

Appendix A

Air Quality, Greenhouse Gas
Emissions, and Energy Assessment

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Subject: Air Quality, Greenhouse Gas Emissions, and Energy Assessment for the City of Poway Treated Water Facilities & Redundant Pipeline Project

Dear Mr. Webster:

HELIX Environmental Planning, Inc. (HELIX) has assessed air quality, greenhouse gas (GHG) emission, and energy consumption impacts associated with the City of Poway (City) Treated Water Facilities & Redundant Pipeline Project. This letter summarizes the findings of the assessment.

PROJECT LOCATION

The City of Poway Treated Water Facilities & Redundant Pipeline Project (Project No. WTR0028) (referred to as the Project) is located within the City in San Diego County (County), California (Figure 1, *Regional Location*). Specifically, the Project contains features within and along Espola Road from 500 feet south of Green Valley Truck Trail to Lake Poway Road and within Lake Poway Road east from Espola Road to the Lester J. Berglund Water Treatment Plant (Berglund WTP) where improvements to the facilities within the Berglund WTP are proposed (Figure 2, *Project Components*). The pump station and forebay tank would be located within City property (Assessor's Parcel Number 278-437-7400) along the south side of Lake Poway Road, approximately 1,100 feet east of Espola Road.

PROJECT COMPONENTS

In November 2025, the City of Poway, Ramona Municipal Water District (Ramona MWD), and the San Diego County Water Authority (Water Authority) entered into a Memorandum of Understanding to facilitate the delivery of potable water from the Water Authority to Poway and the delivery of potable water from Poway to the Ramona MWD. As part of the Memorandum of Understanding, the entities were assigned different responsibilities for the facility improvements. The City would be responsible for the design and construction of the pump station, forebay, and associated pipelines, including the 30-inch Espola Road pipeline. The Water Authority would be responsible for abandoning the existing 24-inch and 27-inch pipelines and adding the new POW-6 FCF and associated pipeline improvements to the

existing Water Authority Ramona Pipeline. The City and Water Authority components are hereby defined as the proposed Project.

The Project proposes to construct new water facilities to replace and abandon existing water facilities and provide up to 24 cubic feet per second (cfs) of treated water to the City. Since the untreated water connection to the First Aqueduct is the only source of water to Lake Poway and Berglund WTP, the proposed Project would provide a source of treated water to the City. The availability of a treated water source would also provide greater flexibility for the City to perform necessary repair and replacement work within Berglund WTP in the future.

Generally, the Project improvements consist of water conveyance and treatment infrastructure within Espola Road and Lake Poway Road to deliver water between the Water Authority's POW-6 Flow Control Facility (FCF) and the Berglund WTP. Project improvements within the existing Berglund WTP would include a pipeline to a new forebay tank and booster pump station near the City's existing maintenance building and continuing to the existing clearwell at the Berglund WTP. The proposed facilities specifically include:

- POW-6 FCF, including throttling and isolation valves and a venturi meter
- 3,400 feet of 30-inch pipeline between the POW-6 FCF and the First Aqueduct east of the Espola Road/Lake Poway Road intersection
- 800 feet of 36-inch pipeline from the First Aqueduct to the forebay tank/pump station
- 1,950-square-foot (54-foot-by-36-foot) pump station and standby emergency generator
- 297,000-gallon forebay tank
- 660 feet of 36-inch diameter pipeline from the pump station/forebay tank to the clearwell tanks
- Sodium hypochlorite storage tank and feed facility
- 5,000-gallon surge tank
- Various pipeline connections, vaults, drainage facilities, and appurtenances
- 1,370 square foot biofiltration catch basin west of the proposed pump station

As part of the Project, an existing pump station would also be demolished. The existing pump station, which is located approximately 700 feet east of the Espola Road intersection on the south side of Lake Poway Road, is no longer in service. Below grade piping and conduit would be disconnected and either removed or capped and abandoned in place.

CONSTRUCTION METHODS, SCHEDULE, AND STAGING

The Project would be constructed in a single phase and is anticipated to occur over approximately 27 months. Transmission pipeline installation would occur through open trenching. Trenches are anticipated to be approximately 5 feet in width and range in depth from 8 to 18 feet. Work within the intersection of Espola Road and Lake Poway Road or within the POW-6 FCF vault area may occur at night to avoid daytime roadway closures. Approximately 500 cubic yards (CY) of fill would be required for grading associated with the pump station. Excavated soils from pipeline construction would primarily be used as backfill; however, approximately 3,250 CY would be exported.

For the transmission pipeline and pump station construction activities, it is anticipated that construction staging would be in an area in the eastern portion of the existing Operations Center parking lot (proposed Forebay and Pump Station site), the Berglund WTP site, and parking lots within the City's Lake Poway Recreational Area. Staging for Water Authority construction activities would occur in the disturbed area surrounding the proposed POW-6 FCF vault.

CLIMATE AND METEOROLOGY

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

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

AIR QUALITY REGULATORY FRAMEWORK

Criteria Pollutants

Ambient air quality is described in terms of compliance with state and national standards, and the levels of air pollutant concentrations considered safe, to protect the public health and welfare. These standards are designed to protect people most sensitive to respiratory distress, such as asthmatics, the elderly, young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. The U.S. Environmental Protection Agency (USEPA), the federal agency that administers the Federal Clean Air Act of 1970, as amended in 1990, has established national ambient air quality standards (NAAQS) for several air pollution constituents known as criteria pollutants, including: ozone (O₃); CO; coarse particulate matter (PM₁₀; particles 10 microns or less) and fine particulate matter (PM_{2.5}; particles 2.5 microns or less); sulfur dioxide (SO₂); and lead (Pb). As permitted by the Clean Air Act, California has adopted the more stringent California ambient air quality standards (CAAQS) and expanded the number of regulated air constituents. Ground-level ozone is not emitted directly into the environment but is generated from complex chemical and photochemical reactions between precursor pollutants, primarily reactive organic gases (ROGs; also known as volatile organic

compounds [VOCs]¹), and NO_x. PM₁₀ and PM_{2.5} are generated from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, and windblown dust. In addition, PM₁₀ and PM_{2.5} can also be formed through chemical and photochemical reactions of precursor pollutants in the atmosphere.

Areas that do not meet the NAAQS or CAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. The air quality attainment status of the SDAB is shown in Table 1, *San Diego Air Basin Attainment Status*. Effective July 2, 2021, the SDAB was classified as a severe 15 nonattainment area for the 8-hour NAAQS for ozone (USEPA 2023). The SDAB is a nonattainment area for the 1-hour ozone, 8-hour ozone, PM₁₀, and PM_{2.5} CAAQS. The SDAB is an attainment area or unclassified for all other criteria pollutants (San Diego Air Pollution Control District [SDAPCD] 2023a).

Table 1
SAN DIEGO AIR BASIN ATTAINMENT STATUS

Pollutant	Federal Attainment Status	State of California Attainment Status
Ozone (1-hour)	No Federal Standard	Nonattainment
Ozone (8-hour)	Nonattainment	Nonattainment
Coarse Particulate Matter (PM ₁₀)	Unclassifiable ¹	Nonattainment
Fine Particulate Matter (PM _{2.5})	Attainment	Nonattainment ²
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO ₂)	Attainment	Attainment
Lead	Attainment	Attainment
Sulfur Dioxide (SO ₂)	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility Reducing Particles	No Federal Standard	Unclassified

Source: SDAPCD 2023a

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

² While data collected does meet the requirements for designation of attainment with federal PM_{2.5} standards, the data completeness requirements for state PM_{2.5} standards substantially exceed federal requirements and mandates and have historically not been feasible for most air districts to adhere to given local resources.

Attainment Plan

The SDAPCD and San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The current regional air quality plan for San Diego County is SDAPCD’s 2020 Plan for Attaining the National Ambient Air Quality Standards for Ozone in San Diego County (Attainment Plan; SDAPCD 2020). The Attainment Plan, which would be a revision to the state implementation plan (SIP), outlines SDAPCD’s plans and control measures designed to attain the NAAQS for ozone. The regional air quality plan to achieve the CAAQS for ozone is SDAPCD’s 2022 Regional Air Quality Strategy (RAQS; SDAPCD

¹ The California Air Resources Board (CARB) defines and uses the term ROGs while the U.S. Environmental Protection Agency (USEPA) defines and uses the term VOCs. The compounds included in the lists of ROGs and VOCs and the methods of calculation are slightly different. However, for the purposes of estimating criteria pollutant precursor emissions, the two terms are often used interchangeably.

2023b). These plans accommodate emissions from all sources, including natural sources, through implementation of control measures, where feasible, on stationary sources to attain the standards. Mobile sources are regulated by the USEPA and the California Air Resources Board (CARB), and the emissions and reduction strategies related to mobile sources are considered in the Attainment Plan and RAQS.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation (a cough), runny nose, throat pain, and headaches. TACs may be carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For carcinogenic TACs, there is no level of exposure that is considered safe, and impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust is referred to as diesel particulate matter (DPM). Almost all DPM is 10 microns or less in diameter, and 90 percent of DPM is 2.5 microns or less in diameter (CARB 2023). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung. In 1998, CARB identified DPM as a TAC based on published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects. DPM has a notable effect on California's population—it is estimated that about 70 percent of total known cancer risk related to air toxics in California is attributable to DPM (CARB 2023).

Sensitive Receptors

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

GREENHOUSE GAS EMISSIONS REGULATORY FRAMEWORK

Greenhouse gases, as defined under California's Assembly Bill (AB) 32, include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). AB 32, the California Global Warming Solutions Act of 2006, recognizes that California is a source of substantial amounts of GHG emissions. The statute states that:

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

To help avert these potential consequences, AB 32 established a state goal of reducing GHG emissions to 1990 levels by the year 2020, which was a reduction of approximately 16 percent from forecasted emission levels, with further reductions to follow. In addition, AB 32 required CARB to develop a Scoping Plan to help the state achieve the targeted GHG emission reductions. In 2015, Executive Order (EO) B-30-15 established a California GHG emission reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG emission reduction targets with those of leading international governments, including the 28 nation European Union. California GHG emissions fell below the 2020 target in 2014 and have remained below that target since (CARB 2022a). As a follow-up to AB 32 and in response to EO-B-30-15, Senate Bill (SB) 32 was passed by the California legislature in 2016 to codify the EO's California GHG emission reduction target of 40 percent below 1990 levels by 2030. The most recent update to the Scoping Plan was adopted in December 2022 and lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by AB 1279 (CARB 2022b).

ENERGY REGULATORY FRAMEWORK

California Energy Plan

The California Energy Commission (CEC) is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental and energy costs. To further this policy, the plan identifies a number of strategies, including providing assistance to public agencies and fleet operators.

California Environmental Quality Act Guidelines – Appendix F

California Environmental Quality Act (CEQA) Guidelines Appendix F, Energy Conservation, provides guidance for Environmental Impact Reports (EIRs) regarding potential energy impacts of proposed projects, with particular emphasis on avoiding or reducing the inefficient, wasteful, and unnecessary consumption of energy. In addition, though not described as thresholds for determining the significance of impacts, Appendix F seeks inclusion of information in the EIR addressing the following topics:

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

- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project’s projected transportation energy use requirements and its overall use of efficient transportation alternatives.

METHODOLOGY AND ASSUMPTIONS

Criteria pollutant and GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1 (California Air Pollution Control Officers Association [CAPCOA] 2022). CalEEMod is a computer model used to estimate criteria air pollutant emissions resulting from construction and operation of land development projects throughout the State of California. CalEEMod was developed with the input of several air quality management and pollution control districts. The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files are included in Attachment A.

Construction Emissions

As described above, construction emissions were assessed using the CalEEMod, which contains OFFROAD and EMFAC emission factors from CARB’s models for off-road equipment and on-road vehicles, respectively. The construction analysis included modeling of the projected construction equipment that would be used during each construction activity and quantities of earth and debris to be moved.

Construction input data for CalEEMod include, but are not limited to, (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; (3) areas to be excavated and graded; and (4) volumes of materials to be exported from and imported to the project area. The analysis assessed maximum daily emissions from individual construction activities associated with Project implementation. Table 2, *Construction Phasing*, shows the anticipated construction schedule and equipment that was assumed for modeling purposes.

**Table 2
 CONSTRUCTION PHASING**

Stage	Component	Construction Start	Construction Complete	Anticipated Construction Equipment
1	Demolition of existing pump station	6/1/2027	6/30/2027	Crane, tractor/loader/backhoe, rubber-tired dozer, dump truck, ready mix concrete truck, generator set
2	Construction of 30-inch transmission pipeline in Espola Road including vault connection (30-inch and 20-inch Pipeline Intertie) and new valve vaults for the connection to Ramona MWD’s 27-inch pipeline	11/1/2027	6/30/2028	Excavator, loader, 2 dump truck, asphalt milling machine, roller, paver, crane, tractor/loader/backhoe, ready mix concrete truck, generator set

Stage	Component	Construction Start	Construction Complete	Anticipated Construction Equipment
3	Construction of 30-inch pipeline in Lake Poway Road from Espola Road to the First Aqueduct Crossing	11/1/2027	6/30/2028	Excavator, loader, 2 dump truck, asphalt milling machine, roller, paver, ready mix concrete truck, generator set
4	Construction of new pump station and forebay tank	8/1/2027	3/31/2029	Excavator, loader, 2 dump truck, roller, paver, crane, 2 tractor/ loader/ backhoe, grader, 2 forklifts, ready mix concrete truck, generator set
5	Construction of 36-inch pipeline adjacent to Lake Poway Road from the First Aqueduct Crossing to the new pump station	1/1/2028	3/31/2028	Excavator, loader, 2 dump truck, grader, ready mix concrete truck, generator set
6	Construction of 36-inch pipeline from pump station to clearwell tanks	3/1/2028	5/31/2028	Excavator, loader, 2 dump truck, asphalt milling machine, roller, paver, ready mix concrete truck, generator set
7	Surge Tank	3/1/2028	5/31/2028	Tractor/loader/backhoe, crane, ready mix concrete truck, generator set
8	Disinfection Facility (Sodium Hypochlorite Storage)	5/1/2028	12/31/2028	Crane, forklift, excavator, loader, ready mix concrete truck, generator set
9	Construction of POW-6 FCF	1/1/2028	8/31/2029	Excavator, loader, 2 dump truck, ready mix concrete truck, generator set

Ramona MWD = Ramona Municipal Water District

Approximately 500 CY of fill would be required for grading associated with the pump station site. Excavated soils from pipeline construction would primarily be used as backfill; however, approximately 3,250 CY would be exported. An equivalent quantity of sand is conservatively assumed to be imported for pipe bedding in the model.

The quantity, duration, and the intensity of construction activity influence the amount of construction emissions and their related pollutant concentrations that occur at any one time. As such, the emission forecasts provided herein reflect a specific set of conservative assumptions based on the expected construction scenario wherein a large amount of construction is occurring in a relatively intensive manner. Because of this conservative assumption, actual emissions could be less than those forecasted. If construction is delayed or occurs over a longer time period, emissions could be reduced because of (1) a more modern and cleaner-burning construction equipment fleet mix than incorporated in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

CalEEMod has the capability to calculate reductions in construction emissions from the effects of dust control, diesel-engine classifications, and other selected emissions reduction measures. Construction emission calculations presented herein assume the implementation of standard dust control measures to comply with SDAPCD Rule 55, including watering two times daily during grading, ensuring that all exposed surfaces maintain a minimum soil moisture of 12 percent, and limiting vehicle speeds on unpaved roads to 25 mph (SDAPCD 2009).

Operational Emissions

Operational impacts were estimated using CalEEMod. Operational sources of emissions would be limited to energy use and testing of the 450-kilowatt emergency generator once per month. The Project would use electricity for the pumping of water. Electricity generation typically entails the combustion of fossil fuels, including natural gas and coal, which is then transmitted to end users. A project's electricity use is thus associated with the off-site or indirect emission of GHGs at the source of electricity generation (power plant). Assuming continuous operation of the pump station at an average pumping rate (two 125-horsepower pumps operating), the Project is anticipated to consume 2.2 megawatt-hours (MWh) of electricity per year. The emergency generator is anticipated to be tested for approximately one hour per month with load bank testing up to four hours once per year. Operational emissions are calculated for the earliest anticipated full year of operation—2030.

