---------|---------|---------|---------|------|---------|---------|------|---------|---------|------|------|------|---------|---------|---------|------|------|
| 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.14 | 0.14 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 24.0 | 24.0 | < 0.005 | < 0.005 | — | 24.1 | |
| Dust From Material Movement | — | — | — | — | — | — | 0.04 | 0.04 | — | 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 | 0.08 | 0.08 | 0.05 | 0.97 | 0.00 | 0.00 | 0.54 | 0.54 | 0.00 | 0.08 | 0.08 | — | 189 | 189 | < 0.005 | 0.01 | 0.63 | 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 4.77 | 4.77 | < 0.005 | < 0.005 | 0.01 | 4.84 | |
| 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 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.79 | 0.79 | < 0.005 | < 0.005 | < 0.005 | 0.80 | |
| 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 | |

3.2. Site Preparation (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 | 0.90 | 0.90 | 24.0 | 28.3 | 0.05 | 0.14 | — | 0.14 | 0.13 | — | 0.13 | — | 5,298 | 5,298 | 0.21 | 0.04 | — | 5,316 |
| Dust From Material Movement | — | — | — | — | — | — | 7.67 | 7.67 | — | 3.94 | 3.94 | — | — | — | — | — | — | — |
| 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 | 0.02 | 0.02 | 0.66 | 0.78 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 145 | 145 | 0.01 | < 0.005 | — | 146 |
| Dust From Material Movement | — | — | — | — | — | — | 0.21 | 0.21 | — | 0.11 | 0.11 | — | — | — | — | — | — | — |
| 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 | 0.12 | 0.14 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 24.0 | 24.0 | < 0.005 | < 0.005 | — | 24.1 |
| Dust From Material Movement | — | — | — | — | — | — | 0.04 | 0.04 | — | 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 | 0.08 | 0.08 | 0.05 | 0.97 | 0.00 | 0.00 | 0.54 | 0.54 | 0.00 | 0.08 | 0.08 | — | 189 | 189 | < 0.005 | 0.01 | 0.63 | 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 4.77 | 4.77 | < 0.005 | < 0.005 | 0.01 | 4.84 |
| 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 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.79 | 0.79 | < 0.005 | < 0.005 | < 0.005 | 0.80 |
| 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 |

3.3. Grading (2027) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|-----------------------------|------|------|------|------|---------|-------|-------|-------|--------|--------|--------|------|-------|-------|---------|---------|------|-------|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.51 | 2.95 | 25.6 | 27.3 | 0.06 | 1.04 | — | 1.04 | 0.96 | — | 0.96 | — | 6,598 | 6,598 | 0.27 | 0.05 | — | 6,621 |
| Dust From Material Movement | — | — | — | — | — | — | 3.71 | 3.71 | — | 1.44 | 1.44 | — | — | — | — | — | — | — |
| 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 | 0.29 | 0.24 | 2.10 | 2.24 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 542 | 542 | 0.02 | < 0.005 | — | 544 |
| Dust From Material Movement | — | — | — | — | — | — | 0.30 | 0.30 | — | 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 | 0.05 | 0.04 | 0.38 | 0.41 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 89.8 | 89.8 | < 0.005 | < 0.005 | — | 90.1 |

| | | | | | | | | | | | | | | | | | | |
|-----------------------------|---------|---------|---------|------|------|------|------|------|------|---------|---------|---|--------|--------|---------|---------|---------|--------|
| Dust From Material Movement | — | — | — | — | — | — | 0.06 | 0.06 | — | 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 | 0.10 | 0.09 | 0.06 | 1.10 | 0.00 | 0.00 | 0.62 | 0.62 | 0.00 | 0.09 | 0.09 | — | 217 | 217 | < 0.005 | 0.01 | 0.72 | 220 |
| 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 | 1.59 | 1.22 | 85.0 | 9.51 | 0.60 | 0.59 | 26.1 | 26.7 | 0.59 | 4.75 | 5.34 | — | 56,762 | 56,762 | 0.34 | 8.95 | 84.9 | 59,523 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.07 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 16.4 | 16.4 | < 0.005 | < 0.005 | 0.03 | 16.6 |
| 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 | 0.13 | 0.10 | 7.33 | 0.79 | 0.05 | 0.05 | 2.11 | 2.16 | 0.05 | 0.39 | 0.43 | — | 4,665 | 4,665 | 0.03 | 0.74 | 3.01 | 4,888 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 2.71 | 2.71 | < 0.005 | < 0.005 | < 0.005 | 2.75 |
| 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 | 0.02 | 0.02 | 1.34 | 0.14 | 0.01 | 0.01 | 0.39 | 0.39 | 0.01 | 0.07 | 0.08 | — | 772 | 772 | < 0.005 | 0.12 | 0.50 | 809 |

3.4. Grading (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 | 1.29 | 1.26 | 29.7 | 35.4 | 0.06 | 0.21 | — | 0.21 | 0.19 | — | 0.19 | — | 6,598 | 6,598 | 0.27 | 0.05 | — | 6,621 |
| Dust From Material Movement | — | — | — | — | — | — | 3.71 | 3.71 | — | 1.44 | 1.44 | — | — | — | — | — | — | — |
| 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 | 0.11 | 0.10 | 2.44 | 2.91 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 542 | 542 | 0.02 | < 0.005 | — | 544 |
| Dust From Material Movement | — | — | — | — | — | — | 0.30 | 0.30 | — | 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 | 0.02 | 0.02 | 0.45 | 0.53 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 89.8 | 89.8 | < 0.005 | < 0.005 | — | 90.1 |
| Dust From Material Movement | — | — | — | — | — | — | 0.06 | 0.06 | — | 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 | 0.10 | 0.09 | 0.06 | 1.10 | 0.00 | 0.00 | 0.62 | 0.62 | 0.00 | 0.09 | 0.09 | — | 217 | 217 | < 0.005 | 0.01 | 0.72 | 220 |
| 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 | 1.59 | 1.22 | 85.0 | 9.51 | 0.60 | 0.59 | 26.1 | 26.7 | 0.59 | 4.75 | 5.34 | — | 56,762 | 56,762 | 0.34 | 8.95 | 84.9 | 59,523 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.07 | 0.00 | 0.00 | 0.05 | 0.05 | 0.00 | 0.01 | 0.01 | — | 16.4 | 16.4 | < 0.005 | < 0.005 | 0.03 | 16.6 |
| 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 | 0.13 | 0.10 | 7.33 | 0.79 | 0.05 | 0.05 | 2.11 | 2.16 | 0.05 | 0.39 | 0.43 | — | 4,665 | 4,665 | 0.03 | 0.74 | 3.01 | 4,888 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 2.71 | 2.71 | < 0.005 | < 0.005 | < 0.005 | 2.75 |
| 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 | 0.02 | 0.02 | 1.34 | 0.14 | 0.01 | 0.01 | 0.39 | 0.39 | 0.01 | 0.07 | 0.08 | — | 772 | 772 | < 0.005 | 0.12 | 0.50 | 809 |

3.5. 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 | 1.23 | 1.03 | 9.39 | 12.9 | 0.02 | 0.34 | — | 0.34 | 0.31 | — | 0.31 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.23 | 1.03 | 9.39 | 12.9 | 0.02 | 0.34 | — | 0.34 | 0.31 | — | 0.31 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.63 | 0.53 | 4.84 | 6.66 | 0.01 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,235 | 1,235 | 0.05 | 0.01 | — | 1,239 |
| 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 | 0.12 | 0.10 | 0.88 | 1.22 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 204 | 204 | 0.01 | < 0.005 | — | 205 |
| 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 | 0.21 | 0.19 | 0.13 | 2.44 | 0.00 | 0.00 | 1.38 | 1.38 | 0.00 | 0.20 | 0.20 | — | 478 | 478 | 0.01 | 0.02 | 1.60 | 485 |
| Vendor | 0.02 | 0.02 | 0.96 | 0.17 | < 0.005 | < 0.005 | 0.38 | 0.38 | < 0.005 | 0.07 | 0.07 | — | 688 | 688 | < 0.005 | 0.10 | 1.42 | 721 |

| | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|---------|------|------|---------|---------|------|------|---------|------|------|------|------|------|---------|---------|------|------|------|
| 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.18 | 0.17 | 0.16 | 1.91 | 0.00 | 0.00 | 1.38 | 1.38 | 0.00 | 0.20 | 0.20 | — | 430 | 430 | 0.01 | 0.02 | 0.04 | 436 | |
| Vendor | 0.02 | 0.02 | 1.01 | 0.18 | < 0.005 | < 0.005 | 0.38 | 0.38 | < 0.005 | 0.07 | 0.07 | — | 688 | 688 | < 0.005 | 0.10 | 0.04 | 719 | |
| 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 | 0.09 | 0.09 | 0.08 | 1.00 | 0.00 | 0.00 | 0.69 | 0.69 | 0.00 | 0.10 | 0.10 | — | 226 | 226 | 0.01 | 0.01 | 0.36 | 230 | |
| Vendor | 0.01 | 0.01 | 0.51 | 0.09 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.03 | 0.04 | — | 355 | 355 | < 0.005 | 0.05 | 0.32 | 371 | |
| 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 | 0.01 | 0.18 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.02 | 0.02 | — | 37.5 | 37.5 | < 0.005 | < 0.005 | 0.06 | 38.0 | |
| Vendor | < 0.005 | < 0.005 | 0.09 | 0.02 | < 0.005 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 58.7 | 58.7 | < 0.005 | 0.01 | 0.05 | 61.4 | |
| 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. 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 | 0.67 | 0.61 | 12.2 | 15.0 | 0.02 | 0.12 | — | 0.12 | 0.11 | — | 0.11 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---------------------|------|------|------|------|---------|---------|------|------|---------|------|------|---|-------|-------|---------|---------|------|-------|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.67 | 0.61 | 12.2 | 15.0 | 0.02 | 0.12 | — | 0.12 | 0.11 | — | 0.11 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,405 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.34 | 0.32 | 6.27 | 7.70 | 0.01 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 1,235 | 1,235 | 0.05 | 0.01 | — | 1,239 |
| 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 | 0.06 | 0.06 | 1.15 | 1.41 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 204 | 204 | 0.01 | < 0.005 | — | 205 |
| 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 | 0.21 | 0.19 | 0.13 | 2.44 | 0.00 | 0.00 | 1.38 | 1.38 | 0.00 | 0.20 | 0.20 | — | 478 | 478 | 0.01 | 0.02 | 1.60 | 485 |
| Vendor | 0.02 | 0.02 | 0.96 | 0.17 | < 0.005 | < 0.005 | 0.38 | 0.38 | < 0.005 | 0.07 | 0.07 | — | 688 | 688 | < 0.005 | 0.10 | 1.42 | 721 |
| 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 | 0.18 | 0.17 | 0.16 | 1.91 | 0.00 | 0.00 | 1.38 | 1.38 | 0.00 | 0.20 | 0.20 | — | 430 | 430 | 0.01 | 0.02 | 0.04 | 436 |

