

La Jolla View Reservoir Project  
Environmental Impact Report  
SCH No. 2018041020 - Project No. 331101

Appendix F

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Air Quality Impact Analysis

February 2020



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## Air Quality Impact Analysis

June 2019

Prepared for:

**City of San Diego  
Public Works Department**  
525 B Street, Suite 750  
San Diego, CA 92101

Prepared by:

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7578 El Cajon Boulevard  
La Mesa, CA 91942

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## ACRONYMS AND ABBREVIATIONS

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BMPs	best management practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CARB	California Air Resources Board
CCAA	California Clean Air Act
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CO	carbon monoxide
cy	cubic yard
DPM	diesel particulate matter
EMFAC	emission factors
H <sub>2</sub> S	hydrogen sulfide
HRA	Health Risk Assessment
IEM	Iowa Environmental Mesonet
LJCP	La Jolla Community Plan
MEI	maximally exposed individual
MG	million-gallon
mg/m <sup>3</sup>	milligrams per cubic meter
MT	metric tons
mph	miles per hour
NAAQS	National Ambient Air Quality Standards
NO	nitrogen oxide
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
O <sub>3</sub>	ozone
Pb	lead
PM	particulate matter
PM <sub>10</sub>	particulate matter less than 10 microns
PM <sub>2.5</sub>	particulate matter less than 2.5 microns
Project	La Jolla View Reservoir Project
RAQS	Regional Air Quality Strategies
ROGs	reactive organic gases

## ACRONYMS AND ABBREVIATIONS (cont.)

SANDAG	San Diego Association of Governments
SCAQMD	South Coast Air Quality Management District
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDP	Site Development Permit
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
SO <sub>x</sub>	sulfur oxides
TACs	toxic air contaminants
T-BACT	Toxics-Best Available Control Technology
USEPA	U.S. Environmental Protection Agency
VOC	volatile organic compound
WRCC	Western Regional Climate Center

## EXECUTIVE SUMMARY

This report assesses potential air quality impacts and greenhouse gas (GHG) emissions during construction and operation of the proposed La Jolla View Reservoir Project (Project), located in the City of San Diego.

The Project would result in emissions of criteria air pollutants primarily during construction. Operational emissions would occur from occasional maintenance trips and would result in a negligible contribution to criteria air pollutant emissions. Construction emission sources include fugitive dust, heavy construction equipment exhaust, and vehicle trips associated with workers commuting to and from the site and trucks hauling materials. In accordance with San Diego Air Pollution Control District (SDAPCD) Rule 55, fugitive dust control measures including the use of an on-site water truck to water down active grading areas and unpaved and paved roads at least twice daily are incorporated into Project design. Project emissions of criteria pollutants during construction would not exceed SDAPCD emissions thresholds.

The Project would be consistent with air quality policies set forth by the SDAPCD as presented in the most recent Regional Air Quality Strategies (RAQS).

Project-generated construction traffic would not result in a carbon monoxide (CO) hot spot. Construction and operation of the Project would not result in exposure of sensitive receptors to significant quantities of toxic air contaminants (TACs). In addition, potential impacts related to odors from the Project would be less than significant.

Air pollutant emissions associated with the Project during construction and operation would be below federal *de minimis* levels for all pollutants, consistent with the Clean Air Act.

The Project would result in GHG emissions of 1,373 metric tons (MT) carbon dioxide equivalent (CO<sub>2</sub>e) from construction. Amortized over 30 years, the proposed construction activities would contribute approximately 46 MT CO<sub>2</sub>e emissions per year. Operational emissions would be negligible.

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# 1.0 INTRODUCTION

## 1.1 PROJECT LOCATION

The Project is in the City of San Diego (City) and is generally located within the 42-acre La Jolla Natural Park (a part of City Parks and Recreation Open Space), and is designated as “Parks, Open Space” under the La Jolla Community Plan (LCP). The site is bounded by County Club Drive, across which is located a golf course, to the west; residences off Remley Place, Brodiaea Way, and Encelia Drive to the south; additional open space to the east; and residences off Valdes Drive to the north (see Figure 1, *Regional Location*, and Figure 2, *Aerial Vicinity*). The existing La Jolla View Reservoir is located in the La Jolla Natural Park, approximately 500 feet east of Country Club Drive and 150 feet north of the Remley Place residences. In addition, the Exchange Place Reservoir is located east of the intersection of Country Club Drive and Pepita Way, outside of the park limits. Improvements also would occur along Country Club Drive between Soledad Avenue and Romero Drive.

## 1.2 PROJECT DESCRIPTION

### Background

The existing La Jolla View Reservoir is a 0.72-million-gallon (MG) potable water storage facility that was constructed in 1949. The existing 0.99-MG La Jolla Exchange Place Reservoir was originally constructed in 1909 and was decommissioned in 2002. Use of the existing La Jolla View Reservoir is very limited due to higher-pressure zone and other water system changes. Water quality in the reservoir is also poor and requires supplemental chlorine treatment when in operation. In addition, the existing 16-inch diameter cast iron Muirlands Pipeline that supplies water to the existing La Jolla View Reservoir is beyond its useful life and is undersized for current water conveyance requirements.

### Project Description

The proposed Project would replace the existing Exchange Place Reservoir and La Jolla View Reservoir with a new 3.1-million-gallon reservoir within the La Jolla Natural Park (see Figure 3, *Site Plan*). The existing La Jolla View Reservoir and the Exchange Place Pump Station would be demolished. The Exchange Place Reservoir would be partially demolished by removing the roof and upper three feet of concrete lining, and then backfilling the reservoir with soil. The proposed new reservoir would be almost entirely buried, except for reservoir access hatches and supervisory control and data acquisition equipment. The new reservoir would include an approximately 200-foot-long, 18-inch overflow pipe with an at-grade outlet and energy dissipation structure. The outlet would be situated near the head of the north-central on-site drainage. In addition, 480 linear feet of an 8-inch utility water connection to the new reservoir would be provided from the existing water main in Brodiaea Way.