Energy Consumption

Fuel consumption factors in terms of gallons per hour of diesel for off-road equipment were calculated using data from the CARB Mobile Source Emissions Inventory online database—OFFROAD2026 version 1.1.2 (CARB 2026a). Fuel consumption factors, in terms of gallon of diesel and gasoline per mile travel, for on-road vehicles were calculated from the CARB Mobile Source Emissions Inventory online database—EMFAC2025 version 2.0.0 (CARB 2026b). The energy calculation sheets are included in Attachment A.

SIGNIFICANCE CRITERIA

Air Quality

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

- Conflict with or obstruct implementation of the San Diego Attainment Plan, RAQS, or applicable portions of the SIP; or
- Result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is non-attainment under an applicable NAAQS or CAAQS; or
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Appendix G of the CEQA Guidelines states that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. As part of its air quality permitting process, the SDAPCD has established thresholds in Rule 20.2 for the preparation of Air Quality Impact Assessments (SDAPCD 2019).

For CEQA purposes, these screening criteria were used as numeric methods to determine if the Project would result in a significant impact to air quality or an adverse effect on human health. In the absence of

a SDAPCD threshold for VOCs, the City of San Diego threshold was used in this analysis. The screening thresholds are shown in Table 3, *Screening-level Thresholds for Air Quality Impact Analysis*.

Table 3
SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSIS

Pollutant	Threshold
Daily Emissions (Pounds/Day)	
Respirable Particulate Matter (PM ₁₀)	100
Fine Particulate Matter (PM _{2.5})	67
Oxides of Nitrogen (NO _x)	250
Oxides of Sulfur (SO _x)	250
Carbon Monoxide (CO)	550
Volatile Organic Compounds (VOCs)	137
Toxic Air Contaminant Health Risk	
Excess Cancer Risk	1 in 1 million 10 in 1 million with T-BACT
Non-Cancer Hazard	1.0

Source: SDAPCD 2019; City of San Diego 2022
 T-BACT = Toxics-Best Available Control Technology

SDAPCD Rule 51 (Nuisance) prohibits emissions from any source whatsoever in such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to the public health or damage to property (SDAPCD 1976). It is generally accepted that the considerable number of persons requirement in Rule 51 is normally satisfied when 10 different individuals/households have made separate complaints within 90 days. Odor complaints from a “considerable” number of persons or businesses in the area would be considered to be a significant, adverse odor impact.

Greenhouse Gas Emissions

Given the relatively small levels of emissions generated by a typical development in relationship to the total amount of GHG emissions generated on a national or global basis, individual development projects are not expected to result in significant, direct impacts with respect to climate change. However, given the magnitude of the impact of GHG emissions on the global climate, GHG emissions from new development could result in significant, cumulative impacts with respect to climate change. Therefore, the potential for a significant GHG emissions impact is limited to cumulative impacts.

According to Appendix G of the CEQA Guidelines, a project would have a significant environmental impact if it would:

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

The determination of significance is governed by CEQA Guidelines Section 15064.4, entitled “Determining the Significance of Impacts from Greenhouse Gas Emissions.” CEQA Guidelines Section 15064.4(a) states, “[t]he determination of the significance of greenhouse gas emissions calls for a

careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to ... [use a quantitative model or qualitative model]" (emphasis added). In turn, CEQA Guidelines Section 15064.4(b) clarifies that a lead agency should consider "Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project." Therefore, consistent with CEQA Guidelines Section 15064.4, the GHG emissions analysis for the project appropriately relies upon a threshold based on the exercise of careful judgement and believed to be appropriate in the context of this particular project.

Prior to 2020, a screening level based on the CAPCOA's report *CEQA & Climate Change* was used as a tool used to determine whether further analysis would be needed to examine the GHG impacts of a project (CAPCOA 2008). CAPCOA developed a screening threshold of 900 metric tons (MT) of carbon dioxide equivalent (CO₂e) per year by analyzing the capture of 90 percent or more of future discretionary development for residential and commercial projects across the state. Direct and cumulative impacts would be potentially significant and require further analysis if a project results in emissions that exceed 900 MT CO₂e beyond current baseline emissions. This screening threshold was developed with the goal in mind of achieving the reductions described by AB 32 for meeting 1990 levels of statewide GHG emissions by the year 2020.

Subsequently, SB 32 set a further GHG emission reduction target of 40 percent below 1990 levels by 2030. To achieve this target, a regression trajectory can be projected by reducing the operational year emissions goal from the 900 MT CO₂e target in 2020 to the 540 MT CO₂e target in 2030. This trajectory is outlined in Table 4, *GHG Significance Thresholds Trajectory*, below. Therefore, for the purpose of this report, 540 MT CO₂e is considered a valid and adequate screening level as it is based on current methodologies. This threshold is intended to disclose quantitative information and put the Project generated GHG emissions in the appropriate statewide context and consider the Project's potential impacts.

Table 4
GHG SIGNIFICANCE THRESHOLDS TRAJECTORY

Year	Screening Level ¹ (MT CO ₂ e)
2020	900
2021	855
2022	813
2023	772
2024	734
2025	697
2026	662
2027	629
2028	598
2029	568
2030	540

Source: CAPCOA 2008; SB 32

¹ Emissions reduce by 4.98 percent each year to achieve SB 32's 2030 target.

MT = metric tons; CO₂e = carbon dioxide equivalent

Neither the SDAPCD nor the City have adopted thresholds for determining the significance of a Project's temporary construction GHG emissions. To be conservative in accounting for all the Project's GHG emissions, the construction period emissions were amortized (i.e., averaged) over the anticipated 30-year lifespan of the Project and added to the Project's operational emissions.

Energy

According to Appendix G of the CEQA Guidelines, a project would have a significant environmental impact if it would:

1. Result in the wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
2. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

General Conformity

The City may seek financing from the State Water Resources Control Board (SWRCB) Clean Water State Revolving Fund (SRF) Program for the Project. Because the SRF Program is partially funded by the USEPA, the Project would require compliance not only with the CEQA, but also with the federal Clean Air Act. The City could also seek funding from other federal sources or state programs that receive federal funding. As such, the air quality analysis has been conducted to satisfy General Conformity requirements.

The USEPA General Conformity Rule applies to federal actions occurring in nonattainment or maintenance areas when the total direct and indirect emissions of nonattainment pollutants (or their precursors) exceed specified thresholds. The emissions thresholds that trigger requirements for a conformity analysis are called *de minimis* levels. *De minimis* levels (in tons per year) vary by pollutant and also depend on the severity of the nonattainment status for the air quality management area in question.

A conformity applicability analysis is the first step of a conformity evaluation and assesses if a federal action must be supported by a conformity determination. This is typically done by quantifying applicable direct and indirect emissions that are projected to result due to implementation of the federal action. Indirect emissions are those emissions caused by the federal action and originating in the region of interest, but which can occur at a later time or in a different location from the action itself and are reasonably foreseeable. Reasonably foreseeable emissions are projected for future direct and indirect emissions that are identified at the time the conformity evaluation is performed. If the results of the applicability analysis indicate that the total emissions would not exceed the *de minimis* emissions thresholds, then the conformity evaluation process is completed. The *de minimis* thresholds used for the general conformity analysis for this Project are 25 tons per year for VOCs and NO_x, as the SDAB is classified as a severe nonattainment area for the 8-hour NAAQS for ozone (40 Code of Federal Regulations [CFR] 93.153[b][1]).

AIR QUALITY IMPACT ANALYSIS

(1) *Would the project conflict with or obstruct implementation of the San Diego Attainment Plan or applicable portions of the SIP?*

Less than Significant Impact. A project would be inconsistent with the Attainment Plan and RAQS if it is inconsistent with the population and employment growth assumptions within the General Plan or if the project’s emissions would exceed the applicable thresholds, as analyzed in checklist question (2), below.

As discussed previously, the Project includes water infrastructure improvements that would provide treated water service improvements and redundancy for the City’s water system. The Project would not result in population or employment increases and, therefore, would not exceed the growth projection assumptions in the Attainment Plan or RAQS. Employees that would construct the Project would be recruited from the local pool of labor and would not create employment growth exceeding growth estimates for the area. The proposed improvements would serve existing and planned development and would not create conditions for the creation of new housing, which would thereby induce population growth. Furthermore, as discussed in response to air quality checklist item (2) below, the Project would not generate short-term or long-term emissions that could potentially cause an increase in the frequency or severity of existing air quality violations; cause or contribute to new violations; or delay timely attainment of air quality standards. As such, the Project-related emissions are accounted for in the Attainment Plan and RAQS, which are crafted to bring the SDAB into attainment for all criteria pollutants. Accordingly, the Project would be consistent with the Attainment Plan, RAQS, and applicable portions of the SIP, thus resulting in a less than significant impact.

(2) *Would the result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is non-attainment under an applicable NAAQS or CAAQS?*

Less than Significant Impact. The Project’s construction and operation emissions were estimated using CalEEMod, as described above. Complete model outputs are provided in Attachment A.

The results of the modeling for Project construction activities are shown in Table 5, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the applicable thresholds. As shown in Table 5, the maximum daily emissions would not exceed the applicable thresholds and construction impacts would be less than significant.

**Table 5
 MAXIMUM DAILY CONSTRUCTION EMISSIONS**

Year	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2027	4.3	34.0	48.6	0.1	2.4	1.5
2028	7.8	61.1	84.7	0.2	4.4	2.6
2029	2.9	23.0	30.7	0.1	1.6	1.0
Maximum Daily Emissions	7.8	61.1	84.7	0.2	4.4	2.6
<i>Daily Thresholds</i>	137	250	550	250	100	67
Exceed Thresholds?	No	No	No	No	No	No

Source: CalEEMod (complete model outputs are provided in Attachment A).

VOC = volatile organic compound; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

Operational emission modeling results are shown in Table 6, *Maximum Daily Operational Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the applicable thresholds. As shown in Table 6, the maximum daily emissions would not exceed the applicable thresholds and operational impacts would be less than significant.

Table 6
MAXIMUM DAILY OPERATIONAL EMISSIONS

Emission Category	Pollutant Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Emergency Generator	4.0	11.1	10.1	<0.1	0.6	0.6
Energy	-	-	-	-	-	-
Maximum Daily Emissions¹	4.0	11.0	10.1	<0.1	0.6	0.6
<i>Daily Thresholds</i>	<i>137</i>	<i>250</i>	<i>550</i>	<i>250</i>	<i>100</i>	<i>67</i>
Exceed Thresholds?	No	No	No	No	No	No

Source: CalEEMod (complete model outputs are provided in Attachment A).

¹ Totals may not sum due to rounding.

VOC = volatile organic compound; NO_x = nitrogen oxides; CO = carbon monoxide; SO_x = sulfur oxides; PM₁₀ = particulate matter 10 microns or less in diameter; PM_{2.5} = particulate matter 2.5 microns or less in diameter

(3) Would the project expose sensitive receptors to substantial pollutant concentrations?

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

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

(4) *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Less than Significant Impact. Emissions from construction equipment, such as diesel exhaust, may generate odors; however, these odors would be temporary, intermittent, and not expected to affect a substantial number of people. Additionally, noxious odors would be confined to the immediate vicinity of construction equipment. Furthermore, short-term construction-related odors are expected to cease upon Project buildout. Long-term operation of the Project would be similar to existing conditions and would not be a substantial source of objectionable odors. Therefore, the Project would not create objectionable odors affecting a substantial number of people, and the impact would be less than significant.

GREENHOUSE GAS EMISSIONS IMPACT ANALYSIS

(1) *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

Less than Significant Impact. Project construction and operational GHG emissions were estimated using CalEEMod as described above. Additional details of phasing, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Attachment A.

Project construction was estimated to result in the emission of approximately 2,072.1 MT CO₂e over the construction period. Averaged over 30 years, the proposed construction activities would contribute approximately 69.1 MT CO₂e emissions per year. Table 7, *Total Estimated Operational GHG Emissions*, shows the calculated total annual emissions and amortized construction emissions for the project.

Table 7
TOTAL ESTIMATED OPERATIONAL GHG EMISSIONS

Emission Sources	Operational Emissions (MT CO₂e)
Emergency Generator	3.7
Energy	0.2
Subtotal¹	3.9
Construction (Annualized over 30 years)	69.1
Total	72.9
<i>CAPCOA 2030 Threshold</i>	<i>540</i>
Exceed Threshold?	No

Source: CalEEMod (output data is provided in Attachment A); CAPCOA 2008

¹ Totals may not sum due to rounding.

GHG = greenhouse gas; MT = metric tons; CO₂e = carbon dioxide equivalent;
CAPCOA = California Air Pollution Control Officers Association

Table 7 demonstrates that the Project's total annual operational emissions would not exceed the adjusted CAPCOA threshold. Therefore, the implementation of the Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and the impact would be less than significant.

(2) *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?*

Less than Significant Impact. There are numerous state plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal overall state plan and policy is AB 32, the California Global Warming Solutions Act of 2006. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020. SB 32 would require further reductions of 40 percent below 1990 levels by 2030. AB 1297 would require additional reduction to 85 percent below 1990 levels by 2045. Because the Project’s operational year is post-2020, the Project aims to reach the quantitative goals set by SB 32 and AB 1297. Statewide plans and regulations such as GHG emissions standards for vehicles (AB 1493), the low carbon fuel standard, and regulations requiring an increasing fraction of electricity to be generated from renewable sources are being implemented at the statewide level; as such, compliance at the project level is not addressed. Therefore, the proposed Project would not conflict with those plans and regulations.

The overall intent of the Project is to provide a treated water source to allow greater flexibility for the City to perform typical repair and replacement work within the Berglund WTP in the future. Long-term operation of the Project would be similar to existing conditions and would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, impacts would be less than significant.

ENERGY IMPACT ANALYSIS

(1) *Would the project result in the wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Less than Significant Impact. Construction activities would require the use of diesel fuel, gasoline, and other fuels. Energy use during construction typically involves the use of motor vehicles for transportation of workers and materials and the use of motorized equipment for direct construction actions such as moving soil and demolishing structures. The estimated combined construction energy that would be used during construction activities is shown in Table 8, *Construction Energy Use*. Energy calculation files are provided in Attachment B.

As shown in Table 8, total Project construction activities would result in the consumption of approximately 11,834 gallons of diesel fuel and approximately 14,092 gallons of gasoline. The total construction energy use would be approximately 3,392 million British thermal units.

**Table 8
 CONSTRUCTION ENERGY USE**

Source	Diesel (gallons)	Gasoline (gallons)	Total Energy (MMBTU)
Off-Road Construction Vehicles	3,875	-	539
On-Road Construction Vehicles	7,959	14,092	2,854
Total¹	11,834	14,092	3,392

Source: CalEEMod; CARB EMFAC2025; CARB OFFROAD2026; Attachment B.

¹ Totals may not sum due to rounding.

MMBTU = million British thermal units

Construction activities are not anticipated to result in an inefficient use of energy. Since the use of gasoline and diesel fuel would be a significant portion of construction costs, contractors and equipment operators would minimize the use of fuel within the constraints of program requirements. Construction equipment would be maintained in optimal working order and rated energy efficient and on-site vehicle idling would be minimized to reduce the use of gasoline and diesel.

Due to the short-term nature of the construction activities and the total amount of diesel and gasoline fuel anticipated to be consumed, the Project's consumption of energy (primarily diesel fuel) during construction would not represent a substantial demand on energy resources or result in the need to develop any new, or alter any existing, energy production or distribution facilities. In addition, construction-related energy would not be used in a wasteful, inefficient, or unnecessary manner. Energy use associated with operation would result from increased electricity use and backup emergency generator testing. The Project is anticipated to consume 2.2 MWh of electricity and less than 1 gallon of diesel fuel per year.

The overall intent of the Project is to provide a treated water source to allow greater flexibility for the City to perform typical repair and replacement work within the Berglund WTP in the future. Long-term operation of the Project would be similar to existing conditions and energy use would be limited to the operations necessary for the pumping of water. Therefore, the Project would not consume energy in a wasteful, inefficient, or unnecessary manner, and impacts would be less than significant.