| | | | | | | | | | | | | | | | | | | |
|---------------|---------|---------|------|------|---------|---------|------|------|---------|------|------|---|------|------|---------|---------|------|------|
| Vendor | 0.02 | 0.02 | 1.01 | 0.18 | < 0.005 | < 0.005 | 0.38 | 0.38 | < 0.005 | 0.07 | 0.07 | — | 688 | 688 | < 0.005 | 0.10 | 0.04 | 719 |
| 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 | 0.09 | 0.09 | 0.08 | 1.00 | 0.00 | 0.00 | 0.69 | 0.69 | 0.00 | 0.10 | 0.10 | — | 226 | 226 | 0.01 | 0.01 | 0.36 | 230 |
| Vendor | 0.01 | 0.01 | 0.51 | 0.09 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.03 | 0.04 | — | 355 | 355 | < 0.005 | 0.05 | 0.32 | 371 |
| 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 | 0.01 | 0.18 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.02 | 0.02 | — | 37.5 | 37.5 | < 0.005 | < 0.005 | 0.06 | 38.0 |
| Vendor | < 0.005 | < 0.005 | 0.09 | 0.02 | < 0.005 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 58.7 | 58.7 | < 0.005 | 0.01 | 0.05 | 61.4 |
| 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. Building Construction (2028) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|------|------|------|------|-------|-------|-------|--------|--------|--------|------|-------|-------|------|------|------|-------|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.18 | 0.99 | 8.92 | 12.9 | 0.02 | 0.30 | — | 0.30 | 0.28 | — | 0.28 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,406 |
| 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 | 1.18 | 0.99 | 8.92 | 12.9 | 0.02 | 0.30 | — | 0.30 | 0.28 | — | 0.28 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,406 |

| | | | | | | | | | | | | | | | | | | | |
|---------------------|------|---------|------|------|---------|---------|------|------|---------|------|------|------|------|------|---------|---------|------|------|------|
| 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 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36 | 0.30 | 2.74 | 3.97 | 0.01 | 0.09 | — | 0.09 | 0.08 | — | 0.08 | — | 736 | 736 | 0.03 | 0.01 | — | 738 | |
| 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.06 | 0.50 | 0.72 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 122 | 122 | < 0.005 | < 0.005 | — | 122 | |
| 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.19 | 0.11 | 2.29 | 0.00 | 0.00 | 1.38 | 1.38 | 0.00 | 0.20 | 0.20 | — | 469 | 469 | 0.01 | 0.02 | 1.45 | 475 | |
| Vendor | 0.02 | 0.02 | 0.90 | 0.17 | < 0.005 | < 0.005 | 0.38 | 0.38 | < 0.005 | 0.07 | 0.07 | — | 672 | 672 | < 0.005 | 0.10 | 1.29 | 704 | |
| 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 | 0.16 | 0.15 | 1.79 | 0.00 | 0.00 | 1.38 | 1.38 | 0.00 | 0.20 | 0.20 | — | 422 | 422 | 0.01 | 0.02 | 0.04 | 428 | |
| Vendor | 0.02 | 0.02 | 0.95 | 0.17 | < 0.005 | < 0.005 | 0.38 | 0.38 | < 0.005 | 0.07 | 0.07 | — | 672 | 672 | < 0.005 | 0.10 | 0.03 | 703 | |
| 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 | 0.04 | 0.56 | 0.00 | 0.00 | 0.41 | 0.41 | 0.00 | 0.06 | 0.06 | — | 132 | 132 | < 0.005 | 0.01 | 0.19 | 134 | |
| Vendor | 0.01 | < 0.005 | 0.29 | 0.05 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.02 | 0.02 | — | 206 | 206 | < 0.005 | 0.03 | 0.17 | 216 | |

| | | | | | | | | | | | | | | | | | | |
|---------|---------|---------|------|------|---------|---------|------|------|---------|---------|---------|---|------|------|---------|---------|------|------|
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.01 | 0.10 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.01 | 0.01 | — | 21.9 | 21.9 | < 0.005 | < 0.005 | 0.03 | 22.2 |
| Vendor | < 0.005 | < 0.005 | 0.05 | 0.01 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 34.2 | 34.2 | < 0.005 | 0.01 | 0.03 | 35.8 |
| 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. Building Construction (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 | 0.65 | 0.60 | 12.1 | 14.9 | 0.02 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,406 |
| 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 | 0.65 | 0.60 | 12.1 | 14.9 | 0.02 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 2,397 | 2,397 | 0.10 | 0.02 | — | 2,406 |
| 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 | 0.20 | 0.18 | 3.73 | 4.59 | 0.01 | 0.04 | — | 0.04 | 0.03 | — | 0.03 | — | 736 | 736 | 0.03 | 0.01 | — | 738 |

| | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|---------|------|------|---------|---------|------|------|---------|---------|---------|------|------|------|---------|---------|------|------|------|
| 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.03 | 0.68 | 0.84 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 122 | 122 | < 0.005 | < 0.005 | — | 122 | |
| 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 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.19 | 0.11 | 2.29 | 0.00 | 0.00 | 1.38 | 1.38 | 0.00 | 0.20 | 0.20 | — | 469 | 469 | 0.01 | 0.02 | 1.45 | 475 | |
| Vendor | 0.02 | 0.02 | 0.90 | 0.17 | < 0.005 | < 0.005 | 0.38 | 0.38 | < 0.005 | 0.07 | 0.07 | — | 672 | 672 | < 0.005 | 0.10 | 1.29 | 704 | |
| 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 | 0.16 | 0.15 | 1.79 | 0.00 | 0.00 | 1.38 | 1.38 | 0.00 | 0.20 | 0.20 | — | 422 | 422 | 0.01 | 0.02 | 0.04 | 428 | |
| Vendor | 0.02 | 0.02 | 0.95 | 0.17 | < 0.005 | < 0.005 | 0.38 | 0.38 | < 0.005 | 0.07 | 0.07 | — | 672 | 672 | < 0.005 | 0.10 | 0.03 | 703 | |
| 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 | 0.04 | 0.56 | 0.00 | 0.00 | 0.41 | 0.41 | 0.00 | 0.06 | 0.06 | — | 132 | 132 | < 0.005 | 0.01 | 0.19 | 134 | |
| Vendor | 0.01 | < 0.005 | 0.29 | 0.05 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.02 | 0.02 | — | 206 | 206 | < 0.005 | 0.03 | 0.17 | 216 | |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Worker | 0.01 | 0.01 | 0.01 | 0.10 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.01 | 0.01 | — | 21.9 | 21.9 | < 0.005 | < 0.005 | 0.03 | 22.2 | |
| Vendor | < 0.005 | < 0.005 | 0.05 | 0.01 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 34.2 | 34.2 | < 0.005 | 0.01 | 0.03 | 35.8 | |
| 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. Paving (2028) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---------------------|------|------|------|------|---------|---------|-------|---------|---------|--------|---------|------|-------|-------|---------|---------|------|-------|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.82 | 0.69 | 6.63 | 9.91 | 0.01 | 0.26 | — | 0.26 | 0.24 | — | 0.24 | — | 1,511 | 1,511 | 0.06 | 0.01 | — | 1,516 |
| Paving | 1.39 | 1.39 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.04 | 0.36 | 0.54 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 82.8 | 82.8 | < 0.005 | < 0.005 | — | 83.1 |
| Paving | 0.08 | 0.08 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.07 | 0.10 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 13.7 | 13.7 | < 0.005 | < 0.005 | — | 13.8 |
| Paving | 0.01 | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---------------------|---------|---------|---------|------|------|------|---------|---------|------|---------|---------|---|------|------|---------|---------|---------|------|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.06 | 0.04 | 0.78 | 0.00 | 0.00 | 0.47 | 0.47 | 0.00 | 0.07 | 0.07 | — | 159 | 159 | < 0.005 | 0.01 | 0.49 | 161 |
| 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | < 0.005 | < 0.005 | — | 8.02 | 8.02 | < 0.005 | < 0.005 | 0.01 | 8.14 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.33 | 1.33 | < 0.005 | < 0.005 | < 0.005 | 1.35 |
| 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. Paving (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 | 0.50 | 0.45 | 8.08 | 10.6 | 0.01 | 0.10 | — | 0.10 | 0.09 | — | 0.09 | — | 1,511 | 1,511 | 0.06 | 0.01 | — | 1,516 |
| Paving | 1.39 | 1.39 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | | |
|---------------------|---------|---------|---------|------|---------|---------|------|---------|---------|---------|---------|------|------|------|---------|---------|------|------|------|
| 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 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.03 | 0.02 | 0.44 | 0.58 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 82.8 | 82.8 | < 0.005 | < 0.005 | — | 83.1 | |
| Paving | 0.08 | 0.08 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.08 | 0.11 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 13.7 | 13.7 | < 0.005 | < 0.005 | — | 13.8 | |
| Paving | 0.01 | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Worker | 0.06 | 0.06 | 0.04 | 0.78 | 0.00 | 0.00 | 0.47 | 0.47 | 0.00 | 0.07 | 0.07 | — | 159 | 159 | < 0.005 | 0.01 | 0.49 | 161 | |
| 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | < 0.005 | < 0.005 | — | 8.02 | 8.02 | < 0.005 | < 0.005 | 0.01 | 8.14 | |

| | | | | | | | | | | | | | | | | | | | |
|---------|---------|---------|---------|------|------|------|---------|---------|------|---------|---------|------|------|------|---------|---------|---------|------|------|
| 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 | 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 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.33 | 1.33 | < 0.005 | < 0.005 | < 0.005 | 1.35 | |
| 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 | 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 | 0.00 |