The Project also includes construction of approximately 2,790 linear feet of 30-inch pipeline. The pipeline would run from the new La Jolla View Reservoir in a general east-to-west direction through the La Jolla Natural Park to the Soledad Way and Exchange Place intersection. Approximately 1,050 linear feet of the 2,790 linear feet total would be replacing the 16-inch pipeline up to the existing Muirlands Pump Station. In addition, approximately 780 feet of an 8-inch pipeline will parallel the 30-inch pipeline along Country Club Drive to serve existing customers. An altitude valve vault will be located along the

pipeline adjacent to Country Club Drive. The existing pipeline segment through the La Jolla Natural Park would be abandoned in place.

An existing paved access road from Encelia Drive would be reconstructed to allow access to the new reservoir site for maintenance vehicles. This road would terminate at the reservoir access hatches where two parking spaces and paved turnaround area will be provided. The remaining portion of the existing access road to the existing La Jolla View Reservoir would be demolished, and the area would be revegetated.

Proposed discretionary actions include a Site Development Permit (SDP) and a Coastal Development Permit (CDP). An SDP is required because the Project may have significant impacts on environmentally sensitive lands. A CDP is required because the Project proposes development within the Coastal Overlay Zone.

## **Grading and Construction**

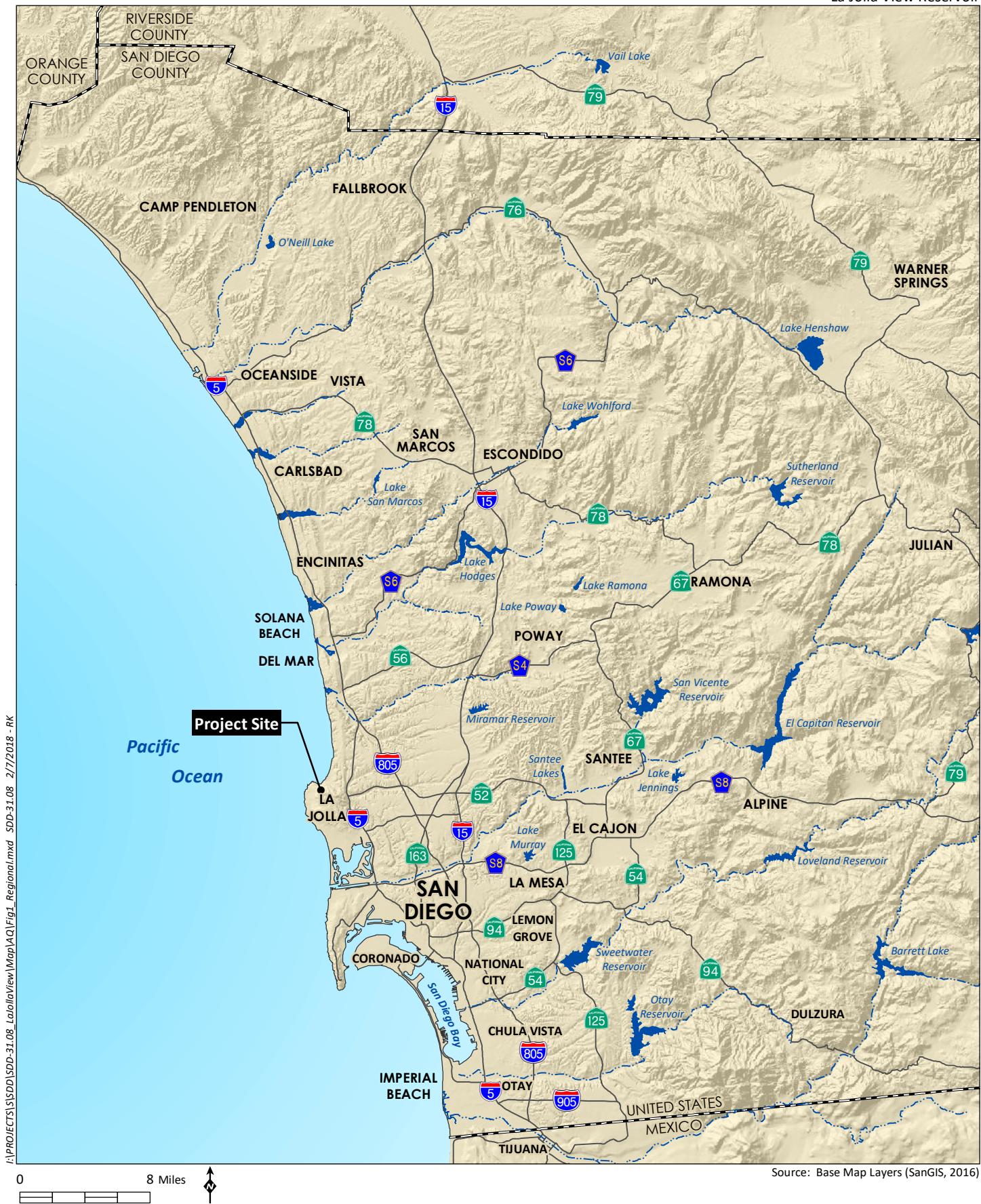
Excavation to install the new reservoir would result in approximately 78,000 cubic yards (cy) of cut with 56,500 cy of fill. Approximately 22,000 cy would be permanently disposed of offsite, requiring approximately 2,200 hauling round trips. The remainder (56,000 cy) would be temporarily stockpiled on site, including use of a proposed temporary access road that would run from the new reservoir site to the stockpile area within La Jolla Natural Park near Country Club Drive. During stockpiling, 5,000 cy would be used to backfill the Exchange Place Reservoir. Once the reservoir is installed, the remaining stockpiled soil would be backfilled into the new reservoir location and to cover the temporary access road. The backfilled areas would be revegetated.

Extended construction hours would be required for concrete pouring for the reservoir roof and floor/footing. In addition, concrete pouring of the walls may involve extended hours, up to 16 hours per day. It is conservatively estimated there would be 20 days of construction with extended hours.