(2) *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Less than Significant Impact. The overall intent of the Project is to provide a treated water source to allow greater flexibility for the City to perform typical repair and replacement work within the Berglund WTP in the future. Long-term operation of the Project would be similar to existing conditions and energy use would be limited to the operations necessary for the pumping of water. By improving upon the existing water infrastructure, the Project would reduce reliance on imported water. The Project's demand on energy resources and services would not be anticipated to require the construction of new energy facilities or require improvements to local infrastructure. Therefore, impacts related to inconsistency with adopted plans and policies for renewable energy or energy efficiency would be less than significant.

GENERAL CONFORMITY ANALYSIS

The Project's construction and operational emissions were estimated using CalEEMod, as described above. The results of the calculations are shown in Table 9, *Annual Emissions Estimate*. The data are presented as the maximum annual construction and operational emissions for comparison with the applicable *de minimis* limits, which are provided in tons per year. As shown in Table 9, the Project's maximum annual construction and operational emissions would not exceed the annual *de minimis* levels. Therefore, no adverse impact would occur.

Table 9
ANNUAL EMISSIONS ESTIMATE

Criteria Pollutant (Attainment Status)	De Minimis Threshold (tons/year)	Construction Emissions (tons)	Operational Emissions (tons)	Adverse Effect?
VOC (Extreme Nonattainment Area)	25	0.69	0.01	No
NO _x (Extreme Nonattainment Area)	25	5.51	0.02	No
CO (Attainment)	--	7.37	0.02	No
SO ₂ (Attainment)	--	0.01	<0.01	No
PM ₁₀ (Unclassifiable/Attainment)	--	0.38	<0.01	No
PM _{2.5} (Attainment)	--	0.23	<0.01	No

Source: 40 CFR 93.153

VOC = volatile organic compound; NO_x = nitrogen oxides; CO = carbon monoxide; SO₂ = sulfur dioxide; PM₁₀ = respirable particulate matter 10 microns or less in diameter; PM_{2.5} = fine particulate matter 2.5 microns or less in diameter

SUMMARY

As described above, emissions of criteria pollutants would be below the applicable daily thresholds, and the Project would be consistent with the Attainment Plan. Sensitive receptors would not be exposed to substantial concentrations of TACs or odors. Impacts to air quality would be less than significant and no mitigation measures would be required. The Project would not generate GHG emissions that may have a significant impact on the environment or conflict with GHG reduction plans. Impacts related to GHG emissions would be less than significant and no mitigation measures would be required. The Project would not result in the wasteful, inefficient, or unnecessary consumption of energy or conflict with plans for renewable energy or energy efficiency. Impacts related to energy consumption would be less than significant and no mitigation measures would be required.

Short-term construction and long-term operation of the Project would not result in criteria pollutant and precursor pollutant emissions that would exceed the *de minimis* levels. Therefore, the Project would not result in an adverse air quality impact and the Project would be consistent with the federal Clean Air Act.

Sincerely,



Victor Ortiz
 Senior Air Quality Specialist



Shelby Bocks
 Air Quality Specialist

Attachments:

- Figure 1 Regional Vicinity
- Figure 2 Project Components
- Attachment A CalEEMod Output
- Attachment B Energy Calculations

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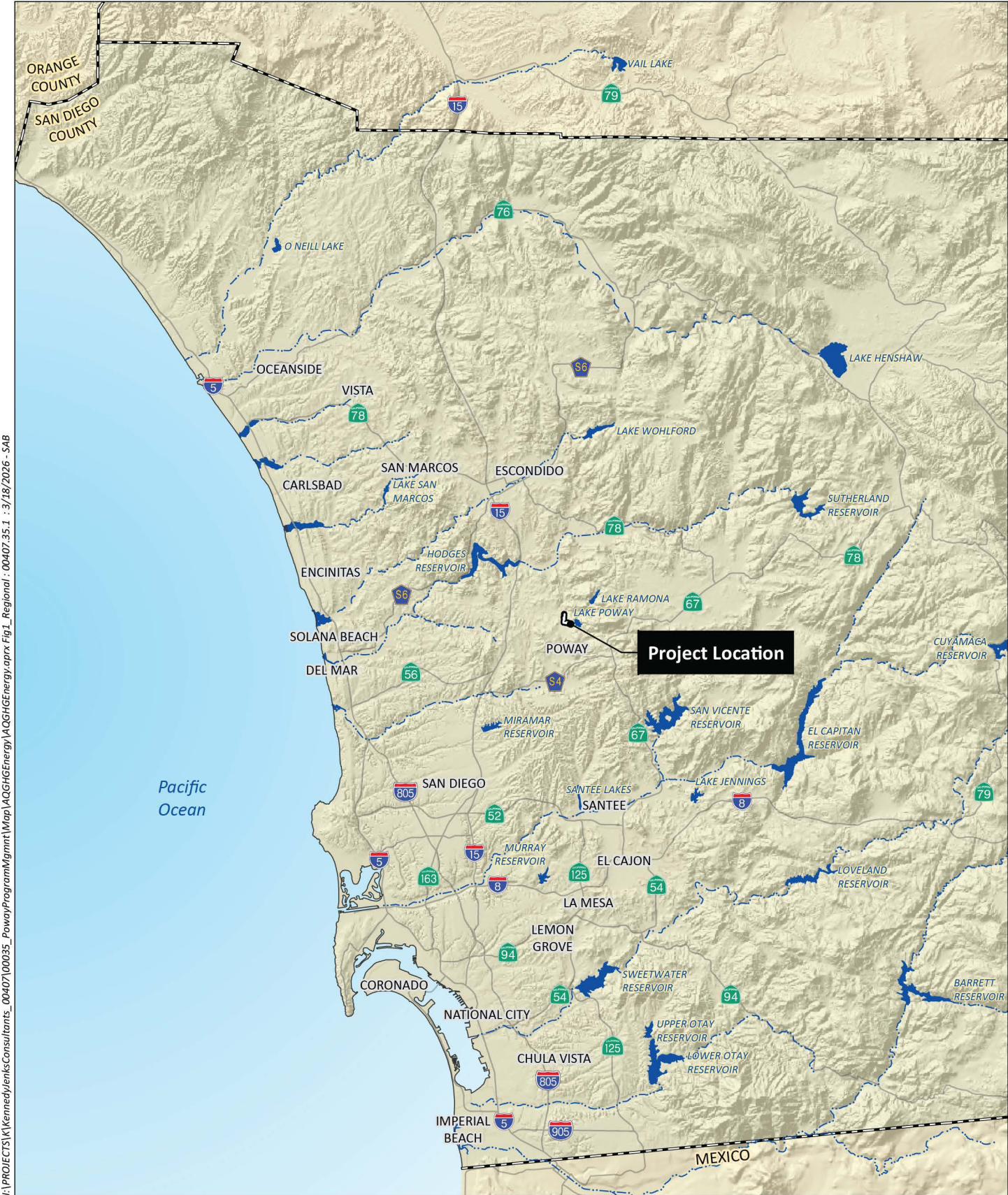
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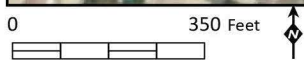
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Source: Base Map Layers (SanGIS, 2016)





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Source: Aerial (Vantor, 2025)

Attachment A

CalEEMod Output

Poway Treated Water Facilities Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Poway Treated Water Facilities
Construction Start Date	06/01/2026
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20000
Precipitation (days)	27.8000
Location	33.00700164395698, -117.01830504753406
County	San Diego
City	Poway
Air District	San Diego County APCD
Air Basin	San Diego
TAZ	6111
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	San Diego Gas & Electric
App Version	2022.1.1.41

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
User Defined Industrial	1.000000	User Defined Unit	5.20000	0.00000	0.00000	0.00000	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.20470	7.72004	61.1025	83.5536	0.16673	2.37697	1.70716	4.08412	2.18586	0.38517	2.57103	—	18,864.5	18,864.5	0.73488	0.33177	5.86475	18,987.6
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.32616	7.81385	61.0753	84.7079	0.16659	2.41813	1.97360	4.39174	2.22304	0.42296	2.64600	—	18,810.7	18,810.7	0.73906	0.35381	0.16031	18,934.8
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.51666	3.78783	30.1939	40.3629	0.07639	1.19476	0.87277	2.06753	1.09887	0.18579	1.28466	—	8,627.30	8,627.30	0.33811	0.14815	1.16423	8,681.06
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.82429	0.69128	5.51039	7.36622	0.01394	0.21804	0.15928	0.37732	0.20054	0.03391	0.23445	—	1,428.35	1,428.35	0.05598	0.02453	0.19275	1,437.25

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

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
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Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	2.16909	1.82605	14.5095	21.5377	0.03473	0.61460	0.53111	1.14571	0.56549	0.09952	0.66501	—	3,995.69	3,995.69	0.16361	0.05557	1.27102	4,017.61
2028	9.20470	7.72004	61.1025	83.5536	0.16673	2.37697	1.70716	4.08412	2.18586	0.38517	2.57103	—	18,864.5	18,864.5	0.73488	0.33177	5.86475	18,987.6
2029	1.45061	1.21738	10.0006	9.51491	0.01778	0.41434	0.15246	0.56680	0.38063	0.03681	0.41744	—	1,965.24	1,965.24	0.07621	0.03190	0.53162	1,977.18
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	5.11273	4.28949	34.0077	48.5999	0.09458	1.37949	1.04476	2.42425	1.26832	0.22440	1.49272	—	10,763.5	10,763.5	0.44785	0.18374	0.09188	10,829.5
2028	9.32616	7.81385	61.0753	84.7079	0.16659	2.41813	1.97360	4.39174	2.22304	0.42296	2.64600	—	18,810.7	18,810.7	0.73906	0.35381	0.16031	18,934.8
2029	3.47482	2.91921	23.0328	30.6806	0.05251	0.92787	0.68357	1.61144	0.85252	0.13633	0.98885	—	5,920.34	5,920.34	0.23189	0.08674	0.04053	5,952.03
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.11032	0.93224	7.48591	10.4284	0.01917	0.30871	0.23122	0.53992	0.28391	0.04703	0.33094	—	2,182.43	2,182.43	0.09028	0.03482	0.30267	2,195.37
2028	4.51666	3.78783	30.1939	40.3629	0.07639	1.19476	0.87277	2.06753	1.09887	0.18579	1.28466	—	8,627.30	8,627.30	0.33811	0.14815	1.16423	8,681.06
2029	1.04568	0.87777	7.05281	8.23814	0.01457	0.28748	0.16378	0.45126	0.26412	0.03447	0.29858	—	1,629.92	1,629.92	0.06357	0.02483	0.18741	1,639.10
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.20263	0.17013	1.36618	1.90319	0.00350	0.05634	0.04220	0.09854	0.05181	0.00858	0.06040	—	361.326	361.326	0.01495	0.00577	0.05011	363.468
2028	0.82429	0.69128	5.51039	7.36622	0.01394	0.21804	0.15928	0.37732	0.20054	0.03391	0.23445	—	1,428.35	1,428.35	0.05598	0.02453	0.19275	1,437.25
2029	0.19084	0.16019	1.28714	1.50346	0.00266	0.05247	0.02989	0.08235	0.04820	0.00629	0.05449	—	269.852	269.852	0.01052	0.00411	0.03103	271.371

2.2.2. Onsite 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	2.02626	1.69904	14.2892	20.0410	0.03399	0.61306	0.20682	0.81988	0.56402	0.02233	0.58635	—	3,569.75	3,569.75	0.14480	0.02896	0.00000	3,582.00
2028	8.58795	7.19379	59.5153	77.3783	0.15967	2.36083	0.20750	2.56833	2.17196	0.02244	2.19440	—	16,567.3	16,567.3	0.67204	0.13441	0.00000	16,624.1
2029	1.39021	1.16460	9.85857	8.91315	0.01710	0.41300	0.00000	0.41300	0.37996	0.00000	0.37996	—	1,741.85	1,741.85	0.07066	0.01413	0.00000	1,747.82

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	4.76241	3.99152	33.0698	45.3388	0.09099	1.37096	0.20727	1.57823	1.26129	0.02240	1.28369	—	9,529.50	9,529.50	0.38656	0.07731	0.00000	9,562.20
2028	8.69676	7.28420	59.2045	79.0659	0.15857	2.39927	0.41459	2.81385	2.20733	0.04481	2.25213	—	16,426.0	16,426.0	0.66631	0.13326	0.00000	16,482.4
2029	3.28239	2.75098	22.6679	28.9733	0.05110	0.92505	0.20682	1.13187	0.85105	0.02233	0.87338	—	5,312.04	5,312.04	0.21548	0.04310	0.00000	5,330.27
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.03939	0.87133	7.31443	9.75543	0.01853	0.30725	0.06543	0.37268	0.28267	0.00722	0.28988	—	1,942.41	1,942.41	0.07879	0.01576	0.00000	1,949.07
2028	4.23214	3.54572	29.4600	37.7515	0.07337	1.18794	0.18521	1.37316	1.09291	0.02001	1.11292	—	7,611.90	7,611.90	0.30877	0.06175	0.00000	7,638.02
2029	0.99436	0.83321	6.94417	7.77164	0.01412	0.28658	0.03643	0.32301	0.26366	0.00393	0.26759	—	1,457.12	1,457.12	0.05911	0.01182	0.00000	1,462.12
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.18969	0.15902	1.33488	1.78037	0.00338	0.05607	0.01194	0.06801	0.05159	0.00132	0.05290	—	321.588	321.588	0.01305	0.00261	0.00000	322.691
2028	0.77237	0.64709	5.37645	6.88964	0.01339	0.21680	0.03380	0.25060	0.19946	0.00365	0.20311	—	1,260.24	1,260.24	0.05112	0.01022	0.00000	1,264.56
2029	0.18147	0.15206	1.26731	1.41832	0.00258	0.05230	0.00665	0.05895	0.04812	0.00072	0.04883	—	241.242	241.242	0.00979	0.00196	0.00000	242.070

2.2.3. Offsite 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	0.14283	0.12701	0.24965	1.49672	0.00116	0.00273	0.32429	0.32583	0.00227	0.07719	0.07866	—	425.937	425.937	0.01881	0.02978	1.27102	435.608
2028	0.61675	0.52625	1.58723	6.17537	0.00706	0.01614	1.49965	1.51579	0.01390	0.36273	0.37663	—	2,297.18	2,297.18	0.06284	0.19736	5.86475	2,363.43
2029	0.06039	0.05278	0.14203	0.60176	0.00067	0.00135	0.15246	0.15381	0.00067	0.03681	0.03748	—	223.391	223.391	0.00556	0.01777	0.53162	229.356
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.35032	0.29797	0.93794	3.26100	0.00359	0.00853	0.83749	0.84602	0.00703	0.20200	0.20904	—	1,234.01	1,234.01	0.06129	0.10643	0.09188	1,267.35
2028	0.62940	0.52964	1.87080	5.64197	0.00802	0.01886	1.55902	1.57788	0.01572	0.37815	0.39387	—	2,384.66	2,384.66	0.07275	0.22055	0.16031	2,452.36
2029	0.19243	0.16823	0.36490	1.70735	0.00141	0.00282	0.47675	0.47957	0.00147	0.11400	0.11547	—	608.302	608.302	0.01641	0.04364	0.04053	621.758

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.07093	0.06092	0.17147	0.67302	0.00063	0.00146	0.16579	0.16725	0.00124	0.03982	0.04106	—	240.024	240.024	0.01149	0.01906	0.30267	246.295
2028	0.28452	0.24210	0.73390	2.61138	0.00302	0.00681	0.68756	0.69437	0.00596	0.16578	0.17174	—	1,015.39	1,015.39	0.02934	0.08639	1.16423	1,043.04
2029	0.05132	0.04456	0.10864	0.46650	0.00045	0.00090	0.12735	0.12825	0.00046	0.03053	0.03099	—	172.806	172.806	0.00446	0.01301	0.18741	176.981
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.01295	0.01112	0.03129	0.12283	0.00012	0.00027	0.03026	0.03052	0.00023	0.00727	0.00749	—	39.7387	39.7387	0.00190	0.00316	0.05011	40.7770
2028	0.05192	0.04418	0.13394	0.47658	0.00055	0.00124	0.12548	0.12672	0.00109	0.03025	0.03134	—	168.110	168.110	0.00486	0.01430	0.19275	172.686
2029	0.00937	0.00813	0.01983	0.08514	0.00008	0.00016	0.02324	0.02341	0.00008	0.00557	0.00566	—	28.6101	28.6101	0.00074	0.00215	0.03103	29.3012