3.11. Architectural Coating (2028) - Unmitigated

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

| Location | TOG | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|------------------------|------|------|------|------|---------|---------|-------|---------|---------|--------|---------|------|-------|------|---------|---------|------|------|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13 | 0.11 | 0.81 | 1.12 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 134 | 134 | 0.01 | < 0.005 | — | 134 |
| Architectural Coatings | 102 | 102 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.01 | 0.01 | 0.04 | 0.06 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 7.32 | 7.32 | < 0.005 | < 0.005 | — | 7.34 |

| | | | | | | | | | | | | | | | | | | |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------|------|------|---------|---------|---------|------|
| Architectural | 5.61 | 5.61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.21 | 1.21 | < 0.005 | < 0.005 | — | 1.22 |
| Architectural Coatings | 1.02 | 1.02 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.04 | 0.04 | 0.02 | 0.46 | 0.00 | 0.00 | 0.28 | 0.28 | 0.00 | 0.04 | 0.04 | — | 93.8 | 93.8 | < 0.005 | < 0.005 | 0.29 | 95.1 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 4.72 | 4.72 | < 0.005 | < 0.005 | 0.01 | 4.79 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.78 | 0.78 | < 0.005 | < 0.005 | < 0.005 | 0.79 |
| 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 |

3.12. Architectural Coating (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 | 0.13 | 0.11 | 0.81 | 1.12 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 134 | 134 | 0.01 | < 0.005 | — | 134 |
| Architectural Coatings | 70.4 | 70.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.04 | 0.06 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 7.32 | 7.32 | < 0.005 | < 0.005 | — | 7.34 |
| Architectural Coatings | 3.86 | 3.86 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.01 | 0.01 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 1.21 | 1.21 | < 0.005 | < 0.005 | — | 1.22 |
| Architectural Coatings | 0.70 | 0.70 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | 0.04 | 0.04 | 0.02 | 0.46 | 0.00 | 0.00 | 0.28 | 0.28 | 0.00 | 0.04 | 0.04 | — | 93.8 | 93.8 | < 0.005 | < 0.005 | 0.29 | 95.1 |
| 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 4.72 | 4.72 | < 0.005 | < 0.005 | 0.01 | 4.79 |
| 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 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 0.78 | 0.78 | < 0.005 | < 0.005 | < 0.005 | 0.79 |
| 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

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | 263 | 263 | 0.11 | 0.01 | — | 269 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 88.5 | 88.5 | 0.04 | < 0.005 | — | 90.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 351 | 351 | 0.15 | 0.02 | — | 360 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | 263 | 263 | 0.11 | 0.01 | — | 269 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 88.5 | 88.5 | 0.04 | < 0.005 | — | 90.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 351 | 351 | 0.15 | 0.02 | — | 360 |

| | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|------|------|------|---------|---|------|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | 43.5 | 43.5 | 0.02 | < 0.005 | — | 44.6 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 14.7 | 14.7 | 0.01 | < 0.005 | — | 15.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 58.1 | 58.1 | 0.02 | < 0.005 | — | 59.6 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | 263 | 263 | 0.11 | 0.01 | — | 269 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 88.5 | 88.5 | 0.04 | < 0.005 | — | 90.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 351 | 351 | 0.15 | 0.02 | — | 360 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | 263 | 263 | 0.11 | 0.01 | — | 269 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 88.5 | 88.5 | 0.04 | < 0.005 | — | 90.7 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 351 | 351 | 0.15 | 0.02 | — | 360 |

| | | | | | | | | | | | | | | | | | | |
|--------------------------|---|---|---|---|---|---|---|---|---|---|---|---|------|------|------|---------|---|------|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | 43.5 | 43.5 | 0.02 | < 0.005 | — | 44.6 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 14.7 | 14.7 | 0.01 | < 0.005 | — | 15.0 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 58.1 | 58.1 | 0.02 | < 0.005 | — | 59.6 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 381 | 381 | 0.03 | < 0.005 | — | 383 |
| 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 | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 381 | 381 | 0.03 | < 0.005 | — | 383 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 381 | 381 | 0.03 | < 0.005 | — | 383 |
| 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 | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 381 | 381 | 0.03 | < 0.005 | — | 383 |

| | | | | | | | | | | | | | | | | | | |
|--------------------------|------|---------|------|------|---------|---------|---|---------|---------|---|---------|---|------|------|------|---------|---|------|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | 0.01 | < 0.005 | 0.06 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 63.2 | 63.2 | 0.01 | < 0.005 | — | 63.3 |
| 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 | 0.01 | < 0.005 | 0.06 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 63.2 | 63.2 | 0.01 | < 0.005 | — | 63.3 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 381 | 381 | 0.03 | < 0.005 | — | 383 |
| 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 | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 381 | 381 | 0.03 | < 0.005 | — | 383 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 381 | 381 | 0.03 | < 0.005 | — | 383 |
| 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 | 0.04 | 0.02 | 0.32 | 0.27 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 381 | 381 | 0.03 | < 0.005 | — | 383 |

| | | | | | | | | | | | | | | | | | | |
|--------------------------|------|---------|------|------|---------|---------|---|---------|---------|---|---------|---|------|------|------|---------|---|------|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | 0.01 | < 0.005 | 0.06 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 63.2 | 63.2 | 0.01 | < 0.005 | — | 63.3 |
| 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 | 0.01 | < 0.005 | 0.06 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 63.2 | 63.2 | 0.01 | < 0.005 | — | 63.3 |

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 | 1.73 | 1.73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.56 | 0.56 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 1.07 | 0.99 | 0.05 | 6.00 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 24.7 | 24.7 | < 0.005 | < 0.005 | — | 24.8 |
| Total | 3.36 | 3.28 | 0.05 | 6.00 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 24.7 | 24.7 | < 0.005 | < 0.005 | — | 24.8 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|------------------------|------|------|---------|------|---------|---------|---|---------|---------|---|---------|---|------|------|---------|---------|---|------|
| Consumer | 1.73 | 1.73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.56 | 0.56 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 2.29 | 2.29 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 0.32 | 0.32 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.10 | 0.10 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.10 | 0.09 | < 0.005 | 0.54 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.02 | 2.02 | < 0.005 | < 0.005 | — | 2.02 |
| Total | 0.51 | 0.51 | < 0.005 | 0.54 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.02 | 2.02 | < 0.005 | < 0.005 | — | 2.02 |

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 | 1.73 | 1.73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.56 | 0.56 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|------------------------|------|------|---------|------|---------|---------|---|---------|---------|---|---------|---|------|------|---------|---------|---|------|
| Landscape Equipment | 1.07 | 0.99 | 0.05 | 6.00 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 24.7 | 24.7 | < 0.005 | < 0.005 | — | 24.8 |
| Total | 3.36 | 3.28 | 0.05 | 6.00 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 24.7 | 24.7 | < 0.005 | < 0.005 | — | 24.8 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 1.73 | 1.73 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.56 | 0.56 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 2.29 | 2.29 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 0.32 | 0.32 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.10 | 0.10 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.10 | 0.09 | < 0.005 | 0.54 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.02 | 2.02 | < 0.005 | < 0.005 | — | 2.02 |
| Total | 0.51 | 0.51 | < 0.005 | 0.54 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 2.02 | 2.02 | < 0.005 | < 0.005 | — | 2.02 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 1.16 | 4.40 | 0.33 | 0.01 | — | 15.1 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 1.16 | 4.40 | 0.33 | 0.01 | — | 15.1 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 19.6 | 6.99 | 26.6 | 2.01 | 0.05 | — | 91.2 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 1.16 | 4.40 | 0.33 | 0.01 | — | 15.1 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 3.24 | 1.16 | 4.40 | 0.33 | 0.01 | — | 15.1 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 12.9 | 0.00 | 12.9 | 1.29 | 0.00 | — | 45.2 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 12.9 | 0.00 | 12.9 | 1.29 | 0.00 | — | 45.2 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 78.1 | 0.00 | 78.1 | 7.81 | 0.00 | — | 273 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 12.9 | 0.00 | 12.9 | 1.29 | 0.00 | — | 45.2 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 12.9 | 0.00 | 12.9 | 1.29 | 0.00 | — | 45.2 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.11 | 0.11 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.11 | 0.11 |

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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.66 | 0.66 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.11 | 0.11 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.11 | 0.11 |

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)

| Equipm ent 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 | 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

4.8.2. 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

4.9. 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)

| Equipm ent 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)

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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|----------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Remove | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|-------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |
|-----------------------|-----------------------|------------|-----------|---------------|---------------------|-------------------|
| Site Preparation | Site Preparation | 5/18/2027 | 5/27/2027 | 7.00 | 10.0 | — |
| Grading | Grading | 5/28/2027 | 6/26/2027 | 7.00 | 30.0 | — |
| Building Construction | Building Construction | 6/27/2027 | 4/21/2028 | 7.00 | 300 | — |
| Paving | Paving | 4/22/2028 | 5/11/2028 | 7.00 | 20.0 | — |
| Architectural Coating | Architectural Coating | 5/12/2028 | 5/31/2028 | 7.00 | 20.0 | — |