## **1.3 CONSTRUCTION BEST MANAGEMENT PRACTICES**

The Project would incorporate best management practices (BMPs) during construction to reduce emissions of fugitive dust. San Diego Air Pollution Control District (SDAPCD) Rule 55 – Fugitive Dust Control states that no dust and/or dirt shall leave the property line. SDAPCD Rule 55 requires the following:

- (1) **Airborne Dust Beyond the Property Line:** No person shall engage in construction or demolition activity subject to this rule in a manner that discharges visible dust emissions into the atmosphere beyond the property line for a period or periods aggregating more than 3 minutes in any 60-minute period.
- (2) **Track-Out/Carry-Out:** Visible roadway dust as a result of active operations, spillage from transport trucks, erosion, or track-out/carry-out shall:
  - (i) be minimized by the use of any of the following or equally effective trackout/carry-out and erosion control measures that apply to the Project or operation:



Regional Location

Figure 1



Aerial Vicinity  
Figure 2



- (a) track-out grates or gravel beds at each egress point,
  - (b) wheel-washing at each egress during muddy conditions, soil binders, chemical soil stabilizers, geotextiles, mulching, or seeding; and for outbound transport trucks;
  - (c) using secured tarps or cargo covering, watering, or treating of transported material; and
- (ii) be removed at the conclusion of each work day when active operations cease, or every 24 hours for continuous operations. If a street sweeper is used to remove any track-out/carry-out, only PM<sub>10</sub>-efficient (particulate matter less than 10 microns) street sweepers certified to meet the most current South Coast Air Quality Management District (SCAQMD) Rule 1186 requirements shall be used. The use of blowers for removal of track-out/carry-out is prohibited under any circumstances.

The control measures listed below are the BMPs that the Project would incorporate for dust control:

- A minimum of two applications of water during grading between dozer/scraper passes;
- Paving, chip sealing, or chemical stabilization of internal roadways after completion of grading;
- Termination of grading if winds exceed 25 miles per hour (mph);
- Verification that all exposed surfaces maintain a minimum soil moisture of 12 percent;
- Stabilization of dirt storage piles by chemical binders, tarps, fencing, or other erosion control; and
- Vehicle speeds would be limited on unpaved roads to 15 mph.

The existing La Jolla View Reservoir may contain lead-based paint and asbestos that would be removed prior to demolition of the reservoir. Per the City's hazardous materials abatement specification, the contractor will be directed to use a strategy of abatement which entails removing lead-based paint using chemicals, heat guns, and certain contained abrasive methods but not open flame burning, open abrasive blasting, sandblasting, water blasting, extensive dry scraping, or methylene chloride removers. Lead and asbestos containing materials will be adequately wetted with water or a removal encapsulant before and during the removal process to reduce dust emission.

## 2.0 REGULATORY SETTING

### 2.1 CRITERIA POLLUTANTS

Criteria pollutants are defined by state and federal law as a risk to the health and welfare of the general public. In general, air pollutants include the following compounds:

- Ozone ( $O_3$ )
- Reactive Organic Gases (ROGs) or Volatile Organic Compounds (VOCs)
- Carbon Monoxide (CO)
- Nitrogen Dioxide ( $NO_2$ )
- Respirable Particulate Matter and Fine Particulate Matter ( $PM_{10}$  and  $PM_{2.5}$ )
- Sulfur Dioxide ( $SO_2$ )
- Lead (Pb)

The following specific descriptions of health effects for each of the air pollutants potentially associated with Project construction and operation are based on information provided by the U.S. Environmental Protection Agency (USEPA; 2007) and the California Air Resources Board (CARB; 2009).

**Ozone.** Ozone is considered a photochemical oxidant, which is a chemical that is formed when VOCs and nitrogen oxides ( $NO_x$ ), both by-products of fuel combustion, react in the presence of ultraviolet light. Ozone is considered a respiratory irritant and prolonged exposure can reduce lung function, aggravate asthma, and increase susceptibility to respiratory infections. Children and those with existing respiratory diseases are at greatest risk from exposure to ozone.

**Reactive Organic Gases.** ROGs (also known as VOCs) are compounds composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of ROGs. Other sources of ROGs include evaporative emissions from paints and solvents, the application of asphalt paving, and the use of household consumer products such as aerosols. Adverse effects on human health are not caused directly by ROGs, but rather by reactions of ROGs to form secondary pollutants such as ozone.

**Carbon Monoxide.** CO is a product of fuel combustion. CO is an odorless, colorless gas. CO affects red blood cells in the body by binding to hemoglobin and reducing the amount of oxygen that can be carried to the body's organs and tissues. CO can cause health effects to those with cardiovascular disease and can also affect mental alertness and vision.

**Nitrogen Dioxide.**  $NO_2$  is also a by-product of fuel combustion and is formed both directly as a product of combustion and in the atmosphere through the reaction of nitrogen oxide (NO) with oxygen.  $NO_2$  is a respiratory irritant and may affect those with existing respiratory illness, including asthma.  $NO_2$  can also increase the risk of respiratory illness.

**Respirable Particulate Matter and Fine Particulate Matter.** Respirable particulate matter, or  $PM_{10}$ , refers to particulate matter with an aerodynamic diameter of 10 microns or less. Fine particulate matter, or  $PM_{2.5}$ , refers to particulate matter with an aerodynamic diameter of 2.5 microns or less. Particulate matter in these size ranges have been determined to have the potential to lodge in the lungs and contribute to respiratory problems.  $PM_{10}$  and  $PM_{2.5}$  arise from a variety of sources, including road dust, diesel exhaust, fuel combustion, tire and brake wear, construction operations, and windblown dust.  $PM_{10}$  and  $PM_{2.5}$  can increase susceptibility to respiratory infections and can aggravate existing respiratory diseases such as asthma and chronic bronchitis.  $PM_{2.5}$  is considered to have the potential to lodge deeper in the lungs. Diesel particulate matter (DPM) is classified a carcinogen by CARB.

**Sulfur dioxide.** SO<sub>2</sub> is a colorless, reactive gas that is produced from the burning of sulfur-containing fuels such as coal and oil and by other industrial processes. Generally, the highest concentrations of SO<sub>2</sub> are found near large industrial sources. SO<sub>2</sub> is a respiratory irritant that can cause narrowing of the airways leading to wheezing and shortness of breath. Long-term exposure to SO<sub>2</sub> can cause respiratory illness and aggravate existing cardiovascular disease.

**Lead.** Lead in the atmosphere occurs as particulate matter. With the phase-out of leaded gasoline, large manufacturing facilities are the sources of the largest amounts of lead emissions. Lead has the potential to cause gastrointestinal, central nervous system, kidney and blood diseases upon prolonged exposure. Lead is also classified as a probable human carcinogen.