2.3. 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.	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,025.93	2,025.93	0.08150	0.01589	0.00000	2,032.70
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,025.93	2,025.93	0.08150	0.01589	0.00000	2,032.70
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.04766	0.04337	0.12124	0.11061	0.00021	0.00638	0.00000	0.00638	0.00638	0.00000	0.00638	0.00000	23.2132	23.2132	0.00109	0.00020	0.00000	23.2995
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.00870	0.00792	0.02213	0.02019	0.00004	0.00116	0.00000	0.00116	0.00116	0.00000	0.00116	0.00000	3.84322	3.84322	0.00018	0.00003	0.00000	3.85749

2.4. 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	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	1.02246	1.02246	0.00020	0.00002	—	1.03462
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Stationary	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,024.91	2,024.91	0.08130	0.01586	0.00000	2,031.67
Total	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,025.93	2,025.93	0.08150	0.01589	0.00000	2,032.70
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	1.02246	1.02246	0.00020	0.00002	—	1.03462
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Stationary	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,024.91	2,024.91	0.08130	0.01586	0.00000	2,031.67
Total	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,025.93	2,025.93	0.08150	0.01589	0.00000	2,032.70
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	1.02246	1.02246	0.00020	0.00002	—	1.03462
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Stationary	0.04766	0.04337	0.12124	0.11061	0.00021	0.00638	0.00000	0.00638	0.00638	0.00000	0.00638	0.00000	22.1908	22.1908	0.00089	0.00017	0.00000	22.2649
Total	0.04766	0.04337	0.12124	0.11061	0.00021	0.00638	0.00000	0.00638	0.00638	0.00000	0.00638	0.00000	23.2132	23.2132	0.00109	0.00020	0.00000	23.2995
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.16928	0.16928	0.00003	< 0.000005	—	0.17129
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Stationary	0.00870	0.00792	0.02213	0.02019	0.00004	0.00116	0.00000	0.00116	0.00116	0.00000	0.00116	0.00000	3.67394	3.67394	0.00015	0.00003	0.00000	3.68620
Total	0.00870	0.00792	0.02213	0.02019	0.00004	0.00116	0.00000	0.00116	0.00116	0.00000	0.00116	0.00000	3.84322	3.84322	0.00018	0.00003	0.00000	3.85749

3. Construction Emissions Details

3.1. Demolition of Existing Pump Station (2027)

3.1.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.75993	1.47576	13.1756	12.1941	0.02576	0.55104	—	0.55104	0.50696	—	0.50696	—	2,690.04	2,690.04	0.10912	0.02182	—	2,699.28
Demolition	—	—	—	—	—	—	0.05727	0.05727	—	0.00867	0.00867	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10608	0.08895	0.79415	0.73499	0.00155	0.03321	—	0.03321	0.03056	—	0.03056	—	162.140	162.140	0.00658	0.00132	—	162.696
Demolition	—	—	—	—	—	—	0.00345	0.00345	—	0.00052	0.00052	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01936	0.01623	0.14493	0.13414	0.00028	0.00606	—	0.00606	0.00558	—	0.00558	—	26.8441	26.8441	0.00109	0.00022	—	26.9362
Demolition	—	—	—	—	—	—	0.00063	0.00063	—	0.00010	0.00010	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05784	0.05289	0.03697	0.61480	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	137.066	137.066	0.00627	0.00495	0.44435	139.143
Vendor	0.00712	0.00337	0.12136	0.05727	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	96.1696	96.1696	0.00366	0.01349	0.21457	100.496
Hauling	0.00537	0.00164	0.09132	0.03547	0.00048	0.00138	0.01938	0.02077	0.00092	0.00531	0.00623	—	71.7946	71.7946	0.00366	0.01134	0.14172	75.4072

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00341	0.00309	0.00277	0.03294	0.00000	0.00000	0.00751	0.00751	0.00000	0.00176	0.00176	—	7.87228	7.87228	0.00040	0.00030	0.01157	7.98271
Vendor	0.00042	0.00019	0.00752	0.00350	0.00004	0.00008	0.00152	0.00160	0.00008	0.00042	0.00050	—	5.79815	5.79815	0.00023	0.00081	0.00559	6.05169
Hauling	0.00032	0.00010	0.00569	0.00215	0.00003	0.00008	0.00115	0.00124	0.00006	0.00032	0.00037	—	4.32810	4.32810	0.00022	0.00068	0.00370	4.54100
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00062	0.00056	0.00050	0.00601	0.00000	0.00000	0.00137	0.00137	0.00000	0.00032	0.00032	—	1.30335	1.30335	0.00007	0.00005	0.00191	1.32163
Vendor	0.00008	0.00004	0.00137	0.00064	0.00001	0.00001	0.00028	0.00029	0.00001	0.00008	0.00009	—	0.95995	0.95995	0.00004	0.00013	0.00093	1.00193
Hauling	0.00006	0.00002	0.00104	0.00039	0.00001	0.00002	0.00021	0.00023	0.00001	0.00006	0.00007	—	0.71657	0.71657	0.00004	0.00011	0.00061	0.75181

3.2. Construction of New Pump Station and Forebay Tank (2027)

3.2.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02626	1.69904	14.2892	20.0410	0.03399	0.61306	—	0.61306	0.56402	—	0.56402	—	3,569.75	3,569.75	0.14480	0.02896	—	3,582.00
Dust From Material Movement	—	—	—	—	—	—	0.20682	0.20682	—	0.02233	0.02233	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.02626	1.69904	14.2892	20.0410	0.03399	0.61306	—	0.61306	0.56402	—	0.56402	—	3,569.75	3,569.75	0.14480	0.02896	—	3,582.00
Dust From Material Movement	—	—	—	—	—	—	0.20682	0.20682	—	0.02233	0.02233	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.60669	0.50871	4.27838	6.00054	0.01018	0.18356	—	0.18356	0.16887	—	0.16887	—	1,068.83	1,068.83	0.04336	0.00867	—	1,072.50
Dust From Material Movement	—	—	—	—	—	—	0.06192	0.06192	—	0.00669	0.00669	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11072	0.09284	0.78080	1.09510	0.00186	0.03350	—	0.03350	0.03082	—	0.03082	—	176.957	176.957	0.00718	0.00144	—	177.564
Dust From Material Movement	—	—	—	—	—	—	0.01130	0.01130	—	0.00122	0.00122	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13496	0.12341	0.08626	1.43454	0.00000	0.00000	0.29600	0.29600	0.00000	0.06938	0.06938	—	319.821	319.821	0.01464	0.01155	1.03682	324.666
Vendor	0.00712	0.00337	0.12136	0.05727	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	96.1696	96.1696	0.00366	0.01349	0.21457	100.496
Hauling	0.00074	0.00023	0.01265	0.00491	0.00007	0.00019	0.00269	0.00288	0.00013	0.00074	0.00086	—	9.94576	9.94576	0.00051	0.00157	0.01963	10.4462
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13265	0.12033	0.10782	1.26001	0.00000	0.00000	0.29600	0.29600	0.00000	0.06938	0.06938	—	302.050	302.050	0.01618	0.01232	0.02681	306.154
Vendor	0.00686	0.00311	0.12573	0.05819	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	96.2340	96.2340	0.00375	0.01349	0.00557	100.353
Hauling	0.00073	0.00021	0.01307	0.00496	0.00007	0.00019	0.00269	0.00288	0.00013	0.00074	0.00086	—	9.94988	9.94988	0.00051	0.00157	0.00051	10.4322
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03949	0.03580	0.03205	0.38185	0.00000	0.00000	0.08705	0.08705	0.00000	0.02038	0.02038	—	91.2469	91.2469	0.00461	0.00346	0.13406	92.5269
Vendor	0.00208	0.00096	0.03735	0.01739	0.00020	0.00040	0.00755	0.00795	0.00040	0.00209	0.00249	—	28.8025	28.8025	0.00112	0.00404	0.02777	30.0619
Hauling	0.00022	0.00007	0.00392	0.00148	0.00002	0.00006	0.00079	0.00085	0.00004	0.00022	0.00026	—	2.97841	2.97841	0.00015	0.00047	0.00254	3.12491
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00721	0.00653	0.00585	0.06969	0.00000	0.00000	0.01589	0.01589	0.00000	0.00372	0.00372	—	15.1070	15.1070	0.00076	0.00057	0.02220	15.3189
Vendor	0.00038	0.00017	0.00682	0.00317	0.00004	0.00007	0.00138	0.00145	0.00007	0.00038	0.00045	—	4.76858	4.76858	0.00019	0.00067	0.00460	4.97710
Hauling	0.00004	0.00001	0.00071	0.00027	< 0.000005	0.00001	0.00014	0.00016	0.00001	0.00004	0.00005	—	0.49311	0.49311	0.00003	0.00008	0.00042	0.51737

3.3. Construction of New Pump Station and Forebay Tank (2028)

3.3.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.94815	1.63341	13.4832	20.0655	0.03400	0.55490	—	0.55490	0.51051	—	0.51051	—	3,570.84	3,570.84	0.14485	0.02897	—	3,583.09
Dust From Material Movement	—	—	—	—	—	—	0.20682	0.20682	—	0.02233	0.02233	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.94815	1.63341	13.4832	20.0655	0.03400	0.55490	—	0.55490	0.51051	—	0.51051	—	3,570.84	3,570.84	0.14485	0.02897	—	3,583.09
Dust From Material Movement	—	—	—	—	—	—	0.20682	0.20682	—	0.02233	0.02233	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39535	1.16992	9.65722	14.3718	0.02435	0.39745	—	0.39745	0.36565	—	0.36565	—	2,557.58	2,557.58	0.10375	0.02075	—	2,566.36
Dust From Material Movement	—	—	—	—	—	—	0.14813	0.14813	—	0.01600	0.01600	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25465	0.21351	1.76244	2.62285	0.00444	0.07253	—	0.07253	0.06673	—	0.06673	—	423.437	423.437	0.01718	0.00344	—	424.890

Dust From Material Movement	—	—	—	—	—	—	0.02703	0.02703	—	0.00292	0.00292	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13111	0.11955	0.08549	1.35677	0.00000	0.00000	0.29600	0.29600	0.00000	0.06938	0.06938	—	314.129	314.129	0.00540	0.01155	0.93908	318.646
Vendor	0.00712	0.00329	0.11519	0.05490	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.7536	93.7536	0.00357	0.01349	0.19147	98.0543
Hauling	0.00068	0.00023	0.01217	0.00485	0.00007	0.00019	0.00269	0.00288	0.00013	0.00074	0.00086	—	9.68305	9.68305	0.00044	0.00157	0.01808	10.1803
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13033	0.11801	0.09781	1.18761	0.00000	0.00000	0.29600	0.29600	0.00000	0.06938	0.06938	—	296.692	296.692	0.00617	0.01155	0.02430	300.313
Vendor	0.00677	0.00311	0.11964	0.05649	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.8220	93.8220	0.00357	0.01349	0.00496	97.9362
Hauling	0.00066	0.00021	0.01260	0.00490	0.00007	0.00019	0.00269	0.00288	0.00013	0.00074	0.00086	—	9.68729	9.68729	0.00044	0.00157	0.00047	10.1669
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09225	0.08342	0.06950	0.86216	0.00000	0.00000	0.20823	0.20823	0.00000	0.04875	0.04875	—	214.401	214.401	0.00442	0.00827	0.29042	217.267
Vendor	0.00498	0.00223	0.08500	0.03989	0.00048	0.00096	0.01806	0.01902	0.00096	0.00500	0.00596	—	67.1712	67.1712	0.00256	0.00966	0.05920	70.1737
Hauling	0.00048	0.00016	0.00898	0.00349	0.00005	0.00014	0.00190	0.00203	0.00009	0.00052	0.00061	—	6.93669	6.93669	0.00032	0.00113	0.00560	7.28547
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01683	0.01522	0.01268	0.15734	0.00000	0.00000	0.03800	0.03800	0.00000	0.00890	0.00890	—	35.4965	35.4965	0.00073	0.00137	0.04808	35.9711
Vendor	0.00091	0.00041	0.01551	0.00728	0.00009	0.00018	0.00330	0.00347	0.00018	0.00091	0.00109	—	11.1210	11.1210	0.00042	0.00160	0.00980	11.6180
Hauling	0.00009	0.00003	0.00164	0.00064	0.00001	0.00003	0.00035	0.00037	0.00002	0.00009	0.00011	—	1.14845	1.14845	0.00005	0.00019	0.00093	1.20619

3.4. Construction of New Pump Station and Forebay Tank (2029)

3.4.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.89217	1.58638	12.8093	20.0601	0.03400	0.51205	—	0.51205	0.47109	—	0.47109	—	3,570.19	3,570.19	0.14482	0.02896	—	3,582.44
Dust From Material Movement	—	—	—	—	—	—	0.20682	0.20682	—	0.02233	0.02233	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33326	0.27940	2.25604	3.53310	0.00599	0.09019	—	0.09019	0.08297	—	0.08297	—	628.801	628.801	0.02551	0.00510	—	630.959
Dust From Material Movement	—	—	—	—	—	—	0.03643	0.03643	—	0.00393	0.00393	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.06082	0.05099	0.41173	0.64479	0.00109	0.01646	—	0.01646	0.01514	—	0.01514	—	104.105	104.105	0.00422	0.00084	—	104.462
Dust From Material Mover	—	—	—	—	—	—	0.00665	0.00665	—	0.00072	0.00072	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12570	0.11338	0.08703	1.11599	0.00000	0.00000	0.29600	0.29600	0.00000	0.06938	0.06938	—	291.616	291.616	0.00617	0.01155	0.02193	295.234
Vendor	0.00610	0.00302	0.11423	0.05412	0.00067	0.00135	0.02560	0.02695	0.00067	0.00707	0.00775	—	91.1466	91.1466	0.00357	0.01282	0.00439	95.0598
Hauling	0.00066	0.00021	0.01212	0.00484	0.00007	0.00013	0.00269	0.00281	0.00013	0.00074	0.00086	—	9.41472	9.41472	0.00044	0.00151	0.00043	9.87527
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02187	0.01970	0.01519	0.19953	0.00000	0.00000	0.05120	0.05120	0.00000	0.01199	0.01199	—	51.8181	51.8181	0.00095	0.00203	0.06420	52.5124
Vendor	0.00109	0.00055	0.01993	0.00953	0.00012	0.00024	0.00444	0.00468	0.00012	0.00123	0.00135	—	16.0458	16.0458	0.00063	0.00226	0.01288	16.7471
Hauling	0.00012	0.00004	0.00212	0.00085	0.00001	0.00002	0.00047	0.00049	0.00002	0.00013	0.00015	—	1.65772	1.65772	0.00008	0.00027	0.00126	1.74002
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00399	0.00359	0.00277	0.03641	0.00000	0.00000	0.00934	0.00934	0.00000	0.00219	0.00219	—	8.57908	8.57908	0.00016	0.00034	0.01063	8.69403
Vendor	0.00020	0.00010	0.00364	0.00174	0.00002	0.00004	0.00081	0.00085	0.00002	0.00022	0.00025	—	2.65657	2.65657	0.00010	0.00037	0.00213	2.77268
Hauling	0.00002	0.00001	0.00039	0.00015	< 0.000005	< 0.000005	0.00009	0.00009	< 0.000005	0.00002	0.00003	—	0.27446	0.27446	0.00001	0.00004	0.00021	0.28808