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 |
|------------------|----------------------------|-----------|-------------|----------------|---------------|------------|-------------|
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Back hoes | Diesel | Average | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Excavators | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |

| | | | | | | | |
|-----------------------|----------------------------|--------|---------|------|------|------|------|
| Grading | Tractors/Loaders/Back hoes | Diesel | Average | 2.00 | 8.00 | 84.0 | 0.37 |
| Grading | Scrapers | Diesel | Average | 2.00 | 8.00 | 423 | 0.48 |
| Grading | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Building Construction | Forklifts | Diesel | Average | 3.00 | 8.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Cranes | Diesel | Average | 1.00 | 7.00 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Average | 1.00 | 8.00 | 46.0 | 0.45 |
| Building Construction | Tractors/Loaders/Back hoes | Diesel | Average | 3.00 | 7.00 | 84.0 | 0.37 |
| Paving | Pavers | Diesel | Average | 2.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 2.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 6.00 | 37.0 | 0.48 |

5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|-----------------------|----------------------------|-----------|-------------|----------------|---------------|------------|-------------|
| Site Preparation | Rubber Tired Dozers | Diesel | Tier 3 | 3.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Back hoes | Diesel | Tier 3 | 4.00 | 8.00 | 84.0 | 0.37 |
| Grading | Graders | Diesel | Tier 3 | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Excavators | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Grading | Tractors/Loaders/Back hoes | Diesel | Tier 3 | 2.00 | 8.00 | 84.0 | 0.37 |
| Grading | Scrapers | Diesel | Tier 3 | 2.00 | 8.00 | 423 | 0.48 |
| Grading | Rubber Tired Dozers | Diesel | Tier 3 | 1.00 | 8.00 | 367 | 0.40 |
| Building Construction | Forklifts | Diesel | Tier 3 | 3.00 | 8.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 1.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Cranes | Diesel | Tier 3 | 1.00 | 7.00 | 367 | 0.29 |

| | | | | | | | |
|-----------------------|----------------------------|--------|---------|------|------|------|------|
| Building Construction | Welders | Diesel | Average | 1.00 | 8.00 | 46.0 | 0.45 |
| Building Construction | Tractors/Loaders/Back hoes | Diesel | Tier 3 | 3.00 | 7.00 | 84.0 | 0.37 |
| Paving | Pavers | Diesel | Tier 3 | 2.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Tier 3 | 2.00 | 8.00 | 89.0 | 0.36 |
| Paving | Rollers | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Average | 1.00 | 6.00 | 37.0 | 0.48 |

5.3. Construction Vehicles

5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|-----------------------|--------------|-----------------------|----------------|---------------|
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 17.5 | 14.3 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 8.80 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 20.0 | 14.3 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 8.80 | HHDT,MHDT |
| Grading | Hauling | 667 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 44.2 | 14.3 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 22.6 | 8.80 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 15.0 | 14.3 | LDA,LDT1,LDT2 |

| | | | | |
|-----------------------|--------------|------|------|---------------|
| Paving | Vendor | — | 8.80 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 8.83 | 14.3 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 8.80 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|-----------------------|--------------|-----------------------|----------------|---------------|
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 17.5 | 14.3 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 8.80 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 20.0 | 14.3 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 8.80 | HHDT,MHDT |
| Grading | Hauling | 667 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 44.2 | 14.3 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 22.6 | 8.80 | HHDT,MHDT |
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 15.0 | 14.3 | LDA,LDT1,LDT2 |

| | | | | |
|-----------------------|--------------|------|------|---------------|
| Paving | Vendor | — | 8.80 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 8.83 | 14.3 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 8.80 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | 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 | 207,000 | 69,000 | 27,756 |

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) |
|------------------|------------------------|------------------------|----------------------|-------------------------------|---------------------|
| Site Preparation | — | — | 15.0 | 0.00 | — |
| Grading | 107,000 | 53,000 | 90.0 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 10.6 |

5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|----------------------------|---------------------|----------------|-----------------|
|----------------------------|---------------------|----------------|-----------------|

| | | | |
|--------------------|---|-----|-----|
| Water Exposed Area | 2 | 61% | 61% |
|--------------------|---|-----|-----|

5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|--------------------------|--------------------|-----------|
| Regional Shopping Center | 0.00 | 0% |
| Parking Lot | 10.6 | 100% |

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|------|--------------|-----|------|---------|
| 2027 | 0.00 | 204 | 0.03 | < 0.005 |
| 2028 | 0.00 | 204 | 0.03 | < 0.005 |

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 |
|---------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-----------|
| Total all Land Uses | 2,536 | 2,536 | 2,536 | 925,640 | 11,462 | 11,462 | 11,462 | 4,183,630 |

5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|-----------|
| Total all Land Uses | 2,536 | 2,536 | 2,536 | 925,640 | 11,462 | 11,462 | 11,462 | 4,183,630 |

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|--|--|--|--|-----------------------------|
| 0 | 0.00 | 207,000 | 69,000 | 27,756 |

5.10.3. Landscape Equipment

| Season | Unit | Value |
|-------------|--------|-------|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|-------------|--------|-------|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 180 |

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) |
|--------------------------|----------------------|------|--------|--------|-----------------------|
| Regional Shopping Center | 1,202,266 | 79.7 | 0.0330 | 0.0040 | 1,190,333 |
| Parking Lot | 405,244 | 79.7 | 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) |
|--------------------------|----------------------|------|--------|--------|-----------------------|
| Regional Shopping Center | 1,202,266 | 79.7 | 0.0330 | 0.0040 | 1,190,333 |
| Parking Lot | 405,244 | 79.7 | 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) |
|--------------------------|-------------------------|--------------------------|
| Regional Shopping Center | 10,222,008 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|--------------------------|-------------------------|--------------------------|
| Regional Shopping Center | 10,222,008 | 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) |
|--------------------------|------------------|-------------------------|
| Regional Shopping Center | 145 | — |
| Parking Lot | 0.00 | — |

5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|--------------------------|------------------|-------------------------|
| Regional Shopping Center | 145 | — |

| | | |
|-------------|------|---|
| Parking Lot | 0.00 | — |
|-------------|------|---|

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|--------------------------|---|-------------|-------|---------------|----------------------|-------------------|----------------|
| Regional Shopping Center | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Regional Shopping Center | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |

5.14.2. Mitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|--------------------------|---|-------------|-------|---------------|----------------------|-------------------|----------------|
| Regional Shopping Center | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Regional Shopping Center | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.15.2. Mitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

5.16.2. Process Boilers

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

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1.2. 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) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Characteristics: Utility Information | CO2 emission factor estimated based upon RPS compliance. |
| Land Use | Based on project-specific information. |
| Construction: Construction Phases | Based on project-specific information |
| Construction: Dust From Material Movement | Construction material movement based on project-specific information. Watering 2x/day based on Rule 223-1, Table 1. |
| Construction: Architectural Coatings | Updated the VOC emission factor based on EDCAPCD Rule 215 Limits. |
| Operations: Consumer Products | Updated based on county specific data, refer to report for further details. |
| Operations: Architectural Coatings | Updated the VOC emission factor based on EDCAPCD Rule 215 Limits. |
| Construction: On-Road Fugitive Dust | Percent paved roads updated based on Project-specific information. |
| Operations: Road Dust | Percent paved roads updated based on Project-specific information. |

APPENDIX B
CONSTRUCTION INPUTS

List of Tables

- Table B-1: Construction Schedule - North Site Remainder Area
- Table B-2: Construction Equipment Assumptions - North Site Remainder Area
- Table B-3: Construction Trip Assumptions - North Site Remainder Area
- Table B-4: Construction Material Movement - North Site Remainder Area

Table B-1. Construction Schedule - North Site Remainder Area

El Dorado Hills Costco Project
El Dorado Hills, California

| Construction Phase Name ¹ | CalEEMod Phase Type ¹ | Start Date ¹ | End Date ¹ | Phase Duration ² (days) |
|---|---|--------------------------------|------------------------------|---|
| Site Preparation | Site Preparation | 5/18/2027 | 5/27/2027 | 10 |
| Grading | Grading | 5/28/2027 | 6/26/2027 | 30 |
| Building Construction | Building Construction | 6/27/2027 | 4/21/2028 | 300 |
| Paving | Paving | 4/22/2028 | 5/11/2028 | 20 |
| Architectural Coating | Architectural Coating | 5/12/2028 | 5/31/2028 | 20 |

Notes:

¹ Construction of the North Side Remainder Area land uses is conservatively assumed to begin immediately after the EDH Costco Project is operational. Construction phases and duration are based on CalEEMod defaults.

² The construction work week was assumed to be 7 days per week.

Abbreviations:

CalEEMod - California Emissions Estimator Model

EDH - El Dorado Hills

Table B-2. Construction Equipment Assumptions - North Site Remainder Area

El Dorado Hills Costco Project
 El Dorado Hills, California

| Construction Phase Name | Offroad Equipment Type ¹ | Number of Equipment ¹ | Usage Hours ¹ (hours/day) | Equipment Horsepower ¹ (hp) | Equipment Load Factor ¹ | Fuel Type ¹ | Engine Tier for Unmitigated Project ¹ | Diesel Particulate Filter Level for Unmitigated Project ¹ | Engine Tier for Mitigated Project ² | Diesel Particulate Filter Level for Mitigated Project ² |
|-------------------------|-------------------------------------|----------------------------------|--------------------------------------|--|------------------------------------|------------------------|--|--|--|--|
| Site Preparation | Rubber Tired Dozers | 3 | 8 | 367 | 0.40 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8 | 84 | 0.37 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Grading | Excavators | 2 | 8 | 36 | 0.38 | Diesel | Average | N/A | Average | N/A |
| Grading | Graders | 1 | 8 | 148 | 0.41 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Grading | Rubber Tired Dozers | 1 | 8 | 367 | 0.40 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Grading | Scrapers | 2 | 8 | 423 | 0.48 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8 | 84 | 0.37 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Building Construction | Cranes | 1 | 7 | 367 | 0.29 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Building Construction | Forklifts | 3 | 8 | 82 | 0.20 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Building Construction | Generator Sets | 1 | 8 | 14 | 0.74 | Diesel | Average | N/A | Average | N/A |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7 | 84 | 0.37 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Building Construction | Welders | 1 | 8 | 46 | 0.45 | Diesel | Average | N/A | Average | N/A |
| Paving | Pavers | 2 | 8 | 81 | 0.42 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Paving | Paving Equipment | 2 | 8 | 89 | 0.36 | Diesel | Average | N/A | Tier 3 | Level 3 |
| Paving | Rollers | 2 | 8 | 36 | 0.38 | Diesel | Average | N/A | Average | N/A |
| Architectural Coating | Air Compressors | 1 | 6 | 37 | 0.48 | Diesel | Average | N/A | Average | N/A |

Notes:

¹ Based on CalEEMod default values.