Air quality is defined by ambient air concentrations of specific pollutants identified by the USEPA to be of concern with respect to health and welfare of the general public. The USEPA is responsible for enforcing the Federal Clean Air Act (CAA) of 1970 and its 1977 and 1990 Amendments. The CAA required the USEPA to establish National Ambient Air Quality Standards (NAAQS), which identify concentrations of pollutants in the ambient air below which no adverse effects on the public health and welfare are anticipated. In response, the USEPA established both primary and secondary standards for several criteria pollutants, which are introduced above. Table 1, *Ambient Air Quality Standards*, shows the federal and state ambient air quality standards for these pollutants.

The CAA allows states to adopt ambient air quality standards and other regulations provided they are at least as stringent as federal standards. CARB has established the more stringent California Ambient Air Quality Standards (CAAQS) for the six criteria pollutants through the California Clean Air Act of 1988 (CCAA), and also has established CAAQS for additional pollutants, including sulfates, hydrogen sulfide (H<sub>2</sub>S), vinyl chloride, and visibility-reducing particles.

**Table 1**  
**AMBIENT AIR QUALITY STANDARDS**

<b>Pollutant</b>	<b>Averaging Time</b>	<b>California Standards</b>	<b>Federal Standards</b>		
			<b>Primary<sup>1</sup></b>	<b>Secondary<sup>2</sup></b>	
O <sub>3</sub>	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	—	—	
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )	0.070 ppm (137 µg/m <sup>3</sup> )	Same as Primary	
PM <sub>10</sub>	24 Hour	50 µg/m <sup>3</sup>	150 µg/m <sup>3</sup>	Same as Primary	
	AAM	20 µg/m <sup>3</sup>	—	Same as Primary	
PM <sub>2.5</sub>	24 Hour	—	35 µg/m <sup>3</sup>	Same as Primary	
	AAM	12 µg/m <sup>3</sup>	12.0 µg/m <sup>3</sup>	15.0 µg/m <sup>3</sup>	
CO	1 Hour	20 ppm (23 mg/m <sup>3</sup> )	35 ppm (40 mg/m <sup>3</sup> )	—	
	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	9 ppm (10 mg/m <sup>3</sup> )	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m <sup>3</sup> )	—	—	
NO <sub>2</sub>	1 Hour	0.18 ppm (339 µg/m <sup>3</sup> )	0.100 ppm (188 µg/m <sup>3</sup> )	—	
	AAM	0.030 ppm (57 µg/m <sup>3</sup> )	0.053 ppm (100 µg/m <sup>3</sup> )	Same as Primary	
SO <sub>2</sub>	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )	0.075 ppm (196 µg/m <sup>3</sup> )	—	
	3 Hour	—	—	0.5 ppm (1,300 µg/m <sup>3</sup> )	
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )	—	—	
Lead	30-day Avg.	1.5 µg/m <sup>3</sup>	—	—	
	Calendar Quarter	—	1.5 µg/m <sup>3</sup>	Same as Primary	
	Rolling 3-month Avg.	—	0.15 µg/m <sup>3</sup>		
Visibility Reducing Particles	8 Hour	Extinction coefficient of 0.23 per km – visibility ≥ 10 miles (0.07 per km – ≥30 miles for Lake Tahoe)	No Federal Standards		
Sulfates	24 Hour	25 µg/m <sup>3</sup>	No Federal Standards		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	No Federal Standards		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	No Federal Standards		

Source: CARB 2016

<sup>1</sup> National Primary Standards: The levels of air quality necessary, within an adequate margin of safety, to protect the public health.

<sup>2</sup> National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

Note: More detailed information of the data presented in this table can be found at the CARB website ([www.arb.ca.gov](http://www.arb.ca.gov)).

O<sub>3</sub>: ozone; ppm: parts per million; µg/m<sup>3</sup>: micrograms per cubic meter; PM<sub>10</sub>: large particulate matter;

AAM: Annual Arithmetic Mean; PM<sub>2.5</sub>: fine particulate matter; CO: carbon monoxide;

mg/m<sup>3</sup>: milligrams per cubic meter; NO<sub>2</sub>: nitrogen dioxide; SO<sub>2</sub>: sulfur dioxide; km: kilometer; -: No Standard

Areas that do not meet the NAAQS or the CAAQS for a particular pollutant are considered to be “nonattainment areas” for that pollutant. On April 30, 2012, the San Diego Air Basin (SDAB) was classified as a marginal nonattainment area for the 8-hour NAAQS for ozone. The SDAB is an attainment area under the NAAQS for all other criteria pollutants. The SDAB currently falls under a national “maintenance plan” for CO, following a 1998 re-designation as a CO attainment area (SDAPCD 2010). The SDAB is currently classified as a nonattainment area under the CAAQS for ozone (serious nonattainment), PM<sub>10</sub>, and PM<sub>2.5</sub>. The current federal and state attainment status for the County is presented in Table 2, *San Diego Air Basin Attainment Status*.

**Table 2**  
**SAN DIEGO AIR BASIN ATTAINMENT STATUS**

Criteria Pollutant	Federal Designation	State Designation
O <sub>3</sub> (1-hour)	(No federal standard)	Nonattainment
O <sub>3</sub> (8-hour)	Marginal Nonattainment	Nonattainment
CO	Attainment	Attainment
PM <sub>10</sub>	Unclassified	Nonattainment
PM <sub>2.5</sub>	Attainment	Nonattainment
NO <sub>2</sub>	Attainment	Attainment
SO <sub>2</sub>	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	(No federal standard)	Attainment
Hydrogen Sulfide	(No federal standard)	Unclassified
Visibility	(No federal standard)	Unclassified

Source: CARB 2017

The SDAPCD is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County (County). 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 County's RAQS were initially adopted in 1991 and are updated on a triennial basis. The most recent revision of the RAQS was adopted by the SDAPCD in December 2016 (SDAPCD 2016). The local RAQS, in combination with those from all other California nonattainment areas with serious (or worse) air quality problems, is submitted to CARB, which develops the California State Implementation Plan (SIP). The SIP relies on the same information from SANDAG to develop emission inventories and emission reduction strategies that are included in the attainment demonstration for the air basin.