3.5. Disinfection Facility (2028)

3.5.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82896	0.69401	6.06055	7.24185	0.01536	0.22114	—	0.22114	0.20345	—	0.20345	—	1,575.19	1,575.19	0.06390	0.01278	—	1,580.59
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82896	0.69401	6.06055	7.24185	0.01536	0.22114	—	0.22114	0.20345	—	0.20345	—	1,575.19	1,575.19	0.06390	0.01278	—	1,580.59
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39745	0.33274	2.90574	3.47212	0.00737	0.10603	—	0.10603	0.09754	—	0.09754	—	755.226	755.226	0.03064	0.00613	—	757.818
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07253	0.06073	0.53030	0.63366	0.00134	0.01935	—	0.01935	0.01780	—	0.01780	—	125.036	125.036	0.00507	0.00101	—	125.465

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
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3.5.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05619	0.05124	0.03664	0.58147	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	134.627	134.627	0.00231	0.00495	0.40246	136.562
Vendor	0.00712	0.00329	0.11519	0.05490	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.7536	93.7536	0.00357	0.01349	0.19147	98.0543
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05586	0.05058	0.04192	0.50898	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	127.154	127.154	0.00265	0.00495	0.01042	128.706
Vendor	0.00677	0.00311	0.11964	0.05649	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.8220	93.8220	0.00357	0.01349	0.00496	97.9362
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02646	0.02393	0.01994	0.24734	0.00000	0.00000	0.05974	0.05974	0.00000	0.01399	0.01399	—	61.5085	61.5085	0.00127	0.00237	0.08332	62.3308
Vendor	0.00333	0.00149	0.05690	0.02670	0.00032	0.00065	0.01209	0.01273	0.00065	0.00335	0.00399	—	44.9644	44.9644	0.00171	0.00647	0.03963	46.9742
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00483	0.00437	0.00364	0.04514	0.00000	0.00000	0.01090	0.01090	0.00000	0.00255	0.00255	—	10.1834	10.1834	0.00021	0.00039	0.01379	10.3196
Vendor	0.00061	0.00027	0.01038	0.00487	0.00006	0.00012	0.00221	0.00232	0.00012	0.00061	0.00073	—	7.44436	7.44436	0.00028	0.00107	0.00656	7.77711
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Surge Tank (2028)

3.6.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64956	0.54326	4.66723	5.19188	0.01265	0.17876	—	0.17876	0.16445	—	0.16445	—	1,280.99	1,280.99	0.05196	0.01039	—	1,285.38
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64956	0.54326	4.66723	5.19188	0.01265	0.17876	—	0.17876	0.16445	—	0.16445	—	1,280.99	1,280.99	0.05196	0.01039	—	1,285.38
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11745	0.09823	0.84394	0.93881	0.00229	0.03232	—	0.03232	0.02974	—	0.02974	—	231.631	231.631	0.00940	0.00188	—	232.425
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02144	0.01793	0.15402	0.17133	0.00042	0.00590	—	0.00590	0.00543	—	0.00543	—	38.3491	38.3491	0.00156	0.00031	—	38.4807
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03746	0.03416	0.02443	0.38765	0.00000	0.00000	0.08457	0.08457	0.00000	0.01982	0.01982	—	89.7512	89.7512	0.00154	0.00330	0.26831	91.0416
Vendor	0.00712	0.00329	0.11519	0.05490	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.7536	93.7536	0.00357	0.01349	0.19147	98.0543
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03724	0.03372	0.02795	0.33932	0.00000	0.00000	0.08457	0.08457	0.00000	0.01982	0.01982	—	84.7692	84.7692	0.00176	0.00330	0.00694	85.8037
Vendor	0.00677	0.00311	0.11964	0.05649	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.8220	93.8220	0.00357	0.01349	0.00496	97.9362
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00665	0.00602	0.00501	0.06219	0.00000	0.00000	0.01502	0.01502	0.00000	0.00352	0.00352	—	15.4650	15.4650	0.00032	0.00060	0.02095	15.6718
Vendor	0.00126	0.00056	0.02146	0.01007	0.00012	0.00024	0.00456	0.00480	0.00024	0.00126	0.00150	—	16.9580	16.9580	0.00065	0.00244	0.01495	17.7160
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00121	0.00110	0.00091	0.01135	0.00000	0.00000	0.00274	0.00274	0.00000	0.00064	0.00064	—	2.56041	2.56041	0.00005	0.00010	0.00347	2.59464
Vendor	0.00023	0.00010	0.00392	0.00184	0.00002	0.00004	0.00083	0.00088	0.00004	0.00023	0.00027	—	2.80759	2.80759	0.00011	0.00040	0.00247	2.93308
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Construction of 30-Inch Espola Road Pipeline (2027)

3.7.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.59037	1.33328	11.1421	14.7594	0.03348	0.44659	—	0.44659	0.41086	—	0.41086	—	3,524.71	3,524.71	0.14298	0.02860	—	3,536.81
Dust From Material Movement	—	—	—	—	—	—	0.00037	0.00037	—	0.00006	0.00006	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18985	0.15916	1.33008	1.76189	0.00400	0.05331	—	0.05331	0.04905	—	0.04905	—	420.758	420.758	0.01707	0.00341	—	422.202
Dust From Material Movement	—	—	—	—	—	—	0.00004	0.00004	—	0.00001	0.00001	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03465	0.02905	0.24274	0.32154	0.00073	0.00973	—	0.00973	0.00895	—	0.00895	—	69.6613	69.6613	0.00283	0.00057	—	69.9004
Dust From Material Movement	—	—	—	—	—	—	0.00001	0.00001	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000
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3.7.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09475	0.08595	0.07701	0.90000	0.00000	0.00000	0.21143	0.21143	0.00000	0.04956	0.04956	—	215.750	215.750	0.01156	0.00880	0.01915	218.681
Vendor	0.00686	0.00311	0.12573	0.05819	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	96.2340	96.2340	0.00375	0.01349	0.00557	100.353
Hauling	0.01344	0.00395	0.24143	0.09168	0.00124	0.00354	0.04958	0.05312	0.00236	0.01357	0.01593	—	183.728	183.728	0.00937	0.02907	0.00943	192.633
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01124	0.01019	0.00913	0.10874	0.00000	0.00000	0.02479	0.02479	0.00000	0.00580	0.00580	—	25.9853	25.9853	0.00131	0.00098	0.03818	26.3499
Vendor	0.00083	0.00038	0.01489	0.00693	0.00008	0.00016	0.00301	0.00317	0.00016	0.00083	0.00099	—	11.4833	11.4833	0.00045	0.00161	0.01107	11.9855
Hauling	0.00163	0.00049	0.02883	0.01088	0.00015	0.00042	0.00584	0.00626	0.00028	0.00160	0.00188	—	21.9270	21.9270	0.00112	0.00346	0.01872	23.0056
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00205	0.00186	0.00167	0.01985	0.00000	0.00000	0.00452	0.00452	0.00000	0.00106	0.00106	—	4.30217	4.30217	0.00022	0.00016	0.00632	4.36252
Vendor	0.00015	0.00007	0.00272	0.00127	0.00001	0.00003	0.00055	0.00058	0.00003	0.00015	0.00018	—	1.90120	1.90120	0.00007	0.00027	0.00183	1.98433
Hauling	0.00030	0.00009	0.00526	0.00199	0.00003	0.00008	0.00107	0.00114	0.00005	0.00029	0.00034	—	3.63026	3.63026	0.00019	0.00057	0.00310	3.80884

3.8. Construction of 30-Inch Espola Road Pipeline (2028)

3.8.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.53331	1.28535	10.4768	14.7726	0.03349	0.40717	—	0.40717	0.37460	—	0.37460	—	3,525.88	3,525.88	0.14302	0.02860	—	3,537.98
Dust From Material Movement	—	—	—	—	—	—	0.00037	0.00037	—	0.00006	0.00006	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.53331	1.28535	10.4768	14.7726	0.03349	0.40717	—	0.40717	0.37460	—	0.37460	—	3,525.88	3,525.88	0.14302	0.02860	—	3,537.98
Dust From Material Movement	—	—	—	—	—	—	0.00037	0.00037	—	0.00006	0.00006	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54611	0.45779	3.73145	5.26149	0.01193	0.14502	—	0.14502	0.13342	—	0.13342	—	1,255.79	1,255.79	0.05094	0.01019	—	1,260.10
Dust From Material Movement	—	—	—	—	—	—	0.00013	0.00013	—	0.00002	0.00002	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09967	0.08355	0.68099	0.96022	0.00218	0.02647	—	0.02647	0.02435	—	0.02435	—	207.911	207.911	0.00843	0.00169	—	208.624
Dust From Material Movement	—	—	—	—	—	—	0.00002	0.00002	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09365	0.08540	0.06106	0.96912	0.00000	0.00000	0.21143	0.21143	0.00000	0.04956	0.04956	—	224.378	224.378	0.00386	0.00825	0.67077	227.604
Vendor	0.00712	0.00329	0.11519	0.05490	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.7536	93.7536	0.00357	0.01349	0.19147	98.0543
Hauling	0.01250	0.00419	0.22475	0.08962	0.00124	0.00354	0.04958	0.05312	0.00236	0.01357	0.01593	—	178.800	178.800	0.00814	0.02901	0.33387	187.982
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09310	0.08429	0.06986	0.84829	0.00000	0.00000	0.21143	0.21143	0.00000	0.04956	0.04956	—	211.923	211.923	0.00441	0.00825	0.01736	214.509
Vendor	0.00677	0.00311	0.11964	0.05649	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.8220	93.8220	0.00357	0.01349	0.00496	97.9362
Hauling	0.01226	0.00395	0.23265	0.09050	0.00124	0.00354	0.04958	0.05312	0.00236	0.01357	0.01593	—	178.879	178.879	0.00814	0.02901	0.00867	187.735
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03276	0.02963	0.02469	0.30623	0.00000	0.00000	0.07396	0.07396	0.00000	0.01732	0.01732	—	76.1534	76.1534	0.00157	0.00294	0.10316	77.1715
Vendor	0.00247	0.00111	0.04227	0.01984	0.00024	0.00048	0.00898	0.00946	0.00048	0.00248	0.00296	—	33.4021	33.4021	0.00127	0.00480	0.02944	34.8951
Hauling	0.00441	0.00145	0.08246	0.03204	0.00044	0.00126	0.01742	0.01868	0.00084	0.00477	0.00561	—	63.6941	63.6941	0.00290	0.01033	0.05141	66.8967
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00598	0.00541	0.00451	0.05589	0.00000	0.00000	0.01350	0.01350	0.00000	0.00316	0.00316	—	12.6081	12.6081	0.00026	0.00049	0.01708	12.7766
Vendor	0.00045	0.00020	0.00771	0.00362	0.00004	0.00009	0.00164	0.00173	0.00009	0.00045	0.00054	—	5.53010	5.53010	0.00021	0.00080	0.00487	5.77728
Hauling	0.00080	0.00026	0.01505	0.00585	0.00008	0.00023	0.00318	0.00341	0.00015	0.00087	0.00102	—	10.5453	10.5453	0.00048	0.00171	0.00851	11.0755

3.9. Construction of 30-Inch Lake Poway Road Pipeline (2027)

3.9.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.14579	0.95920	7.63844	10.5384	0.02352	0.31131	—	0.31131	0.28641	—	0.28641	—	2,435.03	2,435.03	0.09878	0.01976	—	2,443.39
Dust From Material Movement	—	—	—	—	—	—	0.00008	0.00008	—	0.00001	0.00001	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13678	0.11450	0.91183	1.25801	0.00281	0.03716	—	0.03716	0.03419	—	0.03419	—	290.679	290.679	0.01179	0.00236	—	291.676
Dust From Material Movement	—	—	—	—	—	—	0.00001	0.00001	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02496	0.02090	0.16641	0.22959	0.00051	0.00678	—	0.00678	0.00624	—	0.00624	—	48.1252	48.1252	0.00195	0.00039	—	48.2903	
Dust From Material Movement	—	—	—	—	—	—	< 0.000005	< 0.000005	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—	
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.9.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08527	0.07735	0.06931	0.81000	0.00000	0.00000	0.19029	0.19029	0.00000	0.04460	0.04460	—	194.175	194.175	0.01040	0.00792	0.01724	196.813
Vendor	0.00686	0.00311	0.12573	0.05819	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	96.2340	96.2340	0.00375	0.01349	0.00557	100.353
Hauling	0.00290	0.00085	0.05210	0.01979	0.00027	0.00076	0.01070	0.01146	0.00051	0.00293	0.00344	—	39.6506	39.6506	0.00202	0.00627	0.00203	41.5725
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01012	0.00917	0.00821	0.09787	0.00000	0.00000	0.02231	0.02231	0.00000	0.00522	0.00522	—	23.3868	23.3868	0.00118	0.00089	0.03436	23.7149
Vendor	0.00083	0.00038	0.01489	0.00693	0.00008	0.00016	0.00301	0.00317	0.00016	0.00083	0.00099	—	11.4833	11.4833	0.00045	0.00161	0.01107	11.9855
Hauling	0.00035	0.00010	0.00622	0.00235	0.00003	0.00009	0.00126	0.00135	0.00006	0.00035	0.00041	—	4.73211	4.73211	0.00024	0.00075	0.00404	4.96488
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00185	0.00167	0.00150	0.01786	0.00000	0.00000	0.00407	0.00407	0.00000	0.00095	0.00095	—	3.87195	3.87195	0.00020	0.00015	0.00569	3.92627

Vendor	0.00015	0.00007	0.00272	0.00127	0.00001	0.00003	0.00055	0.00058	0.00003	0.00015	0.00018	—	1.90120	1.90120	0.00007	0.00027	0.00183	1.98433
Hauling	0.00006	0.00002	0.00114	0.00043	0.00001	0.00002	0.00023	0.00025	0.00001	0.00006	0.00007	—	0.78345	0.78345	0.00004	0.00012	0.00067	0.82199

3.10. Construction of 30-Inch Lake Poway Road Pipeline (2028)

3.10.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10522	0.92511	7.24156	10.5487	0.02353	0.28422	—	0.28422	0.26149	—	0.26149	—	2,435.74	2,435.74	0.09880	0.01976	—	2,444.10
Dust From Material Movement	—	—	—	—	—	—	0.00008	0.00008	—	0.00001	0.00001	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10522	0.92511	7.24156	10.5487	0.02353	0.28422	—	0.28422	0.26149	—	0.26149	—	2,435.74	2,435.74	0.09880	0.01976	—	2,444.10
Dust From Material Movement	—	—	—	—	—	—	0.00008	0.00008	—	0.00001	0.00001	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39364	0.32949	2.57918	3.75708	0.00838	0.10123	—	0.10123	0.09313	—	0.09313	—	867.524	867.524	0.03519	0.00704	—	870.501
Dust From Material Movement	—	—	—	—	—	—	0.00003	0.00003	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07184	0.06013	0.47070	0.68567	0.00153	0.01847	—	0.01847	0.01700	—	0.01700	—	143.628	143.628	0.00583	0.00117	—	144.121
Dust From Material Movement	—	—	—	—	—	—	0.00001	0.00001	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.10.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08428	0.07686	0.05496	0.87221	0.00000	0.00000	0.19029	0.19029	0.00000	0.04460	0.04460	—	201.940	201.940	0.00347	0.00743	0.60369	204.844
Vendor	0.00712	0.00329	0.11519	0.05490	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.7536	93.7536	0.00357	0.01349	0.19147	98.0543
Hauling	0.00270	0.00090	0.04850	0.01934	0.00027	0.00076	0.01070	0.01146	0.00051	0.00293	0.00344	—	38.5873	38.5873	0.00176	0.00626	0.07205	40.5687