² The mitigation measure requires that construction equipment greater than 50 hp used at the site shall be mitigated to meet USEPA Tier 4 Final emission standards for PM₁₀ and PM_{2.5}. If Tier 4 Final equipment is viable but not available, all construction equipment larger than 50 horsepower used at the site shall meet USEPA emission standards for Tier 3 engines and include particulate matter emissions control equivalent to CARB Level 3 verifiable diesel emission control devices. To be conservative, this analysis assumed that off-road construction equipment larger than 50 horsepower are equipped with Tier 3 engines and DPFs for the mitigated emissions.

Abbreviations:

CalEEMod - California Emissions Estimator Model
 CARB - California Air Resources Board
 DPF - Diesel Particulate Filter
 hp - horsepower

N/A - not available
 PM₁₀ - particulate matter less than 10 microns in diameter
 PM_{2.5} - particulate matter less than 2.5 microns in diameter
 USEPA - United States Environmental Protection Agency

Table B-3. Construction Trip Assumptions - North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| Construction Phase Name | Worker Trips per Day ^{1,2} | Vendor Trips per Day ^{1,2} | Hauling Trips per Day ^{1,2} |
|--------------------------------|--|--|---|
| Site Preparation | 18 | 0 | 0 |
| Grading | 20 | 0 | 667 |
| Building Construction | 44 | 23 | 0 |
| Paving | 15 | 0 | 0 |
| Architectural Coating | 9 | 0 | 0 |

Notes:

¹ Trips are presented as one-way trips per day.

² Worker, vendor, and hauling trips are based on CalEEMod defaults. The one-way trip lengths for worker, vendor, and hauling trips are assumed to be the CalEEMod default values of 14.3 miles, 8.8 miles, and 20.0 miles, respectively.

Abbreviations:

CalEEMod - California Emissions Estimator Model

Table B-4. Construction Material Movement - North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| Construction Phase Name | Material Imported ¹ (yd³) | Material Exported ¹ (yd³) |
|--------------------------------|--|--|
| Grading | 107,000 | 53,000 |

Notes:

¹ Soil import and export quantities based on project-specific data.

Abbreviations:

yd³ - cubic yard

APPENDIX C
CONSTRUCTION EMISSION CALCULATION TABLES

List of Tables

- Table C-1: Estimating Unmitigated Criteria Air Pollutant Emissions for North Site Remainder Area Construction
- Table C-2: Estimating Mitigated Criteria Air Pollutant Emissions for North Site Remainder Area Construction

Table C-1. Estimating Unmitigated Criteria Air Pollutant Emissions for North Site Remainder Area Construction

El Dorado Hills Costco Project
El Dorado Hills, California

| Construction Phases ¹ | Start Date | End Date | Number of Construction Days | Construction Time Period | Season ² | Daily ROG Emissions ³ (lbs/day) | Daily NO _x Emissions ³ (lbs/day) | Daily CO Emissions ³ (lbs/day) | Daily SO _x Emissions ^{3,4} (lbs/day) | Daily PM ₁₀ Emissions ^{3,5} (lbs/day) | Daily PM _{2.5} Emissions ^{3,5} (lbs/day) | Total ROG Emissions ⁶ (lbs) | Total NO _x Emissions ⁶ (lbs) | Total CO Emissions ⁶ (lbs) | Total SO _x Emissions ^{4,6} (lbs) | Total PM ₁₀ Emissions ^{5,6} (lbs) | Total PM _{2.5} Emissions ^{5,6} (lbs) |
|----------------------------------|------------|------------|-----------------------------|--------------------------|---------------------|--|--|---|--|---|--|--|--|---------------------------------------|--|---|--|
| Site Preparation | 5/18/2027 | 5/27/2027 | 10 | First Quarter | Summer | 3.1 | 28.0 | 29.2 | 0.0 | 9.4 | 5.1 | 31 | 280 | 292 | 0.5 | 94 | 51 |
| Grading | 5/28/2027 | 6/26/2027 | 30 | First Quarter | Summer | 4.3 | 110.7 | 37.9 | 0.7 | 32.1 | 7.8 | 128 | 3,320 | 1,137 | 19.9 | 962 | 235 |
| Building Construction | 6/27/2027 | 8/17/2027 | 52 | First Quarter | Summer | 1.2 | 10.5 | 15.6 | 0.0 | 2.1 | 0.6 | 64 | 545 | 809 | 1.4 | 109 | 30 |
| Building Construction | 8/18/2027 | 9/30/2027 | 44 | Second Quarter | Summer | 1.2 | 10.5 | 15.6 | 0.0 | 2.1 | 0.6 | 55 | 461 | 684 | 1.2 | 92 | 25 |
| Building Construction | 10/1/2027 | 11/17/2027 | 48 | Second Quarter | Winter | 1.2 | 10.6 | 15.0 | 0.0 | 2.1 | 0.6 | 59 | 507 | 721 | 1.3 | 100 | 28 |
| Building Construction | 11/18/2027 | 12/31/2027 | 44 | Third Quarter | Winter | 1.2 | 10.6 | 15.0 | 0.0 | 2.1 | 0.6 | 54 | 465 | 661 | 1.2 | 92 | 25 |
| Building Construction | 1/1/2028 | 2/17/2028 | 48 | Third Quarter | Winter | 1.2 | 10.0 | 14.9 | 0.0 | 2.1 | 0.5 | 56 | 481 | 715 | 1.3 | 99 | 26 |
| Building Construction | 2/18/2028 | 3/31/2028 | 43 | Fourth Quarter | Winter | 1.2 | 10.0 | 14.9 | 0.0 | 2.1 | 0.5 | 50 | 431 | 641 | 1.2 | 88 | 23 |
| Building Construction | 4/1/2028 | 4/21/2028 | 21 | Fourth Quarter | Summer | 1.2 | 9.9 | 15.4 | 0.0 | 2.1 | 0.5 | 25 | 209 | 323 | 0.6 | 43 | 11 |
| Paving | 4/22/2028 | 5/11/2028 | 20 | Fourth Quarter | Summer | 2.1 | 6.7 | 10.7 | 0.0 | 0.7 | 0.3 | 43 | 133 | 214 | 0.3 | 14 | 6 |
| Architectural Coating | 5/12/2028 | 5/31/2028 | 20 | Fourth Quarter | Summer | 102.6 | 0.8 | 1.6 | 0.0 | 0.3 | 0.1 | 2,051 | 17 | 32 | 0.0 | 6 | 1 |

Notes:

¹ Construction phases and duration are based on CalEEMod defaults. Refer to **Appendix B** for further details.

² Based on CalEEMod defaults.

³ Estimated by summing up the maximum daily emissions for the construction phase. Maximum daily emissions for the Site Preparation; Grading; Building Construction; Paving; and Architectural Coating phases are obtained from **Appendix A**.

⁴ For purposes of this analysis SO_x emissions are assumed to be equal to SO₂.

⁵ Particulate matter emissions include exhaust emissions from off-road construction equipment, fugitive dust emissions from on-site construction activities, and exhaust/tire wear/brake wear/entrained road dust emissions from on-road vehicles associated with project construction. As noted in Section 4.2.3 of the Air Quality Technical Report, fugitive dust emissions will be controlled by watering the construction site twice daily in accordance with the EDCAQMD Rule 223-1. Particulate matter emissions presented here account for these control measures for fugitive dust emissions.

⁶ Estimated by multiplying the maximum daily emissions by the number of construction days for each construction phase.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

CO - carbon monoxide

EDCAQMD - El Dorado County Air Quality Management District

lb - pound

NO_x - nitrogen oxide compounds

PM₁₀ - particulate matter less than 10 microns in diameter

PM_{2.5} - particulate matter less than 2.5 microns in diameter

ROG - reactive organic gases

SO₂ - sulfur dioxide

SO_x - sulfur oxide compounds

Table C-2. Estimating Mitigated Criteria Air Pollutant Emissions for North Site Remainder Area Construction