## 2.2 TOXIC AIR CONTAMINANTS

Toxic air contaminants (TACs) are a category of air pollutants that have been shown to have an impact on human health but are not classified as criteria pollutants. Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. Air toxics are generated by a number of sources, including stationary ones such as dry cleaners, gas stations, combustion sources, and laboratories; mobile ones such as automobiles; and area sources such as farms, landfills, construction sites, and residential areas. Adverse health effects of TACs can be carcinogenic (cancer-causing), short-term (acute) noncarcinogenic, and long-term (chronic) noncarcinogenic. Public exposure to TACs is a significant environmental health issue in California.

## 3.0 EXISTING CONDITIONS

### 3.1 CLIMATE AND METEOROLOGY

The climate in southern California, including the SDAB, is controlled largely by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. Areas within 30 miles of the coast experience moderate temperatures and comfortable humidity.

The predominant wind direction in the vicinity of Project site is from the west to northwest and the average wind speed is approximately four miles per hour (Iowa Environmental Mesonet [IEM] 2017). The annual average maximum temperature in the Project area is approximately 67°F, and the annual average minimum temperature is approximately 56°F. Total precipitation in the Project area averages approximately 10 inches annually. Precipitation occurs mostly during the winter and relatively infrequently during the summer (Western Regional Climate Center [WRCC] 2016).

Due to its climate, the SDAB experiences frequent temperature inversions (temperature increases as altitude increases, which is the opposite of general patterns). Temperature inversions prevent air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems 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 NO<sub>2</sub> react under strong sunlight, 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 CO and NO<sub>2</sub> emissions. High NO<sub>2</sub> levels usually occur during autumn or winter, on days with summer-like conditions.

### 3.2 EXISTING AIR QUALITY

#### 3.2.1 Criteria Pollutants

##### 3.2.1.1 Attainment Designations

Attainment designations are discussed in Section 2.1 and Table 2. The SDAB is classified as a marginal nonattainment area for the 8-hour NAAQS for ozone. The SDAB is currently classified as a nonattainment area under the CAAQS for ozone (serious nonattainment), PM<sub>10</sub>, and PM<sub>2.5</sub>. The SDAB is an attainment area for all other criteria pollutants.

##### 3.2.1.2 Monitored Air Quality

The SDAPCD operates a network of ambient air monitoring stations throughout the County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the CAAQS and the NAAQS. The nearest ambient monitoring station to the Project site is the Del Mar-Mira Costa College monitoring station located near 832 Highway 101 in Del Mar, approximately 7.7 miles north of the Project site. Air quality data for this monitoring station are shown in Table 3, *Air Quality Monitoring Data*. The Del Mar-Mira Costa College station did not record concentrations for NO<sub>2</sub>, PM<sub>2.5</sub> and PM<sub>10</sub>; the next closest station, San Diego-Kearny Villa Road, located approximately 7.8 miles east of the Project site, was used for these

values in Table 3. No stations in San Diego County have monitored CO since 2013; values at a downtown San Diego station (San Diego-1110 Beardsley Street) were within acceptable levels during 2013.

The San Diego-Kearny Villa Road had acceptable levels of NO<sub>2</sub>, PM2.5 and PM10. At the Del Mar-Mira Costa College station, the state 8-hour ozone standard was violated four times in 2014, twice in 2015, and once in 2016, and the federal 8-hour ozone standard was violated twice in 2014 and once in 2015. The 1-hour ozone standard was violated once in 2014 and 2015.

**Table 3**  
**AIR QUALITY MONITORING DATA**

Pollutant	2014	2015	2016
<b>Ozone (O<sub>3</sub>)</b>			
Maximum 1-hour concentration (ppm)	0.100	0.098	0.79
Days above 1-hour state standard (>0.09 ppm)	1	1	0
Maximum 8-hour concentration (ppm)	0.087	0.078	0.071
Days above 8-hour state standard (>0.070 ppm)	4	2	1
Days above 8-hour federal standard (>0.075 ppm)	2	1	0
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>			
Maximum 24-hour concentration ( $\mu\text{g}/\text{m}^3$ )	39.0	39.0	36.0
Days above state standard (>50 $\mu\text{g}/\text{m}^3$ )	0	0	0
Days above federal standard (>150 $\mu\text{g}/\text{m}^3$ )	0	0	0
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>			
Maximum 24-hour concentration ( $\mu\text{g}/\text{m}^3$ )	20.2	25.7	19.4
Days above federal standard (>35 $\mu\text{g}/\text{m}^3$ )	0	0	0
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>			
Maximum 1-hour concentration (ppm)	0.051	0.051	0.053
Days above state 1-hour standard (0.18 ppm)	0	0	0

Source: CARB 2018

ppm = parts per million,  $\mu\text{g}/\text{m}^3$  = micrograms per cubic meter

## 4.0 METHODOLOGY AND SIGNIFICANCE CRITERIA

### 4.1 METHODOLOGY

Criteria pollutant emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2016.3.2 (SCAQMD 2017). CalEEMod is a computer model used to estimate criteria air pollutant resulting from construction and operation of land development projects throughout the state of California. CalEEMod was developed by the SCAQMD with the input of several air quality management and pollution control districts. The model calculates emissions of CO, PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, and the ozone precursors VOC and NO<sub>x</sub>. The input data and subsequent construction and operation emission estimates for the proposed Project are discussed below. CalEEMod output files are included in Appendix A.

#### 4.1.1 Construction Emissions

CalEEMod contains OFFROAD2011 emission factors and EMFAC2014 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, which would occur over nine phases (see Table 4, *Major Construction Phases and Equipment*, for list of phases). Construction equipment estimates was determined by input from the Project engineers (City of San Diego Public Works Department and Infrastructure Engineering Corporation 2018). Table 4 presents a summary of the equipment assumed to be involved in each stage of construction.