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08379	0.07586	0.06288	0.76347	0.00000	0.00000	0.19029	0.19029	0.00000	0.04460	0.04460	—	190.731	190.731	0.00397	0.00743	0.01562	193.058
Vendor	0.00677	0.00311	0.11964	0.05649	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.8220	93.8220	0.00357	0.01349	0.00496	97.9362
Hauling	0.00265	0.00085	0.05021	0.01953	0.00027	0.00076	0.01070	0.01146	0.00051	0.00293	0.00344	—	38.6042	38.6042	0.00176	0.00626	0.00187	40.5155
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02949	0.02667	0.02222	0.27561	0.00000	0.00000	0.06656	0.06656	0.00000	0.01558	0.01558	—	68.5380	68.5380	0.00141	0.00264	0.09284	69.4544
Vendor	0.00247	0.00111	0.04227	0.01984	0.00024	0.00048	0.00898	0.00946	0.00048	0.00248	0.00296	—	33.4021	33.4021	0.00127	0.00480	0.02944	34.8951
Hauling	0.00095	0.00031	0.01780	0.00692	0.00010	0.00027	0.00376	0.00403	0.00018	0.00103	0.00121	—	13.7459	13.7459	0.00063	0.00223	0.01109	14.4371
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00538	0.00487	0.00405	0.05030	0.00000	0.00000	0.01215	0.01215	0.00000	0.00284	0.00284	—	11.3473	11.3473	0.00023	0.00044	0.01537	11.4990
Vendor	0.00045	0.00020	0.00771	0.00362	0.00004	0.00009	0.00164	0.00173	0.00009	0.00045	0.00054	—	5.53010	5.53010	0.00021	0.00080	0.00487	5.77728
Hauling	0.00017	0.00006	0.00325	0.00126	0.00002	0.00005	0.00069	0.00074	0.00003	0.00019	0.00022	—	2.27580	2.27580	0.00010	0.00037	0.00184	2.39023

3.11. Construction of 36-Inch Pipeline Crossing to Pump Station (2028)

3.11.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93777	0.78441	5.74974	8.92949	0.01427	0.25958	—	0.25958	0.23881	—	0.23881	—	1,433.94	1,433.94	0.05817	0.01163	—	1,438.86

Dust From Material Movement	—	—	—	—	—	—	0.20708	0.20708	—	0.02237	0.02237	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16700	0.13969	1.02393	1.59018	0.00254	0.04623	—	0.04623	0.04253	—	0.04253	—	255.359	255.359	0.01036	0.00207	—	256.235
Dust From Material Movement	—	—	—	—	—	—	0.03688	0.03688	—	0.00398	0.00398	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03048	0.02549	0.18687	0.29021	0.00046	0.00844	—	0.00844	0.00776	—	0.00776	—	42.2776	42.2776	0.00171	0.00034	—	42.4227
Dust From Material Movement	—	—	—	—	—	—	0.00673	0.00673	—	0.00073	0.00073	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.11.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06517	0.05901	0.04891	0.59381	0.00000	0.00000	0.14800	0.14800	0.00000	0.03469	0.03469	—	148.346	148.346	0.00309	0.00578	0.01215	150.157
Vendor	0.00677	0.00311	0.11964	0.05649	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.8220	93.8220	0.00357	0.01349	0.00496	97.9362
Hauling	0.00945	0.00305	0.17934	0.06976	0.00095	0.00273	0.03822	0.04095	0.00182	0.01046	0.01228	—	137.893	137.893	0.00627	0.02236	0.00668	144.720
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01147	0.01037	0.00864	0.10718	0.00000	0.00000	0.02589	0.02589	0.00000	0.00606	0.00606	—	26.6537	26.6537	0.00055	0.00103	0.03610	27.0100
Vendor	0.00124	0.00055	0.02113	0.00992	0.00012	0.00024	0.00449	0.00473	0.00024	0.00124	0.00148	—	16.7010	16.7010	0.00064	0.00240	0.01472	17.4475
Hauling	0.00170	0.00056	0.03178	0.01235	0.00017	0.00049	0.00671	0.00720	0.00032	0.00184	0.00216	—	24.5501	24.5501	0.00112	0.00398	0.01981	25.7845
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00209	0.00189	0.00158	0.01956	0.00000	0.00000	0.00472	0.00472	0.00000	0.00111	0.00111	—	4.41282	4.41282	0.00009	0.00017	0.00598	4.47182
Vendor	0.00023	0.00010	0.00386	0.00181	0.00002	0.00004	0.00082	0.00086	0.00004	0.00023	0.00027	—	2.76505	2.76505	0.00011	0.00040	0.00244	2.88864
Hauling	0.00031	0.00010	0.00580	0.00225	0.00003	0.00009	0.00123	0.00131	0.00006	0.00034	0.00039	—	4.06454	4.06454	0.00018	0.00066	0.00328	4.26891

3.12. Construction of 36-Inch Pipeline Pump Station to Clearwell (2028)

3.12.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10522	0.92511	7.24156	10.5487	0.02353	0.28422	—	0.28422	0.26149	—	0.26149	—	2,435.74	2,435.74	0.09880	0.01976	—	2,444.10
Dust From Material Movement	—	—	—	—	—	—	0.00023	0.00023	—	0.00004	0.00004	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10522	0.92511	7.24156	10.5487	0.02353	0.28422	—	0.28422	0.26149	—	0.26149	—	2,435.74	2,435.74	0.09880	0.01976	—	2,444.10	
Dust From Material Movement	—	—	—	—	—	—	0.00023	0.00023	—	0.00004	0.00004	—	—	—	—	—	—	—	
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19985	0.16728	1.30943	1.90744	0.00425	0.05139	—	0.05139	0.04728	—	0.04728	—	440.435	440.435	0.01787	0.00357	—	441.947	
Dust From Material Movement	—	—	—	—	—	—	0.00004	0.00004	—	0.00001	0.00001	—	—	—	—	—	—	—	
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03647	0.03053	0.23897	0.34811	0.00078	0.00938	—	0.00938	0.00863	—	0.00863	—	72.9191	72.9191	0.00296	0.00059	—	73.1693	
Dust From Material Movement	—	—	—	—	—	—	0.00001	0.00001	—	< 0.000005	< 0.000005	—	—	—	—	—	—	—	
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.12.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08428	0.07686	0.05496	0.87221	0.00000	0.00000	0.19029	0.19029	0.00000	0.04460	0.04460	—	201.940	201.940	0.00347	0.00743	0.60369	204.844
Vendor	0.00712	0.00329	0.11519	0.05490	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.7536	93.7536	0.00357	0.01349	0.19147	98.0543
Hauling	0.00786	0.00263	0.14134	0.05636	0.00078	0.00222	0.03118	0.03341	0.00148	0.00854	0.01002	—	112.445	112.445	0.00512	0.01824	0.20996	118.219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08379	0.07586	0.06288	0.76347	0.00000	0.00000	0.19029	0.19029	0.00000	0.04460	0.04460	—	190.731	190.731	0.00397	0.00743	0.01562	193.058
Vendor	0.00677	0.00311	0.11964	0.05649	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.8220	93.8220	0.00357	0.01349	0.00496	97.9362
Hauling	0.00771	0.00248	0.14631	0.05691	0.00078	0.00222	0.03118	0.03341	0.00148	0.00854	0.01002	—	112.494	112.494	0.00512	0.01824	0.00545	118.064
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01497	0.01354	0.01128	0.13992	0.00000	0.00000	0.03379	0.03379	0.00000	0.00791	0.00791	—	34.7962	34.7962	0.00072	0.00134	0.04713	35.2614
Vendor	0.00126	0.00056	0.02146	0.01007	0.00012	0.00024	0.00456	0.00480	0.00024	0.00126	0.00150	—	16.9580	16.9580	0.00065	0.00244	0.01495	17.7160
Hauling	0.00141	0.00046	0.02633	0.01023	0.00014	0.00040	0.00556	0.00596	0.00027	0.00152	0.00179	—	20.3362	20.3362	0.00093	0.00330	0.01641	21.3588
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00273	0.00247	0.00206	0.02554	0.00000	0.00000	0.00617	0.00617	0.00000	0.00144	0.00144	—	5.76091	5.76091	0.00012	0.00022	0.00780	5.83793
Vendor	0.00023	0.00010	0.00392	0.00184	0.00002	0.00004	0.00083	0.00088	0.00004	0.00023	0.00027	—	2.80759	2.80759	0.00011	0.00040	0.00247	2.93308
Hauling	0.00026	0.00008	0.00480	0.00187	0.00003	0.00007	0.00101	0.00109	0.00005	0.00028	0.00033	—	3.36690	3.36690	0.00015	0.00055	0.00272	3.53619

3.13. POW-6 FCF (2028)

3.13.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41753	1.18755	10.3444	9.00896	0.01711	0.43041	—	0.43041	0.39598	—	0.39598	—	1,742.92	1,742.92	0.07070	0.01414	—	1,748.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41753	1.18755	10.3444	9.00896	0.01711	0.43041	—	0.43041	0.39598	—	0.39598	—	1,742.92	1,742.92	0.07070	0.01414	—	1,748.90
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01530	0.85057	7.40912	6.45260	0.01226	0.30828	—	0.30828	0.28362	—	0.28362	—	1,248.35	1,248.35	0.05064	0.01013	—	1,252.64
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18529	0.15523	1.35216	1.17760	0.00224	0.05626	—	0.05626	0.05176	—	0.05176	—	206.679	206.679	0.00838	0.00168	—	207.388
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.13.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05619	0.05124	0.03664	0.58147	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	134.627	134.627	0.00231	0.00495	0.40246	136.562
Vendor	0.00712	0.00329	0.11519	0.05490	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.7536	93.7536	0.00357	0.01349	0.19147	98.0543
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05586	0.05058	0.04192	0.50898	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	127.154	127.154	0.00265	0.00495	0.01042	128.706
Vendor	0.00677	0.00311	0.11964	0.05649	0.00067	0.00135	0.02560	0.02695	0.00135	0.00707	0.00842	—	93.8220	93.8220	0.00357	0.01349	0.00496	97.9362
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03953	0.03575	0.02979	0.36950	0.00000	0.00000	0.08924	0.08924	0.00000	0.02089	0.02089	—	91.8862	91.8862	0.00189	0.00355	0.12447	93.1146
Vendor	0.00498	0.00223	0.08500	0.03989	0.00048	0.00096	0.01806	0.01902	0.00096	0.00500	0.00596	—	67.1712	67.1712	0.00256	0.00966	0.05920	70.1737
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00721	0.00652	0.00544	0.06743	0.00000	0.00000	0.01629	0.01629	0.00000	0.00381	0.00381	—	15.2128	15.2128	0.00031	0.00059	0.02061	15.4162
Vendor	0.00091	0.00041	0.01551	0.00728	0.00009	0.00018	0.00330	0.00347	0.00018	0.00091	0.00109	—	11.1210	11.1210	0.00042	0.00160	0.00980	11.6180
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.14. POW-6 FCF (2029)

3.14.1. Onsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.39021	1.16460	9.85857	8.91315	0.01710	0.41300	—	0.41300	0.37996	—	0.37996	—	1,741.85	1,741.85	0.07066	0.01413	—	1,747.82
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39021	1.16460	9.85857	8.91315	0.01710	0.41300	—	0.41300	0.37996	—	0.37996	—	1,741.85	1,741.85	0.07066	0.01413	—	1,747.82
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66110	0.55381	4.68812	4.23854	0.00813	0.19640	—	0.19640	0.18068	—	0.18068	—	828.315	828.315	0.03360	0.00672	—	831.157
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12065	0.10107	0.85558	0.77353	0.00148	0.03584	—	0.03584	0.03297	—	0.03297	—	137.137	137.137	0.00556	0.00111	—	137.608
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.14.2. Offsite - 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
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05420	0.04958	0.03235	0.54847	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	132.316	132.316	0.00198	0.00495	0.36227	134.203
Vendor	0.00619	0.00320	0.10968	0.05329	0.00067	0.00135	0.02560	0.02695	0.00067	0.00707	0.00775	—	91.0746	91.0746	0.00357	0.01282	0.16934	95.1527
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05387	0.04859	0.03730	0.47828	0.00000	0.00000	0.12686	0.12686	0.00000	0.02974	0.02974	—	124.978	124.978	0.00265	0.00495	0.00940	126.529
Vendor	0.00610	0.00302	0.11423	0.05412	0.00067	0.00135	0.02560	0.02695	0.00067	0.00707	0.00775	—	91.1466	91.1466	0.00357	0.01282	0.00439	95.0598
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02530	0.02279	0.01758	0.23088	0.00000	0.00000	0.05925	0.05925	0.00000	0.01387	0.01387	—	59.9610	59.9610	0.00110	0.00235	0.07429	60.7643
Vendor	0.00294	0.00148	0.05382	0.02572	0.00032	0.00064	0.01199	0.01263	0.00032	0.00332	0.00364	—	43.3237	43.3237	0.00170	0.00609	0.03477	45.2173
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00462	0.00416	0.00321	0.04214	0.00000	0.00000	0.01081	0.01081	0.00000	0.00253	0.00253	—	9.92723	9.92723	0.00018	0.00039	0.01230	10.0602
Vendor	0.00054	0.00027	0.00982	0.00469	0.00006	0.00012	0.00219	0.00231	0.00006	0.00061	0.00066	—	7.17274	7.17274	0.00028	0.00101	0.00576	7.48623
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

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.

4.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	1.02246	1.02246	0.00020	0.00002	—	1.03462
Total	—	—	—	—	—	—	—	—	—	—	—	—	1.02246	1.02246	0.00020	0.00002	—	1.03462
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	1.02246	1.02246	0.00020	0.00002	—	1.03462
Total	—	—	—	—	—	—	—	—	—	—	—	—	1.02246	1.02246	0.00020	0.00002	—	1.03462
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.16928	0.16928	0.00003	< 0.000005	—	0.17129
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.16928	0.16928	0.00003	< 0.000005	—	0.17129

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

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	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,024.91	2,024.91	0.08130	0.01586	0.00000	2,031.67
Total	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,024.91	2,024.91	0.08130	0.01586	0.00000	2,031.67
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,024.91	2,024.91	0.08130	0.01586	0.00000	2,031.67

Total	4.34915	3.95773	11.0632	10.0927	0.01902	0.58227	0.00000	0.58227	0.58227	0.00000	0.58227	0.00000	2,024.91	2,024.91	0.08130	0.01586	0.00000	2,031.67
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.00870	0.00792	0.02213	0.02019	0.00004	0.00116	0.00000	0.00116	0.00116	0.00000	0.00116	0.00000	3.67394	3.67394	0.00015	0.00003	0.00000	3.68620
Total	0.00870	0.00792	0.02213	0.02019	0.00004	0.00116	0.00000	0.00116	0.00116	0.00000	0.00116	0.00000	3.67394	3.67394	0.00015	0.00003	0.00000	3.68620

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition of Existing Pump Station	Demolition	6/1/2027	6/30/2027	5.00000	22.0000	—
Construction of New Pump Station and Forebay Tank	Building Construction	8/1/2027	3/31/2029	5.00000	435.000	—
Disinfection Facility	Building Construction	5/1/2028	12/31/2028	5.00000	175.000	—
Surge Tank	Building Construction	3/1/2028	5/31/2028	5.00000	66.0000	—
Construction of 30-Inch Espola Road Pipeline	Trenching	11/1/2027	6/30/2028	5.00000	175.000	—
Construction of 30-Inch Lake Poway Road Pipeline	Trenching	11/1/2027	6/30/2028	5.00000	175.000	—
Construction of 36-Inch Pipeline Crossing to Pump Station	Trenching	1/1/2028	3/31/2028	5.00000	65.0000	—
Construction of 36-Inch Pipeline Pump Station to Clearwell	Trenching	3/1/2028	5/31/2028	5.00000	66.0000	—
POW-6 FCF	Trenching	1/1/2028	8/31/2029	5.00000	435.000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition of Existing Pump Station	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Demolition of Existing Pump Station	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000

Demolition of Existing Pump Station	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Demolition of Existing Pump Station	Dumpers/Tenders	Diesel	Average	1.000000	4.00000	16.0000	0.38000
Demolition of Existing Pump Station	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Demolition of Existing Pump Station	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Construction of New Pump Station and Forebay Tank	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Construction of New Pump Station and Forebay Tank	Tractors/Loaders/Back hoes	Diesel	Average	2.00000	7.00000	84.0000	0.37000
Construction of New Pump Station and Forebay Tank	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Construction of New Pump Station and Forebay Tank	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Construction of New Pump Station and Forebay Tank	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Construction of New Pump Station and Forebay Tank	Dumpers/Tenders	Diesel	Average	2.00000	4.00000	16.0000	0.38000
Construction of New Pump Station and Forebay Tank	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Construction of New Pump Station and Forebay Tank	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Construction of New Pump Station and Forebay Tank	Forklifts	Diesel	Average	2.00000	8.00000	82.0000	0.20000