El Dorado Hills Costco Project
El Dorado Hills, California

| Construction Phases ¹ | Start Date | End Date | Number of Construction Days | Construction Time Period | Season ² | Daily ROG Emissions ³ (lbs/day) | Daily NO _x Emissions ³ (lbs/day) | Daily CO Emissions ³ (lbs/day) | Daily SO _x Emissions ^{3,4} (lbs/day) | Daily PM ₁₀ Emissions ^{3,5} (lbs/day) | Daily PM _{2.5} Emissions ^{3,5} (lbs/day) | Total ROG Emissions ⁶ (lbs) | Total NO _x Emissions ⁶ (lbs) | Total CO Emissions ⁶ (lbs) | Total SO _x Emissions ^{4,6} (lbs) | Total PM ₁₀ Emissions ^{5,6} (lbs) | Total PM _{2.5} Emissions ^{5,6} (lbs) |
|----------------------------------|------------|------------|-----------------------------|--------------------------|---------------------|--|--|---|--|---|--|--|--|---------------------------------------|--|---|--|
| Site Preparation | 5/18/2027 | 5/27/2027 | 10 | First Quarter | Summer | 1.0 | 24.1 | 29.3 | 0.0 | 8.4 | 4.1 | 10 | 241 | 293 | 0.5 | 84 | 41 |
| Grading | 5/28/2027 | 6/26/2027 | 30 | First Quarter | Summer | 2.6 | 114.8 | 46.0 | 0.7 | 31.2 | 7.1 | 77 | 3,445 | 1,381 | 19.9 | 937 | 212 |
| Building Construction | 6/27/2027 | 8/17/2027 | 52 | First Quarter | Summer | 0.8 | 13.3 | 17.6 | 0.0 | 1.9 | 0.4 | 43 | 690 | 913 | 1.4 | 98 | 20 |
| Building Construction | 8/18/2027 | 9/30/2027 | 44 | Second Quarter | Summer | 0.8 | 13.3 | 17.6 | 0.0 | 1.9 | 0.4 | 36 | 584 | 773 | 1.2 | 83 | 17 |
| Building Construction | 10/1/2027 | 11/17/2027 | 48 | Second Quarter | Winter | 0.8 | 13.4 | 17.0 | 0.0 | 1.9 | 0.4 | 39 | 641 | 818 | 1.3 | 90 | 18 |
| Building Construction | 11/18/2027 | 12/31/2027 | 44 | Third Quarter | Winter | 0.8 | 13.4 | 17.0 | 0.0 | 1.9 | 0.4 | 35 | 588 | 750 | 1.2 | 83 | 17 |
| Building Construction | 1/1/2028 | 2/17/2028 | 48 | Third Quarter | Winter | 0.8 | 13.2 | 16.9 | 0.0 | 1.9 | 0.4 | 37 | 636 | 811 | 1.3 | 90 | 18 |
| Building Construction | 2/18/2028 | 3/31/2028 | 43 | Fourth Quarter | Winter | 0.8 | 13.2 | 16.9 | 0.0 | 1.9 | 0.4 | 33 | 569 | 727 | 1.2 | 80 | 16 |
| Building Construction | 4/1/2028 | 4/21/2028 | 21 | Fourth Quarter | Summer | 0.8 | 13.2 | 17.4 | 0.0 | 1.9 | 0.4 | 17 | 276 | 365 | 0.6 | 39 | 8 |
| Paving | 4/22/2028 | 5/11/2028 | 20 | Fourth Quarter | Summer | 1.9 | 8.1 | 11.4 | 0.0 | 0.6 | 0.2 | 38 | 162 | 227 | 0.3 | 11 | 3 |
| Architectural Coating | 5/12/2028 | 5/31/2028 | 20 | Fourth Quarter | Summer | 70.6 | 0.8 | 1.6 | 0.0 | 0.3 | 0.1 | 1,411 | 17 | 32 | 0.0 | 6 | 1 |

Notes:

¹ Construction phases and duration are based on CalEEMod defaults. Refer to **Appendix B** for further details.

² Based on CalEEMod defaults.

³ Estimated by summing up the maximum daily emissions for the construction phase. Maximum daily emissions for the Site Preparation; Grading; Building Construction; Paving; and Architectural Coating phases are obtained from **Appendix A**.

⁴ For purposes of this analysis SO_x emissions are assumed to be equal to SO₂.

⁵ Particulate matter emissions include exhaust emissions from off-road construction equipment, fugitive dust emissions from on-site construction activities, and exhaust/tire wear/brake wear/entrained road dust emissions from on-road vehicles associated with project construction. As noted in Section 4.2.3 of the Air Quality Technical Report, fugitive dust emissions will be controlled by watering the construction site twice daily in accordance with the EDCAQMD Rule 223-1. Particulate matter emissions presented here account for these control measures for fugitive dust emissions.

⁶ Estimated by multiplying the maximum daily emissions by the number of construction days for each construction phase.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODEL

CO - carbon monoxide

EDCAQMD - El Dorado County Air Quality Management District

lb - pound

NO_x - nitrogen oxide compounds

PM₁₀ - particulate matter less than 10 microns in diameter

PM_{2.5} - particulate matter less than 2.5 microns in diameter

ROG - reactive organic gases

SO₂ - sulfur dioxide

SO_x - sulfur oxide compounds

APPENDIX D
CONSTRUCTION ENERGY CALCULATIONS

List of Tables

Table D-1: Off-Road Equipment Fuel Consumption During Construction - North Site Remainder Area

Table D-2: On-Road Vehicle Fuel Consumption During Construction - North Site Remainder Area

Table D-1. Off-Road Equipment Fuel Consumption During Construction - North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| Construction Phase Name | CO₂ Emissions¹ (MT/yr) | Diesel Consumption² (gallons/yr) |
|--------------------------------|---|--|
| Site Preparation (2027) | 24.0 | 2,354 |
| Grading (2027) | 89.8 | 8,794 |
| Building Construction (2027) | 204.4 | 20,021 |
| Building Construction (2028) | 121.8 | 11,929 |
| Paving (2028) | 13.7 | 1,343 |
| Architectural Coating (2028) | 1.2 | 119 |

Constants:

10.21 kg CO₂/gallon diesel consumed in combustion engines³
1,000 kg CO₂/MT CO₂

Notes:

¹ Exhaust CO₂ emissions from off-road construction equipment used during the Site Preparation; Grading; Building Construction; Paving; and Architectural Coating construction phases that occur during remainder area development construction are obtained from the CalEEMod model run shown in **Appendix A**.

² Diesel consumption of off-road construction equipment during each construction phase is estimated as a ratio of the CO₂ emissions from these equipment to the CO₂ emission factor per gallon of diesel consumed.

³ Obtained from the USEPA GHG Emission Factors Hub. Available at:
<https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>. Accessed: June 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel
CO₂ - carbon dioxide
GHG - greenhouse gas
kg - kilograms
MT - metric ton
USEPA - United States Environmental Protection Agency
yr - year

Table D-2. On-Road Vehicle Fuel Consumption During Construction - North Site Remainder Area

El Dorado Hills Costco Project
El Dorado Hills, California

| Construction Phase Name ¹ | Phase Duration ¹ (days) | Worker Trip Rates ² (one-way trips/day) | Vendor Trip Rates ² (one-way trips/day) | Hauling Trip Number ² (one-way trips/day) | Worker Trip Length ³ (miles/one-way trip) | Vendor Trip Length ³ (miles/one-way trip) | Hauling Trip Length ³ (miles/one-way trip) | Worker Vehicle Miles Traveled ⁴ (miles) | Vendor Vehicle Miles Traveled ⁴ (miles) | Hauling Vehicle Miles Traveled ⁴ (miles) | Worker Gasoline Fuel Consumption ⁵ (gallons) | Vendor Diesel Fuel Consumption ⁵ (gallons) | Hauling Diesel Fuel Consumption ⁵ (gallons) |
|--------------------------------------|------------------------------------|--|--|--|--|--|---|--|--|---|---|---|--|
| Site Preparation (2027) | 10 | 17.5 | - | - | 14.3 | - | - | 2,503 | - | - | 95 | - | - |
| Grading (2027) | 30 | 20.0 | - | 667 | 14.3 | - | 20.0 | 8,580 | - | 400,000 | 324 | - | 79,925 |
| Building Construction (2027) | 188 | 44.2 | 22.6 | - | 14.3 | 8.80 | - | 118,720 | 37,420 | - | 4,487 | 7,554 | - |
| Building Construction (2028) | 112 | 44.2 | 22.6 | - | 14.3 | 8.80 | - | 70,727 | 22,292 | - | 2,621 | 4,461 | - |
| Paving (2028) | 20 | 15.0 | - | - | 14.3 | - | - | 4,290 | - | - | 159 | - | - |
| Architectural Coating (2028) | 20 | 8.83 | - | - | 14.3 | - | - | 2,526 | - | - | 94 | - | - |

Notes:

¹ Construction phases and duration (**Table B-1**) are based on CalEEMod defaults. Refer to **Section 3** of the report for further details.

² The number of worker and vendor trips represent CalEEMod defaults based on the construction equipment used in each construction phase. The number of hauling trips were estimated by CalEEMod based on volume of soil that would be imported/exported during construction. Refer to **Appendix B** for further details.

³ The trip lengths for on-road vehicles used during construction are CalEEMod default values.

⁴ Estimated based on trip rates, trip length, and phase duration.

⁵ Fuel consumption of on-road vehicles used during each construction phase are estimated as a product of the vehicle miles traveled by each vehicle type and its fuel consumption rate in gallons per mile.

⁶ Fuel consumption rates for on-road vehicles are calculated using vehicle class-specific fuel consumption data from EMFAC2021 (see the supporting table below, which presents EMFAC2021 outputs for 2027 and 2028 in El Dorado-Mountain County), the fleet mix for each trip type (worker, vendor, and hauling), and vehicle miles traveled. The fleet mix for the worker, vendor, and hauling trucks are based on CalEEMod defaults. Worker vehicles are assumed to be gasoline fueled and include light duty automobiles and trucks (25% LDA, 50% LDT1, 25% LDT2). Vendor vehicles are assumed to be diesel fueled and include heavy heavy-duty trucks and medium heavy duty trucks (50% HHDT and 50% MHDT). Hauling vehicles are assumed to be diesel fueled and include heavy heavy-duty trucks (100% HHDT).