**Table 4**  
**MAJOR CONSTRUCTION PHASES AND EQUIPMENT**

Phase	Construction Activity	Equipment	Number
1	Demolition of La Jolla View Reservoir; Demolition of Exchange Place Reservoir; Pipeline Construction (30-inch only) STA 17+67 to STA 21+50 (west portion in park)	Backhoe	3
		Concrete Saw	2
		Breaker	1
2	Mass Grading; Backfill of Exchange Place Reservoir	Loader	2
		Dozer	1
		Excavator	1
		Grader	1
		Scraper	1
		Roller	1
		Soil drill	1
		Backhoe	1
3	Pipeline Construction - Inlet/Outlet in Park STA 16+94 to STA 17+67 & STA 21+50 to reservoir (across Country Club Drive and east portion of Park); Pipeline Construction - Reservoir Drain/Overflow and Discharge Structures (in park)	Roller	1
		Dozer	1
		Concrete Saw	1
		Wrapping machine	1
4	Reservoir Construction <sup>1</sup>	Generator Set	1
		Crane	1
		Cement truck	1
		Cement pump	1
		Concrete Vibrator	1
		Trowel	1
		Man-lift	1
		Forklift	1

**Table 4 (cont.)**  
**MAJOR CONSTRUCTION PHASES AND EQUIPMENT**

Phase	Construction Activity	Equipment	Number
5	Reservoir Backfill	Dozer	1
		Backhoe	1
		Grader	1
		Scraper	1
		Roller	1
6	Pipeline Construction – 8-inch Supply Line & Electrical Service	Backhoe	1
7	Reservoir Final Grading and Site Improvements	Backhoe	1
		Loader	1
		Dozer	2
		Roller	1
		Paver	1
8	Pipeline Construction - 8" Distribution - Country Club Drive; Relocate Security Pole / Test Electrical Systems; Install Temporary Irrigation & Vegetation inside Park; Pipeline Construction – 30-inch Distribution - Country Club Drive STA 1+00 to STA 16+94	Backhoe	1
		Concrete Saw	1
9	Curb Ramp Improvements & Paving/Temp Irrigation/Planting at Exchange Place Reservoir; Demobilization	Paver	1
		Roller	1

Source: City of San Diego Public Works Department and Infrastructure Engineering Corporation 2018

<sup>1</sup> Construction during this phase may occur for up to 16 hours per day.

The construction schedule was determined by input from the Project engineers (City of San Diego Public Works Department and Infrastructure Engineering Corporation 2018). The beginning and ending construction activities include mobilization and setup, lead and asbestos abatement, and demobilization, which do not use heavy construction equipment that generates substantial pollutants; therefore, they are not included within the major phases and not analyzed further for air quality impacts. As shown in Table 5, *Anticipated Construction Schedule for Major Construction Activities*, major Project development activity was assumed to start in March 2021 and is projected to end May 2023.

**Table 5**  
**ANTICIPATED CONSTRUCTION SCHEDULE FOR MAJOR CONSTRUCTION ACTIVITIES**

Phase	Construction Activity	Construction Period		
		Start	End	Number of Working Days
1	Demolition of La Jolla View Reservoir & Exchange Place Reservoir; Pipeline Construction (30-inch only) STA 17+67 to STA 21+50 (west portion in park)	3/1/21	4/2/21	25
2	Mass Grading; Backfill of Exchange Place Reservoir	3/12/21	8/20/21	116
3	Pipeline Construction - Inlet/Outlet in Park STA 16+94 to STA 17+67 & STA 21+50 to reservoir (across Country Club Drive and east portion of Park); Pipeline Construction - Reservoir Drain/Overflow and Discharge Structures (in park)	8/23/21	9/17/21	20
4	Reservoir Construction (including yard piping)	9/20/21	5/27/22	180
5	Reservoir Backfill	5/30/22	9/2/22	70

**Table 5 (cont.)**  
**ANTICIPATED CONSTRUCTION SCHEDULE FOR MAJOR CONSTRUCTION ACTIVITIES**

<b>Phase</b>	<b>Construction Activity</b>	<b>Construction Period</b>		
		<b>Start</b>	<b>End</b>	<b>Number of Working Days</b>
6	Pipeline Construction – 8-inch Supply Line & Electrical Service	9/5/22	9/23/22	15
7	Reservoir Final Grading and Site Improvements	9/26/22	12/16/22	60
8	Pipeline Construction – 8-inch Distribution - Country Club Drive; Relocate Security Pole / Test Electrical Systems; Install Temporary Irrigation & Vegetation inside Park; Pipeline Construction – 30-inch Distribution - Country Club Drive STA 1+00 to STA 16+94	12/19/22	4/20/23	89
9	Curb Ramp Improvements & Paving/Temp Irrigation/Planting at Exchange Place Reservoir; Demobilization	4/21/23	5/11/23	15

Source: City of San Diego Public Works Department and Infrastructure Engineering Corporation 2018

During demolition (Phase 1), 100 hauling trips were estimated to dispose of the demolished material (City of San Diego Public Works Department and Infrastructure Engineering Corporation 2018). During mass grading (Phase 2), 16,500 cy would be disposed of offsite and 5,000 cy would be moved to backfill the Exchange Place Reservoir, resulting in 2,150 hauling round trips from the Project site. Although the trips to the Exchange Place would be shorter in length than the disposal trips, they were conservatively assumed to be the default trip length in CalEEMod of 20 miles. For final grading (Phase 7), 550 hauling trips were estimated to dispose of 5,500 cy of soil.

During the concrete pouring for the reservoir construction (Phase 4), extended construction hours would be required for approximately 20 working days, with the potential for construction activities to extend up to 16 hours per day. Modeling for this phase in CalEEMod conservatively assumed that every day of this phase would occur for 16 hours.

The quantity, duration, and the intensity of construction activities have an effect on 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 relatively 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 buildup schedule (i.e., fewer daily emissions occurring over a longer time interval). A complete listing of the assumptions used in the analysis and model output is provided in Appendix A of this report.

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 listed in Section 1.3, 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 15 mph.

#### **4.1.2 Operation Emissions**

Operational emissions would consist of weekly vehicle trips for maintenance activities. One round trip vehicle trip per week would result in negligible criteria pollutant emissions. In addition, the valve vault would be powered electrically and would not have a diesel or other fuel component; therefore, no local emissions would result from its operation. The Project would not involve other operational components that would result in criteria air pollutant emissions.