Construction of New Pump Station and Forebay Tank	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Construction of New Pump Station and Forebay Tank	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Disinfection Facility	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Disinfection Facility	Forklifts	Diesel	Average	1.000000	8.00000	82.0000	0.20000
Disinfection Facility	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Disinfection Facility	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Disinfection Facility	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Disinfection Facility	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Surge Tank	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Surge Tank	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Surge Tank	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Surge Tank	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Construction of 30-Inch Espola Road Pipeline	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Construction of 30-Inch Espola Road Pipeline	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Construction of 30-Inch Espola Road Pipeline	Dumpers/Tenders	Diesel	Average	1.000000	4.00000	16.0000	0.38000
Construction of 30-Inch Espola Road Pipeline	Surfacing Equipment	Diesel	Average	1.000000	8.00000	399.000	0.30000
Construction of 30-Inch Espola Road Pipeline	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000

Construction of 30-Inch Espola Road Pipeline	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Construction of 30-Inch Espola Road Pipeline	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Construction of 30-Inch Espola Road Pipeline	Tractors/Loaders/Back hoes	Diesel	Average	1.000000	7.00000	84.0000	0.37000
Construction of 30-Inch Espola Road Pipeline	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Construction of 30-Inch Espola Road Pipeline	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Construction of 30-Inch Lake Poway Road Pipeline	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Construction of 30-Inch Lake Poway Road Pipeline	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Construction of 30-Inch Lake Poway Road Pipeline	Dumpers/Tenders	Diesel	Average	2.00000	4.00000	16.0000	0.38000
Construction of 30-Inch Lake Poway Road Pipeline	Surfacing Equipment	Diesel	Average	1.000000	8.00000	399.000	0.30000
Construction of 30-Inch Lake Poway Road Pipeline	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Construction of 30-Inch Lake Poway Road Pipeline	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Construction of 30-Inch Lake Poway Road Pipeline	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000

Construction of 30-Inch Lake Poway Road Pipeline	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Construction of 36-Inch Pipeline Crossing to Pump Station	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Construction of 36-Inch Pipeline Crossing to Pump Station	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Construction of 36-Inch Pipeline Crossing to Pump Station	Dumpers/Tenders	Diesel	Average	2.00000	4.00000	16.0000	0.38000
Construction of 36-Inch Pipeline Crossing to Pump Station	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Construction of 36-Inch Pipeline Crossing to Pump Station	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Construction of 36-Inch Pipeline Crossing to Pump Station	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Construction of 36-Inch Pipeline Pump Station to Clearwell	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Construction of 36-Inch Pipeline Pump Station to Clearwell	Rubber Tired Loaders	Diesel	Average	1.000000	8.00000	150.000	0.36000
Construction of 36-Inch Pipeline Pump Station to Clearwell	Dumpers/Tenders	Diesel	Average	2.00000	4.00000	16.0000	0.38000
Construction of 36-Inch Pipeline Pump Station to Clearwell	Surfacing Equipment	Diesel	Average	1.000000	8.00000	399.000	0.30000

Construction of 36-Inch Pipeline Pump Station to Clearwell	Rollers	Diesel	Average	1.000000	8.00000	36.0000	0.38000
Construction of 36-Inch Pipeline Pump Station to Clearwell	Pavers	Diesel	Average	1.000000	8.00000	81.0000	0.42000
Construction of 36-Inch Pipeline Pump Station to Clearwell	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
Construction of 36-Inch Pipeline Pump Station to Clearwell	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
POW-6 FCF	Excavators	Diesel	Average	1.000000	8.00000	36.0000	0.38000
POW-6 FCF	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
POW-6 FCF	Dumpers/Tenders	Diesel	Average	2.00000	4.00000	16.0000	0.38000
POW-6 FCF	Cement and Mortar Mixers	Diesel	Average	1.000000	8.00000	10.00000	0.56000
POW-6 FCF	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition of Existing Pump Station	Worker	15.0000	11.9700	LDA,LDT1,LDT2
Demolition of Existing Pump Station	Vendor	4.00000	7.63000	HHDT,MHDT
Demolition of Existing Pump Station	Hauling	1.04545	20.0000	HHDT
Demolition of Existing Pump Station	Onsite truck	—	—	HHDT
Construction of New Pump Station and Forebay Tank	Worker	35.0000	11.9700	LDA,LDT1,LDT2
Construction of New Pump Station and Forebay Tank	Vendor	4.00000	7.63000	HHDT,MHDT
Construction of New Pump Station and Forebay Tank	Hauling	0.14483	20.0000	HHDT

Construction of New Pump Station and Forebay Tank	Onsite truck	—	—	HHDT
Disinfection Facility	Worker	15.0000	11.9700	LDA,LDT1,LDT2
Disinfection Facility	Vendor	4.00000	7.63000	HHDT,MHDT
Disinfection Facility	Hauling	0.00000	20.0000	HHDT
Disinfection Facility	Onsite truck	—	—	HHDT
Surge Tank	Worker	10.00000	11.9700	LDA,LDT1,LDT2
Surge Tank	Vendor	4.00000	7.63000	HHDT,MHDT
Surge Tank	Hauling	0.00000	20.0000	HHDT
Surge Tank	Onsite truck	—	—	HHDT
Construction of 30-Inch Espola Road Pipeline	Worker	25.0000	11.9700	LDA,LDT1,LDT2
Construction of 30-Inch Espola Road Pipeline	Vendor	4.00000	7.63000	HHDT,MHDT
Construction of 30-Inch Espola Road Pipeline	Hauling	2.67429	20.0000	HHDT
Construction of 30-Inch Espola Road Pipeline	Onsite truck	—	—	HHDT
Construction of 30-Inch Lake Poway Road Pipeline	Worker	22.5000	11.9700	LDA,LDT1,LDT2
Construction of 30-Inch Lake Poway Road Pipeline	Vendor	4.00000	7.63000	HHDT,MHDT
Construction of 30-Inch Lake Poway Road Pipeline	Hauling	0.57714	20.0000	HHDT
Construction of 30-Inch Lake Poway Road Pipeline	Onsite truck	—	—	HHDT
Construction of 36-Inch Pipeline Crossing to Pump Station	Worker	17.5000	11.9700	LDA,LDT1,LDT2
Construction of 36-Inch Pipeline Crossing to Pump Station	Vendor	4.00000	7.63000	HHDT,MHDT
Construction of 36-Inch Pipeline Crossing to Pump Station	Hauling	2.06154	20.0000	HHDT

Construction of 36-Inch Pipeline Crossing to Pump Station	Onsite truck	—	—	HHDT
Construction of 36-Inch Pipeline Pump Station to Clearwell	Worker	22.5000	11.9700	LDA,LDT1,LDT2
Construction of 36-Inch Pipeline Pump Station to Clearwell	Vendor	4.00000	7.63000	HHDT,MHDT
Construction of 36-Inch Pipeline Pump Station to Clearwell	Hauling	1.68182	20.0000	HHDT
Construction of 36-Inch Pipeline Pump Station to Clearwell	Onsite truck	—	—	HHDT
POW-6 FCF	Worker	15.0000	11.9700	LDA,LDT1,LDT2
POW-6 FCF	Vendor	4.00000	7.63000	HHDT,MHDT
POW-6 FCF	Hauling	0.00000	20.0000	HHDT
POW-6 FCF	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

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition of Existing Pump Station	0.00000	0.00000	0.00000	2,000.00	0.00000
Construction of New Pump Station and Forebay Tank	500.000	—	120.000	0.00000	0.00000
Construction of 30-Inch Espola Road Pipeline	1,872.00	1,872.00	32.5000	0.00000	0.00000

Construction of 30-Inch Lake Poway Road Pipeline	401.000	401.000	32.5000	0.00000	0.00000
Construction of 36-Inch Pipeline Crossing to Pump Station	535.000	535.000	32.5000	0.00000	0.00000
Construction of 36-Inch Pipeline Pump Station to Clearwell	442.000	442.000	32.5000	0.00000	0.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	45.0990	0.03300	0.00400
2028	0.00000	45.0990	0.03300	0.00400
2029	0.00000	45.0990	0.03300	0.00400

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	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

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

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	0.00000	0.00000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	180.000

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)
User Defined Industrial	2,200.00	169.636	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.000000	4.00000	16.0000	603.000	0.73000

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	17.6000	annual days of extreme heat
Extreme Precipitation	4.15000	annual days with precipitation above 20 mm

Sea Level Rise	0.00000	meters of inundation depth
Wildfire	17.0500	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

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

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	63.6092
AQ-PM	17.0753
AQ-DPM	8.55009
Drinking Water	25.6650
Lead Risk Housing	3.47826
Pesticides	23.2069
Toxic Releases	8.66467
Traffic	24.1750
Effect Indicators	—

CleanUp Sites	0.00000
Groundwater	4.41640
Haz Waste Facilities/Generators	0.00000
Impaired Water Bodies	0.00000
Solid Waste	35.7159
Sensitive Population	—
Asthma	6.06929
Cardio-vascular	9.53390
Low Birth Weights	1.33436
Socioeconomic Factor Indicators	—
Education	4.66970
Housing	16.9202
Linguistic	0.00000
Poverty	14.4849
Unemployment	76.6918

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.73886822
Employed	25.29192865
Median HI	94.96984473
Education	—
Bachelor's or higher	89.67021686
High school enrollment	100
Preschool enrollment	26.03618632
Transportation	—

Auto Access	48.06877967
Active commuting	5.710252791
Social	—
2-parent households	80.5338124
Voting	98.31900423
Neighborhood	—
Alcohol availability	86.69318619
Park access	49.27499038
Retail density	6.954959579
Supermarket access	2.399589375
Tree canopy	63.0822533
Housing	—
Homeownership	96.85615296
Housing habitability	96.16322341
Low-inc homeowner severe housing cost burden	91.91582189
Low-inc renter severe housing cost burden	73.36070833
Uncrowded housing	88.2586937
Health Outcomes	—
Insured adults	90.63261902
Arthritis	0.0
Asthma ER Admissions	94.3
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	43.8

Cognitively Disabled	98.4
Physically Disabled	90.7
Heart Attack ER Admissions	89.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	72.4
SLR Inundation Area	0.0
Children	78.7
Elderly	29.9
English Speaking	90.7
Foreign-born	15.8
Outdoor Workers	78.0
Climate Change Adaptive Capacity	—
Impervious Surface Cover	94.0
Traffic Density	24.6
Traffic Access	23.0
Other Indices	—
Hardship	15.6
Other Decision Support	—

2016 Voting	96.5
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7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	1.000000
Healthy Places Index Score for Project Location (b)	85.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Based on IS/MND Project Description
Construction: Construction Phases	Schedule provided by K/J and Water Authority staff.
Construction: Off-Road Equipment	Equipment list by stage provided by K/J and Water Authority staff.
Construction: Dust From Material Movement	Import/export assumptions provided by Black & Veatch. 500 CY of fill for pump station site grading. 3,250 CY would be exported for pipelines; split between phases proportional to pipeline length. Same quantity of sand assumed to be imported for pipe bedding.

Construction: Trips and VMT	Trips based on CalEEMod default methodology of 2.5 worker trips per piece of equipment. Four vendor trips added per phase to account for 1 water truck and cement or supply vendor trip.
Operations: Energy Use	Data provided by Black and Veatch for 2x125hp pumps running.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.00000	5.20000
Landscape Area	sq. ft	—	0.00000
Special Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Building Construction	Construction of New Pump Station and Forebay Tank	Start Date	9/1/2025	8/1/2027
Building Construction	Construction of New Pump Station and Forebay Tank	End Date	6/30/2027	3/31/2029
Building Construction	Construction of New Pump Station and Forebay Tank	Work Days per Phase	478.000	435.000
Building Construction	Disinfection Facility	Start Date	9/1/2026	5/1/2028
Building Construction	Disinfection Facility	End Date	4/30/2027	12/31/2028
Building Construction	Disinfection Facility	Work Days per Phase	174.000	175.000

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Demolition of Existing Pump Station	Rubber Tired Dozers	Number per Day	2.00000	1.000000
Construction of New Pump Station and Forebay Tank	Tractors/Loaders/Backhoes	Number per Day	3.00000	2.00000

Disinfection Facility	Forklifts	Number per Day	3.00000	1.000000
Disinfection Facility	Tractors/Loaders/Backhoes	Number per Day	3.00000	1.000000
Surge Tank	Tractors/Loaders/Backhoes	Number per Day	3.00000	1.000000
POW-6 FCF	Cement and Mortar Mixers	Hours Per Day	4.00000	8.00000

8.4.6. Trips and VMT

Phase Name	Trip Type	Model Parameter	Default Value	New Value
Construction of New Pump Station and Forebay Tank	Worker	One-Way Trips per Day	0.00000	35.0000
Construction of New Pump Station and Forebay Tank	Vendor	One-Way Trips per Day	0.00000	4.00000
Disinfection Facility	Worker	One-Way Trips per Day	0.00000	15.0000
Disinfection Facility	Vendor	One-Way Trips per Day	0.00000	4.00000
Surge Tank	Worker	One-Way Trips per Day	0.00000	10.00000
Surge Tank	Vendor	One-Way Trips per Day	0.00000	4.00000

8.5. Operations

8.5.3. Energy Usage

Land Use	Model Parameter	Units	Default Value	New Value
User Defined Industrial	Electricity	kWh/yr	0.00000	2,200.00
User Defined Industrial	Electricity (Subject to Title 24)	kWh/yr	0.00000	—
User Defined Industrial	Electricity (Not Subject to Title 24)	kWh/yr	0.00000	2,200.00