Fuel Consumption Rates by Vehicle Type: ⁶

Worker Vehicles in 2027: 0.0378 gallons/mile
 Worker Vehicles in 2028: 0.0371 gallons/mile
 Vendor Vehicles in 2027: 0.2019 gallons/mile
 Vendor Vehicles in 2028: 0.2001 gallons/mile
 Haul Trucks in 2027: 0.1998 gallons/mile

Abbreviations:

CalEEMod - California Emissions Estimator Model
 EMFAC - Emission FACTors model
 HHDT - heavy heavy-duty trucks
 LDA - light-duty automobile
 LDT - light-duty truck
 MHDT - medium heavy-duty trucks

Table D-2. On-Road Vehicle Fuel Consumption During Construction - North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

Supporting Table of EMFAC Outputs

| Calendar Year | EMFAC Vehicle Class | Fuel Type | EMFAC VMT Output (miles) | EMFAC Fuel Use Output (gallons) | Average Fuel Consumption (gallons/mile) |
|----------------------|----------------------------|------------------|---------------------------------|--|--|
| 2027 | LDA | Gasoline | 1,619,691 | 51,441 | 0.0318 |
| 2027 | LDT1 | Gasoline | 181,944 | 7,232 | 0.0397 |
| 2027 | LDT2 | Gasoline | 1,158,122 | 46,256 | 0.0399 |
| 2027 | MHDT | Gasoline | 5,957 | 1,215 | 0.2039 |
| 2027 | HHDT | Diesel | 28,804 | 5,755 | 0.1998 |
| 2028 | LDA | Gasoline | 1,633,311 | 50,730 | 0.0311 |
| 2028 | LDT1 | Gasoline | 175,495 | 6,850 | 0.0390 |
| 2028 | LDT2 | Gasoline | 1,170,851 | 45,776 | 0.0391 |
| 2028 | MHDT | Gasoline | 6,113 | 1,237 | 0.2023 |
| 2028 | HHDT | Diesel | 28,701 | 5,682 | 0.1980 |

Abbreviations:

EMFAC - Emission FACTors model

HHDT - heavy heavy-duty trucks

LDA - light-duty automobile

LDT - light-duty truck

MHDT - medium heavy-duty trucks

VMT - vehicle miles traveled

APPENDIX E
OPERATIONAL INPUTS

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- Table E-1: Operational Mobile Source Assumptions - North Site Remainder Area
- Table E-2: Reactive Organic Gas Emission Factor for Consumer Product Usage in El Dorado County for Calendar Year 2028
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Table E-1. Operational Mobile Source Assumptions - North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| | | |
|---|--------|-----------|
| Total daily trips ^{1,2} | 2,536 | trips/day |
| Average trip length ¹ | 4.52 | miles |
| Daily VMT ^{1,2} | 11,463 | miles/day |

Notes:

¹ Obtained from the July 2025 El Dorado Costco CEQA Analysis report prepared by Kittelson & Associates, Inc.

² For purposes of this analysis the daily trip and VMT assumptions were used for both weekdays and weekends.

Abbreviations:

CEQA - California Environmental Quality Act

VMT - vehicle miles travelled

Table E-2. Reactive Organic Gas Emission Factor for Consumer Product Usage in El Dorado County for Calendar Year 2028

El Dorado Hills Costco Project
 El Dorado Hills, California

| Countywide ROG Inventory for Consumer Product Usage¹ (tons/day) | County Population² | Total Building Square Footage in the County³ (sqft) | ROG Emission Factors for Consumer Product Usage⁴ (lb/sqft/day) |
|---|--------------------------------------|---|--|
| 1.354 | 188,380 | 220,388,409 | 1.23E-05 |

Notes:

¹ ROG consumer products inventory for El Dorado County in calendar year 2028 was obtained from the California Emissions Projection Analysis Model, CEPAM2019v1.04. Available at: <https://ww2.arb.ca.gov/applications/cepam2019v1-04-standard-emission-tool>. Accessed: May 2025.

² Population estimates for El Dorado County in 2020 and 2028 were obtained from the State of California Department of Finance website. Available at: <https://dof.ca.gov/forecasting/demographics/projections/>. Accessed: May 2025.

³ Total building square footage in 2028 was estimated as the product of the countywide building square footage per person in 2020 multiplied by the population projection for El Dorado County in calendar Year 2028.

⁴ The consumer product ROG emission factor for consumer product usage is calculated as the ratio of the countywide ROG inventory for consumer product usage to the total building square footage in the county.

⁵ Total building square footage in El Dorado County for 2020 was obtained from FEMA HAZUS-MH software (version 7.0). Available at: <https://msc.fema.gov/portal/resources/hazus>. Accessed: May 2025.

Constants:

El Dorado County Population² in Calendar Year 2020: 191,522
 Total Building Square Footage⁵ in El Dorado County in 2020: 224,064,279

Conversion Factor:

2000 lb/ton

Abbreviations:

FEMA - Federal Emergency Management Agency
 lb - pound
 ROG - reactive organic compounds
 sqft - square foot

Table E-3. Utility GHG Emission Factor Associated with Renewable Portfolio Standard

El Dorado Hills Costco Project
 El Dorado Hills, California

Energy Generated (MWh)

| | 2020 | 2021 | 2022 | Average | Units |
|--|-------|-------|-------|---------|------------------------------------|
| CO ₂ Intensity Factor per Total Energy Generated ¹ | 160 | 98 | 56 | 105 | lbs CO ₂ /MWh generated |
| % of Total Energy From Renewables ² | 35.1% | 47.7% | 38.5% | 40.4% | |
| CO ₂ Intensity Factor per Total Non-Renewable Energy ³ | 247 | 187 | 91 | 176 | lbs CO ₂ /MWh generated |

Calculated Intensity Factors for Total Energy Delivered ⁴

| | | | | | |
|---------------------------------|-------|------|------|------|------------------------------------|
| 2027 RPS (52% Renewable Energy) | 118.3 | 89.9 | 43.7 | 84.3 | lbs CO ₂ /MWh generated |
| 2028 | 111.8 | 84.9 | 41.3 | 79.7 | lbs CO ₂ /MWh generated |
| 2030 RPS (60% Renewable Energy) | 98.6 | 75.0 | 36.4 | 70.3 | lbs CO ₂ /MWh generated |

Notes:

¹ Obtained from PG&E's 2024 Corporate Sustainability Reports. Note that 2023 values are not provided because they are subject to regulatory approval and verification at the time of this report preparation.

² Obtained from PG&E's 2021, 2022, and 2023 Corporate Sustainability Reports.

³ The emissions metric presented here is calculated based on the total CO₂ emissions for total energy generated divided by the energy generated from non-renewable sources.

⁴ The intensity factors for default RPS assumption are estimated multiplying the maximum allowable percentage of non-renewable energy per RPS and the CO₂ intensity factor per total non-renewable energy calculated above. The RPS minimum targets for renewable energy delivered are 52% for 2027 and 60% for 2030 per Senate Bill 100. The estimate provided here assumes that renewable energy sources do not result in any CO₂ emissions.

Abbreviations:

CO₂ - carbon dioxide

GHG - greenhouse gases

lbs - pounds

MWh - megawatt-hour

PG&E - Pacific Gas and Electric

RPS - Renewable Portfolio Standards

References:

PG&E 2021 Corporate Sustainability Report. Available at: https://www.responsibilityreports.com/HostedData/ResponsibilityReportArchive/p/NYSE_PCG_2021.pdf. Accessed: April 2025.

PG&E 2022 Corporate Sustainability Report. Available at: https://www.pgecorp.com/content/dam/pgecorp/language-masters/en/sustainability/corporate-responsibility-sustainability/reports/2022/assets/PGE_CSR_2022.pdf. Accessed: April 2025.

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APPENDIX F
OPERATIONAL ENERGY CALCULATIONS

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Table F-1. Operational Electricity Consumption for the North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| Project Land Use | Project Electricity Demand ¹ (kWh/yr) |
|--------------------------|---|
| Regional Shopping Center | 1,202,266 |
| Parking Lot | 405,244 |
| Total | 1,607,510 |

Notes:

¹ Obtained from CalEEMod model run for the North Site Remainder Area shown in **Appendix A**.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

kWh - kilowatt hours

yr - year

Table F-2. Operational Natural Gas Consumption for the North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| Project Land Use | Project Natural Gas Demand ¹ (kBTU/yr) |
|--------------------------|--|
| Regional Shopping Center | 1,190,333 |
| Parking Lot | 0 |
| Total | 1,190,333 |

Notes:

¹ Obtained from CalEEMod model run for the North Site Remainder Area shown in **Appendix A**.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

kBTU - kilo British Thermal Unit

yr - year

Table F-3. CalEEMod Default Fleet Mix for El Dorado County in Calendar Year 2028

El Dorado Hills Costco Project

El Dorado Hills, California

| Vehicle Category | CalEEMod Default Fleet Mix ¹ |
|-------------------------|--|
| LDA | 38.10% |
| LDT1 | 4.98% |
| LDT2 | 26.68% |
| MDV | 17.26% |
| LHDT1 | 5.18% |
| LHDT2 | 1.23% |
| MHDT | 1.61% |
| HHDT | 0.41% |
| OBUS | 0.07% |
| UBUS | 0.04% |
| MCY | 3.53% |
| SBUS | 0.13% |
| MH | 0.78% |

Notes:

¹ CalEEMod default for El Dorado (MC) sub-area, calendar year 2028.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