### **4.2 SIGNIFICANCE CRITERIA**

#### **4.2.1 Air Quality**

The City (2016) has approved guidelines for determining significance based on Appendix G of the State California Environmental Quality Act (CEQA) Guidelines, which provide guidance that a project would have a significant air quality environmental impact if it would:

1. Conflict with or obstruct implementation of the San Diego RAQS or applicable portions of the SIP;
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
4. Expose sensitive receptors (i.e., day care centers, schools, retirement homes, and hospitals or medical patients in residential homes which could be impacted by air pollutants) to substantial pollutant concentrations;
5. Create objectionable odors affecting a substantial number of people; or
6. Release substantial quantities of air contaminants beyond the boundaries of the premises upon which the stationary source emitting the contaminants is located.

To determine whether a project would (a) result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation, or (b) result in a cumulatively considerable net increase of PM<sub>10</sub> or exceed quantitative thresholds for ozone precursors (i.e., NO<sub>x</sub> and VOCs), project emissions may be evaluated based on the quantitative emission thresholds established by the SDAPCD. 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 (AQIAs). In the absence of a SDAPCD adopted threshold for PM<sub>2.5</sub>, the SCAQMD's screening threshold of 55 pounds per day or 10 tons per year is used.

For CEQA purposes, these screening criteria can be used as numeric methods to demonstrate that a project's total emissions would not result in a significant impact to air quality. The screening thresholds are included in Table 6, *Screening-level Thresholds for Air Quality Impact Analyses*.

**Table 6**  
**SCREENING-LEVEL THRESHOLDS FOR AIR QUALITY IMPACT ANALYSES**

Pollutant	Total Emissions		
Construction Emissions (Pounds per Day)			
Respirable Particulate Matter (PM <sub>10</sub> )	100		
Fine Particulate Matter (PM <sub>2.5</sub> )	55		
Oxides of Nitrogen (NO <sub>x</sub> )	250		
Oxides of Sulfur (SO <sub>x</sub> )	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOCs)	75		
Operational Emissions			
	Pounds per Hour	Pounds per Day	Tons per Year
Respirable Particulate Matter (PM <sub>10</sub> )	---	100	15
Fine Particulate Matter (PM <sub>2.5</sub> )	---	55	10
Oxides of Nitrogen (NO <sub>x</sub> )	25	250	40
Oxides of Sulfur (SO <sub>x</sub> )	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOC)	---	75	13.7
Toxic Air Contaminant Emissions			
Excess Cancer Risk	1 in 1 million 10 in 1 million with T-BACT		
Non-Cancer Hazard	1.0		

Source: SDAPCD Rule 20.2 and Rule 1210.

T-BACT = Toxics-Best Available Control Technology

The State of California Health and Safety Code Sections 41700 and 41705, and SDAPCD Rule 51, commonly referred to as public nuisance law, prohibit 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. 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 will be considered to be a significant, adverse odor impact.

## 5.0 IMPACT ANALYSIS

This section evaluates potential impacts of the proposed Project related to consistency with air quality plans, conformance to federal and state air quality standards, a cumulatively considerable net increase of nonattainment criteria pollutants, sensitive receptors, and odors.

### 5.1 CONSISTENCY WITH AIR QUALITY PLANS

The SDAPCD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SDAB is in nonattainment. Strategies to achieve these emissions reductions are developed in the RAQS and SIP, prepared by the SDAPCD for the region. Both the RAQS and SIP are based on SANDAG population projections, as well as land use designations and population projections included in general plans for those communities located within the County. Population growth is typically associated with the construction of residential units or large employment centers.

A project would be inconsistent with the RAQS/SIP if it results in population and/or employment growth that exceed growth estimates for the area. The purpose of the Project is to replace two reservoirs at the end of their life cycle, provide an updated facility to meet current City standards, increase the reservoir storage capacity in the area, and to increase the elevation at which the reservoir in the area resides for increased functionality. Achieving these goals would maintain the water system in accordance with expected population growth and would not result in population growth beyond estimates for the area. In addition, construction and maintenance jobs for construction and operation of the project would likely recruit from the local pool of labor and would not create conditions for employment growth that exceeds growth estimates for the area.

Because the Project would not generate population and employment growth beyond the levels assumed for the region, the Project would not conflict with population projections for the region and would, therefore, be consistent with the RAQS/SIP. In addition, the Project would comply with all existing and new rules and regulations as they are implemented by the SDAPCD, CARB, and/or USEPA related to emissions generated during construction. Therefore, the Project would not conflict with the applicable air quality attainment plan, and no impacts to regional air quality would occur.

## **5.2 CONFORMANCE TO FEDERAL AND STATE AIR QUALITY STANDARDS**

The Project would generate criteria pollutants in the short term during construction. To determine whether a project would result in emissions that would violate an air quality standard or contribute substantially to an existing or projected air quality violation, a project's emissions are evaluated based on the quantitative emission thresholds established by the SDAPCD (as shown in Table 6).

### **5.2.1 Project Emissions**

#### **5.2.1.1 Construction Emissions**

The Project's construction emissions were estimated using CalEEMod as described in Section 4.1.1. Project-specific input was based on general information provided in Section 1.0 and default model settings to estimate reasonably conservative conditions. Additional details of phasing, selection of construction equipment, and other input parameters, including CalEEMod data, are included in Appendix A.

The results of the calculations for Project construction are shown in Table 7, *Maximum Daily Construction Emissions*. The data are presented as the maximum anticipated daily emissions for comparison with the SDAPCD thresholds.

**Table 7**  
**MAXIMUM DAILY CONSTRUCTION EMISSIONS**

<b>Phase</b>	<b>Pollutant Emissions (pounds per day)</b>					
	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
Demolition	2	14	17	<0.5	1	1
Mass Grading	4	43	24	<0.5	6	3
Pipeline Construction (Inlet/Outlet)	2	18	12	<0.5	1	1
Reservoir Construction	5	41	48	<0.5	2	2
Reservoir Backfill	2	26	16	<0.5	5	3
Pipeline Construction (Supply Line)	<0.5	1	2	<0.5	<0.5	<0.5
Final Grading	2	27	17	<0.5	8	4
Pipeline Construction (Distribution)	1	4	6	<0.5	<0.5	<0.5
Paving	<0.5	4	5	<0.5	<0.5	<0.5
<b>Maximum Daily Emissions</b>	<b>6</b>	<b>57</b>	<b>48</b>	<b>&lt;0.5</b>	<b>8</b>	<b>4</b>
<i>SDAPCD Thresholds</i>	75	250	550	250	100	55
<b>Significant Impact?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: CalEEMod (output data is provided in Appendix A)

Note: The highest values for ROG and NO<sub>x</sub> occur during the overlap of the demolition and mass grading phases.