Attachment B

Energy Calculations

Construction Energy Use

Off-Road Construction Equipment Energy Use										
Phase	Equipment	Fuel	HP	Equipment Count	Hours/Day	Work Days	Gallons /Hour	Gallons /Day	Total Gallons	Total kBtu
Demolition of Existing Pump Station	Rubber Tired Dozers	Diesel	367	1	8	22	0.050572064	0.404576509	8.9006832	1237.194964
	Tractors/Loaders/Backhoes	Diesel	84	1	7	22	0.056388945	0.394722618	8.6838976	1207.061765
	Cranes	Diesel	367	1	7	22	0.050628127	0.354396888	7.7967315	1083.745682
	Dumpers/Tenders	Diesel	16	1	4	22	0.056475579	0.225902315	4.9698509	690.8092801
	Cement and Mortar Mixers	Diesel	10	1	8	22	0.056080465	0.448643723	9.8701619	1371.952505
	Generator Sets	Diesel	14	1	8	22	0.018166354	0.145330834	3.1972784	444.4216911
Construction of New Pump Station and Forebay Tank	Cranes	Diesel	367	1	7	240	0.050628127	0.354396888	85.055253	11822.68017
	Tractors/Loaders/Backhoes	Diesel	84	2	7	240	0.056388945	0.789445235	189.46686	26335.89305
	Graders	Diesel	148	1	8	240	0.050691511	0.405532089	97.327701	13528.5505
	Generator Sets	Diesel	14	1	8	240	0.018166354	0.145330834	34.8794	4848.23663
	Excavators	Diesel	36	1	8	240	0.056234696	0.449877571	107.97062	15007.91578
	Dumpers/Tenders	Diesel	16	2	4	240	0.056475579	0.451804631	108.43311	15072.20247
	Rollers	Diesel	36	1	8	240	0.056298909	0.450391275	108.09391	15025.05293
	Pavers	Diesel	81	1	8	240	0.056528442	0.452227534	108.53461	15086.31054
	Forklifts	Diesel	82	1	8	240	0.056388348	0.901413573	216.33926	30071.15679
	Cement and Mortar Mixers	Diesel	10	1	8	240	0.056080465	0.448643723	107.67449	14966.7546
Disinfection Facility	Rubber Tired Loaders	Diesel	150	1	8	240	0.050659157	0.405273256	97.265581	13519.91583
	Cranes	Diesel	367	1	7	174	0.050628127	0.354396888	61.665058	8571.443121
	Forklifts	Diesel	82	1	8	174	0.056388348	0.450706786	78.422981	10900.79434
	Tractors/Loaders/Backhoes	Diesel	84	1	7	174	0.056388945	0.394722618	68.681735	9546.76123
	Excavators	Diesel	36	1	8	174	0.056234696	0.449877571	78.278697	10880.73894
	Cement and Mortar Mixers	Diesel	10	1	8	174	0.056080465	0.448643723	78.064008	10850.89708
Surge Tank	Generator Sets	Diesel	14	1	8	174	0.018166354	0.145330834	25.287565	3514.971557
	Cranes	Diesel	367	1	7	65	0.050628127	0.354396888	23.035798	3201.975879
	Generator Sets	Diesel	14	1	8	65	0.018166354	0.145330834	9.4465042	1313.064087
	Tractors/Loaders/Backhoes	Diesel	84	1	7	65	0.056388945	0.394722618	25.65697	3566.31885
	Cement and Mortar Mixers	Diesel	10	1	8	56	0.056080465	0.448643723	25.124048	3492.242739
Construction of 30-Inch Espola Road Pipeline	Excavators	Diesel	36	1	8	131	0.056234696	0.449877571	58.933962	8191.820696
	Rubber Tired Loaders	Diesel	150	1	8	131	0.050659157	0.405273256	53.090797	7379.620722
	Dumpers/Tenders	Diesel	16	1	4	131	0.056475579	0.225902315	29.593203	4113.455259
	Surfacing Equipment	Diesel	399	1	8	131	0.050574532	0.404596259	53.00211	7367.293276
	Rollers	Diesel	36	1	8	131	0.056298909	0.450391275	59.001257	8201.174722
	Pavers	Diesel	81	1	8	131	0.056528442	0.452227534	59.241807	8234.611171
	Cranes	Diesel	367	1	7	131	0.050628127	0.354396888	46.425992	6453.212925
	Tractors/Loaders/Backhoes	Diesel	84	1	7	131	0.056388945	0.394722618	51.708663	7187.504144
	Cement and Mortar Mixers	Diesel	10	1	8	131	0.056080465	0.448643723	58.772328	8169.353551
	Generator Sets	Diesel	14	1	8	131	0.018166354	0.145330834	19.038339	2646.329161
Construction of 30-Inch Lake Poway Road Pipeline	Excavators	Diesel	36	1	8	131	0.056234696	0.449877571	58.933962	8191.820696
	Rubber Tired Loaders	Diesel	150	1	8	131	0.050659157	0.405273256	53.090797	7379.620722
	Dumpers/Tenders	Diesel	16	2	4	131	0.056475579	0.451804631	59.186407	8226.910517
	Surfacing Equipment	Diesel	399	1	8	131	0.050574532	0.404596259	53.00211	7367.293276
	Rollers	Diesel	36	1	8	131	0.056298909	0.450391275	59.001257	8201.174722
	Pavers	Diesel	81	1	8	131	0.056528442	0.452227534	59.241807	8234.611171
	Cement and Mortar Mixers	Diesel	10	1	8	131	0.056080465	0.448643723	58.772328	8169.353551
	Generator Sets	Diesel	14	1	8	131	0.018166354	0.145330834	19.038339	2646.329161
Construction of 36-Inch Pipeline Crossing to Pump Station	Excavators	Diesel	36	1	8	66	0.056234696	0.449877571	29.69192	4127.176839
	Rubber Tired Loaders	Diesel	150	1	8	66	0.050659157	0.405273256	26.748035	3717.976852
	Dumpers/Tenders	Diesel	16	2	4	66	0.056475579	0.451804631	29.819106	4144.85568
	Graders	Diesel	148	1	8	66	0.050691511	0.405532089	26.765118	3720.351387
	Cement and Mortar Mixers	Diesel	10	1	8	66	0.056080465	0.448643723	29.610486	4115.857514
	Generator Sets	Diesel	14	1	8	66	0.018166354	0.145330834	9.5918351	1333.265073
	Excavators	Diesel	36	1	8	65	0.056234696	0.449877571	29.242042	4064.643857
Construction of 36-Inch Pipeline Pump Station to Clearwell	Rubber Tired Loaders	Diesel	150	1	8	65	0.050659157	0.405273256	26.342762	3661.64387
	Dumpers/Tenders	Diesel	16	2	4	65	0.056475579	0.451804631	29.367301	4082.054837
	Surfacing Equipment	Diesel	399	1	8	65	0.050574532	0.404596259	26.298757	3655.527198
	Rollers	Diesel	36	1	8	65	0.056298909	0.450391275	29.275433	4069.285167
	Pavers	Diesel	81	1	8	65	0.056528442	0.452227534	29.39479	4085.875772
	Cement and Mortar Mixers	Diesel	10	1	8	65	0.056080465	0.448643723	29.161842	4053.496037
	Generator Sets	Diesel	14	1	8	65	0.018166354	0.145330834	9.4465042	1313.064087
	Excavators	Diesel	36	1	8	435	0.056234696	0.449877571	195.69674	27201.84735
POW-6 FCF	Rubber Tired Dozers	Diesel	367	1	8	435	0.050572064	0.404576509	175.99078	24462.71862
	Dumpers/Tenders	Diesel	16	2	4	435	0.056475579	0.451804631	196.53501	27318.36698
	Cement and Mortar Mixers	Diesel	10	1	8	435	0.056080465	0.448643723	195.16002	27127.24271
	Generator Sets	Diesel	14	1	8	435	0.018166354	0.145330834	63.218913	8787.428893
Total									3874.5556	538,563.23

Notes:

1. Equipment types and horsepower from CalEEMod defaults.
2. Equipment count and hours from CalEEMod.
3. Fuel consumption factors from CARB OFFROAD2025- Web Database, for San Diego County, aggregate model years for 2027. <https://arb.ca.gov/emfac/offroad>. Dumpers/Tenders relied on Off-Highway Truck consumption factor in the absence of Dumper/Tender data.
4. 1 Gallon of diesel = 139,000 Btu

On-Road Construction Energy Use										
Phase	Trip Type (Fleet Mix)	Trips	Distance (miles)	Work Days	Total VMT	Gallons diesel/VMT	Total diesel gallons	Gallons gas/VMT	Total gasoline gallons	Total kBtu
Demolition of Existing Pump Station	Worker (LDA,LDT1,LDT2)	15	11.97	22	3,950.10	8.0405E-05	0.317606124	0.040757591	160.99656	20007.72093
	Vendor (HHDT,MHDT)	4	7.63	22	671.44	0.13556945	91.02675543	0.018390794	12.348315	14183.91005
	Hauling (HHDT)	1.045455	20	22	460.00	0.16071841	73.93047043	5.80489E-05	0.0267025	10279.6465
Construction of New Pump Station and Forebay Tank	Worker (LDA,LDT1,LDT2)	35	11.97	240	100,548.00	8.0405E-05	8.084519508	0.040757591	4098.0943	509287.4417
	Vendor (HHDT,MHDT)	4	7.63	240	7,324.80	0.13556945	993.0191502	0.018390794	134.70889	154733.5642
	Hauling (HHDT)	0.2625	20	240	1,260.00	0.16071841	202.5052016	5.80489E-05	0.0731416	28157.29258
Disinfection Facility	Worker (LDA,LDT1,LDT2)	15	11.97	174	31,241.70	8.0405E-05	2.511975704	0.040757591	1273.3364	158242.8837
	Vendor (HHDT,MHDT)	4	7.63	174	5,310.48	0.13556945	719.9388839	0.018390794	97.663945	112181.834
Surge Tank	Worker (LDA,LDT1,LDT2)	10	11.97	65	7,780.50	8.0405E-05	0.625587819	0.040757591	317.11444	39409.14728
	Vendor (HHDT,MHDT)	4	7.63	65	1,983.80	0.13556945	268.9426865	0.018390794	36.483658	41907.00696
Construction of 30-Inch Espola Road Pipeline	Worker (LDA,LDT1,LDT2)	25	11.97	131	39,201.75	8.0405E-05	3.152000165	0.040757591	1597.7689	198561.4728
	Vendor (HHDT,MHDT)	4	7.63	131	3,998.12	0.13556945	542.0229528	0.018390794	73.528602	84458.73711
	Hauling (HHDT)	2.67429	20	131	7,006.64	0.16071841	1126.096036	5.80489E-05	0.4067274	156577.7832
Construction of 30-Inch Lake Poway Road Pipeline	Worker (LDA,LDT1,LDT2)	22.5	11.97	131	35,281.58	8.0405E-05	2.836800149	0.040757591	1437.992	178705.3255
	Vendor (HHDT,MHDT)	4	7.63	131	3,998.12	0.13556945	542.0229528	0.018390794	73.528602	84458.73711
	Hauling (HHDT)	0.57714	20	131	1,512.11	0.16071841	243.0234067	5.80489E-05	0.0877761	33791.13776
Construction of 36-Inch Pipeline Crossing to Pump Station	Worker (LDA,LDT1,LDT2)	17.5	11.97	66	13,825.35	8.0405E-05	1.111621432	0.040757591	563.48797	70027.02324
	Vendor (HHDT,MHDT)	4	7.63	66	2,014.32	0.13556945	273.0802663	0.018390794	37.044945	42551.73014
	Hauling (HHDT)	2.06154	20	66	2,721.23	0.16071841	437.3522197	5.80489E-05	0.1579645	60811.54613
Construction of 36-Inch Pipeline Pump Station to Clearwell	Worker (LDA,LDT1,LDT2)	22.5	11.97	65	17,506.13	8.0405E-05	1.407572593	0.040757591	713.50749	88670.58137
	Vendor (HHDT,MHDT)	4	7.63	65	1,983.80	0.13556945	268.9426865	0.018390794	36.483658	41907.00696
	Hauling (HHDT)	1.68182	20	65	2,186.37	0.16071841	351.3892759	5.80489E-05	0.126916	48858.84694
POW-6 FCF	Worker (LDA,LDT1,LDT2)	15	11.97	435	78,104.25	8.0405E-05	6.279939121	0.040757591	3183.341	395607.2004
	Vendor (HHDT,MHDT)	4	7.63	435	13,276.20	0.13556945	1799.847183	0.018390794	244.15986	280454.5808
Total					383,146.78		7,959.47		14,092.47	2,853,832.16

Notes:

- Fleet mix and trip distances from CalEEMod defaults.
- Fuel consumption factors weighted average for fleet mix from CARB EMFAC2025, for San Diego County, aggregate model years for 2027, aggregate speeds. <https://arb.ca.gov/emfac/emissions-inventory>.
- 1 Gallon of diesel = 139 KBtu; 1 gallon of gasoline = 124 KBtu

Construction Total		
Gallons Diesel	Gallons Gas	KBtu
11,834.02	14,092.47	3,392,395

Operational Stationary Energy Use

Equipment	Fuel	HP	Equipment Count	Hours/Year	Gallons /Hour	Total Gallons	Total kBtu
Backup Generator	Diesel	603	1	16	0.016340814	0.261453	36.34196984
						0.261453	36.34196984

Notes:

1. Equipment type and horsepower provided by K/J Consultants, Inc.
2. Fuel consumption factors from CARB OFFROAD2025- Web Database, for San Diego County, aggregate model years for 2027. <https://arb.ca.gov/emfac/offroad>
3. 1 Gallon of diesel = 139,000 Btu

Model Output: Off-Road Web Query (v1.1.2) Emissions Inventory

Region Type: County

Region: San Diego

Calendar Year: 2027

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: Off-Road Web Query Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category		Model Year	Hp Bin	Fuel (gpy)	Fuel Consumption	Total Activity (hpy)	Total Population	Hp Hours (hhpy)	Gallons/Hp hr
San Diego	2027	Construction and Mining - Cranes	Cranes	Aggregate	600	Diesel	131840	21910.78	81.16193	2604086	0.050628
San Diego	2027	Construction and Mining - Excavators	Excavators	Aggregate	50	Diesel	176160.4	297327.2	496.4052	3132593	0.056235
San Diego	2027	Construction and Mining - Graders	Graders	Aggregate	175	Diesel	69198.52	31821.77	69.64574	1365091	0.050692
San Diego	2027	Construction and Mining - Concrete Mixer	Cement and Mortar Mixers	Aggregate	50	Diesel	149.1263	328.1721	0.664254	2659.149	0.05608
San Diego	2027	Construction and Mining - Off-Highway Trucks	Dumpers/Tenders	Aggregate	50	Diesel	1296.539	2751.001	3.45412	22957.52	0.056476
San Diego	2027	Construction and Mining - Pavers	Pavers	Aggregate	100	Diesel	15276.36	10870.23	17.60587	270242	0.056528
San Diego	2027	Construction and Mining - Rollers	Rollers	Aggregate	50	Diesel	67119.62	114924.6	248.4705	1192201	0.056299
San Diego	2027	Construction and Mining - Rubber Tired Dozers	Rubber Tired Dozers	Aggregate	600	Diesel	70426.65	12547.99	16.26396	1392600	0.050572
San Diego	2027	Construction and Mining - Rubber Tired Loaders	Rubber Tired Loaders	Aggregate	175	Diesel	403975.3	182287.6	207.0264	7974378	0.050659
San Diego	2027	Construction and Mining - Surfacing Equipment	Surfacing Equipment	Aggregate	600	Diesel	43638.24	7747.499	11.36303	862850.1	0.050575
San Diego	2027	Construction and Mining - Tractors/Loaders/Backhoes	Tractors/Loaders/Backhoes	Aggregate	100	Diesel	737847.2	503825.6	841.5116	13084961	0.056389
San Diego	2027	Forklifts	Forklifts	Aggregate	100	Diesel	120168.1	85284.41	309.2605	2132972	0.056338
San Diego	2027	Portable Equipment - Non-Rental Generator	Generator Sets	Aggregate	50	Diesel	3742.258	5161.097	3.641806	205999.4	0.018166
San Diego	2027	Portable Equipment - Non-Rental Generator	Non-Rental Generator	Aggregate	750	Diesel	235440.7	22364.75	15.78116	14408140	0.016341

Source: EMFAC2025 (v2.0.0) Emissions Inventory

Region Type: County

Region: San Diego

Calendar Year: 2027

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/year for Combustion VMT and Electric VMT, trips/year for Trips, tons/year for Emissions, 1000 gallons/year for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/year for Natural Gas Fuel Consumption, kWh/year for Energy Consumption, kg/year for Hydrogen Consumption

Construction Fleet Fuel Consumption								
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	Fuel Consumption (1000 Gal.)	Gallons/VMT
Worker (LDA, LDT1, LDT2)								
San Diego	2027	LDA	Aggregate	Aggregate	Diesel	30,237,521.26	819.65	
San Diego	2027	LDT1	Aggregate	Aggregate	Diesel	275,587.00	12.31	
San Diego	2027	LDT2	Aggregate	Aggregate	Diesel	14,880,596.60	494.50	
					Diesel Total	45,393,704.86	1,326.46	0.00008040
San Diego	2027	LDA	Aggregate	Aggregate	Gasoline	8,484,561,876.32	318,932.56	
San Diego	2027	LDT1	Aggregate	Aggregate	Gasoline	1,169,658,189.54	52,052.11	
San Diego	2027	LDT2	Aggregate	Aggregate	Gasoline	6,797,754,916.34	301,408.33	
					Gas Total	16,451,974,982.20	672,393.00	0.04075759
					Total VMT	16,497,368,687.05		
Vendor (HHDT, MHDT)								
San Diego	2027	HHDT	Aggregate	Aggregate	Diesel	571,081,546.93	91,802.62	
San Diego	2027	MHDT	Aggregate	Aggregate	Diesel	212,567,887.58	25,031.82	
					Diesel Total	783,649,434.51	116,834.44	0.13556945
San Diego	2027	HHDT	Aggregate	Aggregate	Gasoline	120,072.91	33.16	
San Diego	2027	MHDT	Aggregate	Aggregate	Gasoline	78,035,568.03	15,816.12	
					Gas Total	78,155,640.93	15,849.28	0.01839079
					Total VMT	861,805,075.45		
Hauling (HHDT)								
San Diego	2027	HHDT	Aggregate	Aggregate	Diesel	571,081,546.93	91,802.62	0.16071841
San Diego	2027	HHDT	Aggregate	Aggregate	Gasoline	120,072.91	33.16	0.00005805
					Total VMT	571,201,619.84		