HHDT - Heavy heavy-duty truck

LDA - light duty automobiles

LDT - light-duty trucks

LHDT - light heavy-duty trucks

MC - Mountain County

MCY - motorcycles

MDV - medium-duty vehicle

MH - motor homes

MHDT - medium heavy-duty trucks

OBUS - other buses

SBUS - school buses

UBUS - urban buses

Table F-4. Operational Vehicle Fleet Mix for the North Site Remainder Area

El Dorado Hills Costco Project
 El Dorado Hills, California

| Vehicle Category | Fuel Type | EMFAC VMT Output ¹ (miles/day) | Fleet Mix ² |
|------------------|----------------|--|------------------------|
| LDA | Gasoline | 1,633,311 | 33.29% |
| LDA | Plug-in Hybrid | 69,525 | 1.42% |
| LDA | Electricity | 161,238 | 3.29% |
| LDA | Diesel | 4,739 | 0.10% |
| LDT1 | Gasoline | 175,495 | 4.93% |
| LDT1 | Plug-in Hybrid | 815 | 0.02% |
| LDT1 | Electricity | 996 | 0.03% |
| LDT1 | Diesel | 8 | 0.00% |
| LDT2 | Gasoline | 1,170,851 | 25.97% |
| LDT2 | Plug-in Hybrid | 16,120 | 0.36% |
| LDT2 | Electricity | 11,154 | 0.25% |
| LDT2 | Diesel | 4,900 | 0.11% |
| MDV | Gasoline | 660,798 | 16.38% |
| MDV | Plug-in Hybrid | 9,758 | 0.24% |
| MDV | Electricity | 11,461 | 0.28% |
| MDV | Diesel | 14,415 | 0.36% |
| LHDT1 | Gasoline | 96,642 | 2.52% |
| LHDT1 | Diesel | 96,871 | 2.53% |
| LHDT1 | Electricity | 4,871 | 0.13% |
| LHDT2 | Gasoline | 7,595 | 0.19% |
| LHDT2 | Diesel | 40,102 | 1.01% |
| LHDT2 | Electricity | 1,065 | 0.03% |
| MHDT | Gasoline | 6,113 | 0.12% |
| MHDT | Diesel | 73,139 | 1.43% |
| MHDT | Electricity | 3,444 | 0.07% |
| HHDT | Gasoline | 17 | 0.00% |
| HHDT | Diesel | 28,701 | 0.39% |
| HHDT | Electricity | 1,232 | 0.02% |
| HHDT | Natural Gas | 132 | 0.00% |
| OBUS | Gasoline | 992 | 0.02% |
| OBUS | Diesel | 3,160 | 0.05% |
| OBUS | Electricity | 53 | 0.00% |
| OBUS | Natural Gas | 38 | 0.00% |
| UBUS | Gasoline | 1,054 | 0.01% |
| UBUS | Diesel | 3,484 | 0.03% |
| UBUS | Electricity | 208 | 0.00% |
| MCY | Gasoline | 19,584 | 3.53% |
| SBUS | Gasoline | 681 | 0.02% |
| SBUS | Diesel | 3,110 | 0.11% |
| SBUS | Electricity | 112 | 0.00% |
| MH | Gasoline | 4,455 | 0.47% |
| MH | Diesel | 2,891 | 0.31% |

Notes:

¹ Default EMFAC2021 output for the El Dorado (MC) sub-area in calendar year 2028.

² The fleet mix for the vehicles incorporates the CalEEMod default fleet mix for El Dorado (MC) sub-area, calendar year 2028, weighted by the EMFAC VMT by fuel type.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODEL

EMFAC - Emission FACTors model

HHDT - Heavy heavy-duty truck

LDA - light duty automobiles

LDT - light-duty trucks

LHDT - light heavy-duty trucks

MC - Mountain County

MCY - motorcycles

MDV - medium-duty vehicle

MH - motor homes

MHDT - medium heavy-duty trucks

OBUS - other buses

SBUS - school buses

UBUS - urban buses

VMT - vehicle miles traveled

Table F-5. Operational Mobile Source Gasoline Consumption for the North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| Mobile Source Category | Mobile Source Activity¹ (miles/yr) | Mobile Source Activity Associated with Gasoline Combustion² (miles/yr) | Gasoline Consumption³ (gallons/yr) |
|-------------------------------|--|--|--|
| Gasoline Vehicles | 3,658,816 | 3,658,816 | 144,096 |
| Plug in Hybrid Vehicles | 85,324 | 38,323 | 1,372 |

Constants:

Average fuel efficiency of gasoline vehicles in 2028⁴ 25 miles per gallon

Average fuel efficiency of plug-in hybrid electric vehicles in 2028⁴ 28 miles per gallon

Notes:

¹ The annual vehicle miles travelled by operational mobile sources (obtained from the CalEEMod model run in **Appendix A**) was apportioned into gasoline and plug-in-hybrid vehicle technology categories based on the operational vehicle fleet mix shown in **Table F-4**.

² The vehicle miles travelled associated with gasoline combustion for each vehicle technology category was estimated based on EMFAC default assumptions for gasoline and plug-in hybrid vehicles operating in El Dorado (MC) sub-area in calendar year 2028.

³ Gasoline consumption of vehicles are estimated as a ratio of the vehicle miles traveled associated with gasoline combustion for each vehicle technology category and its average fuel efficiency in miles per gallon.

⁴ The average fuel efficiency for each gasoline vehicle technology category operating in for El Dorado (MC) sub-area in calendar year 2028 is obtained from EMFAC2021.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODeL

EMFAC - EMission FACtors model

MC - Mountain County

yr - year

Table F-6. Operational Mobile Source Natural Gas Consumption for the North Site Remainder Area

El Dorado Hills Costco Project
 El Dorado Hills, California

| Mobile Source Category | Mobile Source Activity ¹ (miles/yr) | Natural Gas Consumption ² (kBtu/yr) |
|-------------------------------|---|---|
| Natural Gas Vehicles | 102 | 2,580 |

Constants:

Average fuel efficiency of natural gas vehicles ³ 5.73 miles per diesel equivalent gallon

Conversion Factors:^{4,5}

139.3 scf of CNG per diesel equivalent gallon

1.039 kBtu per cubic foot of NG

Notes:

¹ The annual vehicle miles travelled by operational mobile sources (obtained from the CalEEMod model run in **Appendix A**) was apportioned into natural gas vehicle technology based on the operational vehicle fleet mix shown in **Table F-4**.

² Fuel consumption for natural gas vehicles is estimated as a ratio of vehicle miles traveled to the average fuel efficiency of natural gas vehicles.

³ The average fuel efficiency for natural gas vehicles operating in El Dorado (MC) sub-area in calendar year 2028 is obtained from EMFAC2021.

⁴ Scf of CNG per diesel equivalent gallon was obtained from the Alternative Fuels Data Center Gasoline and Diesel Gallon Equivalency Methodology. Available at: <https://afdc.energy.gov/fuels/equivalency-methodology>. Accessed: June 2025.

⁵ kBtu per cubic foot of NG was obtained from the NRG Energy Conversion Calculator. Available at: <https://www.nrg.com/resources/energy-tools/energy-conversion-calculator.html>. Accessed: June 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

CNG - compressed natural gas

EMFAC - EMISSION FACtors model

kBtu - kilo-British thermal unit

MC - Mountain County

NG - natural gas

scf - standard cubic feet

yr - year

Table F-7. Operational Mobile Source Diesel Consumption for the North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| Mobile Source Category | Mobile Source Activity ¹ (miles/yr) | Diesel Consumption ² (gallons/yr) |
|-------------------------------|---|---|
| Diesel Vehicles | 268,259 | 24,867 |

Constants:

Average fuel efficiency of diesel vehicles ³ 10.79 miles per gallon

Notes:

¹ The annual vehicle miles travelled by operational mobile sources (obtained from the CalEEMod model run in **Appendix A**) was apportioned into diesel vehicle technology based on the operational vehicle fleet mix shown in **Table F-4**.

² Fuel consumption for diesel vehicles is estimated as a ratio of vehicle miles traveled to the average fuel efficiency of diesel vehicles.

³ The average fuel efficiency for diesel vehicles operating in El Dorado (MC) sub-area in calendar year 2028 is obtained from EMFAC2021.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

EMFAC - Emission FACTors model

MC - Mountain County

yr - year

Table F-8. Operational Mobile Source Electricity Consumption for the North Site Remainder Area

El Dorado Hills Costco Project
 El Dorado Hills, California

| Mobile Source Category | Mobile Source Activity¹ (miles/yr) | Mobile Source Activity Associated with Electricity Consumption² (electric miles/yr) | Electricity Consumption³ (kWh/yr) |
|-------------------------------|--|---|---|
| Battery Electric Vehicles | 171,129 | 171,129 | 51,686 |
| Plug in Hybrid Vehicles | 85,324 | 47,000 | 14,195 |

Constants:

Average fuel efficiency for plug-in hybrid electric vehicles in 2028⁴ 3.31 miles per kWh

Average fuel efficiency for electric vehicles in 2028⁴ 2.39 miles per kWh

Notes:

¹ The annual vehicle miles travelled by operational mobile sources (obtained from the CalEEMod model run in **Appendix A**) was apportioned into battery electric and plug-in-hybrid vehicle technology categories based on the operational vehicle fleet mix shown in **Table F-4**.

² The fraction of electric vehicle miles traveled by plug-in hybrid vehicles was estimated based on EMFAC default assumptions for plug-in hybrid vehicles operating in El Dorado (MC) sub-area in calendar year 2028.

³ The electricity consumption is estimated as the ratio of the electric miles traveled to the average fuel efficiency of each vehicle technology in miles per kilowatt-hour.

⁴ The average fuel efficiencies of battery electric and plug-in hybrid vehicles operating in El Dorado (MC) sub-area in calendar year 2028 are obtained from EMFAC2021.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODeL

EMFAC - EMission FACtors model

GDF - gasoline dispensing facility

kWh - kilowatt-hour

MC - Mountain County

yr - year

Table F-9. Operational Landscape Equipment Gasoline Consumption for the North Site Remainder Area

El Dorado Hills Costco Project

El Dorado Hills, California

| Area Source Category | CO₂ Emissions¹ (MT/yr) | Gasoline Consumption² (gallons/yr) |
|-----------------------------|---|--|
| Landscape equipment | 2.02 | 230 |

Conversion Factors:

8.78 kg CO₂/gallon gasoline consumed in combustion engines³

1,000 kg CO₂/MT CO₂

Notes:

¹ Exhaust CO₂ emissions from landscaping equipment are obtained from the CalEEMod model run in **Appendix A**.

² Gasoline consumption of landscaping equipment is estimated as a ratio of the CO₂ emissions from these equipment to the CO₂ emission factor per gallon of gasoline consumed.

³ Obtained from the USEPA GHG Emission Factors Hub. Available at:

<https://www.epa.gov/system/files/documents/2025-01/ghg-emission-factors-hub-2025.pdf>. Accessed: June 2025.

Abbreviations:

CalEEMod - CALifornia Emissions Estimator MODel

CO₂ - carbon dioxide

GHG - greenhouse gas

kg - kilograms

MT - metric ton

USEPA - United States Environmental Protection Agency

yr - year