As shown in Table 7, emissions of all criteria pollutants related to Project construction would be below the SDAPCD's significance thresholds. Therefore, direct impacts from criteria pollutants generated during construction would be less than significant.

### 5.2.1.2 Operational Emissions

During operation, one maintenance trip per week would result in negligible criteria pollutant emissions. In addition, the valve vault would be powered electrically and would not have a diesel or other fuel component; therefore, no local emissions would result from its operation. The Project would not involve other operational components that would result in criteria air pollutant emissions. Therefore, operation emissions would be negligible and less than significant.

## 5.3 CUMULATIVELY CONSIDERABLE NET INCREASE OF NONATTAINMENT CRITERIA POLLUTANTS

The region is a federal and/or state nonattainment area for PM<sub>10</sub>, PM<sub>2.5</sub>, and ozone. The Project would contribute particulates and the ozone precursors VOC and NO<sub>x</sub> to the area during Project construction. As described in Section 5.2, emissions during construction would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Therefore, construction emissions would not be cumulatively considerable, and the impact would be less than significant.

During operation, one maintenance trip per week would result in negligible criteria pollutant emissions. In addition, the valve vault would be powered electrically and would not have a diesel or other fuel component; therefore, no local emissions would result from its operation. The Project would not involve other operational components that would result in criteria air pollutant emissions. Therefore, operation emissions would not be cumulatively considerable, and the impact would be less than significant.

## 5.4 IMPACTS TO SENSITIVE RECEPTORS

Impacts to sensitive receptors are typically analyzed for CO hotspots and exposure to TACs. An analysis of the Project's potential to expose sensitive receptors to these pollutants is provided below.

### 5.4.1 Carbon Monoxide Hot Spots

A CO hot spot is an area of localized CO pollution caused by severe vehicle congestion on major roadways, typically near intersections. Temporary delays may occur in the immediate vicinity of lane closures due to construction; however, these delays would be limited to the construction period and would cease upon Project construction. Based on these factors, the potential for a CO hot spot or exposure of sensitive receptors to substantial, Project-generated, local CO emissions is low and the impact would be less than significant.

### 5.4.2 Exposure to TACs

#### 5.4.2.1 Construction

Construction activities would result in short-term, Project-generated emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment. CARB identified diesel PM as a TAC in 1998. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Thus, the risks estimated for a maximally exposed individual (MEI) are higher if a fixed exposure occurs over a longer time period. According to the Office of Environmental Health Hazard Assessment, Health Risk Assessments (HRAs), which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the Project.

There would be relatively few pieces of off-road, heavy-duty diesel equipment used during construction, and the construction period would be relatively short, especially when compared to 70 years. Combined with the highly dispersive properties of diesel PM and additional reductions in exhaust emissions from improved equipment, construction-related emissions would not expose sensitive receptors to substantial emissions of diesel PM.

The existing La Jolla View Reservoir may contain lead-based paint and asbestos that would be removed prior to demolition of the reservoir. Per the City's hazardous materials abatement specification, the contractor will be directed to use a strategy of abatement which entails removing lead-based paint using chemicals, heat guns, and certain contained abrasive methods but not open flame burning, open abrasive blasting, sandblasting, water blasting, extensive dry scraping, or methylene chloride removers. Lead and asbestos containing materials will be adequately wetted with water or a removal encapsulant before and during the removal process, to reduce dust emission. With implementation of these construction BMPs, emissions of hazardous materials would be avoided, and no impacts would occur.

In summary, impacts from construction emissions of TACs would be less than significant.

#### **5.4.2.2 Operation**

As the proposed Project would involve the development of a storage reservoir and ancillary components, Project operation would not introduce new stationary sources of TACs. Therefore, no impacts from operational emissions of TACs would occur.

### **5.5 ODORS**

As discussed above, the State of California Health and Safety Code Sections 41700 and 41705, and SDAPCD Rule 51, prohibit 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. An unreasonable odor discernible at the property line of the Project site will be considered a significant odor impact.

The Project could produce odors during proposed construction activities resulting from construction equipment exhaust or the application of asphalt; however, standard construction practices would minimize the odor emissions and their associated impacts. Furthermore, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon the completion of the respective phase of construction. Accordingly, the proposed Project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

No odor-producing sources would be present during operation, and no impacts would occur.

### **5.6 CLEAN WATER STATE REVOLVING FUND – CLEAN AIR ACT ANALYSIS**

Section 1 of Attachment E1 of the Environmental Package for the Clean Water State Revolving Fund Financial Assistance Application requires analysis of consistency of a project with the Clean Air Act. The information provided below provides Project results for Section 1.

#### **Is this Project Subject to a State Implementation Plan (SIP) Conformity Determination?**

Yes – the Project is in a nonattainment area or attainment area subject to maintenance plans for a federal criteria pollutant. Air pollutant emissions associated with the Project during construction and operation would be below federal *de minimis* levels for all pollutants, as shown in Table 8, *Project Criteria Pollutant Emissions – Clean Air Act Consistency*.

**Table 8**  
**PROJECT CRITERIA POLLUTANT EMISSIONS - CLEAN AIR ACT CONSISTENCY**

Pollutant	Federal Status (Attainment, Nonattainment, Maintenance, or Unclassified)	Nonattainment Rates (i.e., moderate, serious, severe, or extreme)	Threshold of Significance for Project Air Basin (if applicable)	Construction Emissions (tons/year)	Operation Emissions (tons/year)
Ozone (O <sub>3</sub> )	Nonattainment	Marginal	See VOC and NO <sub>x</sub> below	See VOC and NO <sub>x</sub> below	See VOC and NO <sub>x</sub> below
Carbon Monoxide (CO)	Maintenance	--	550 pounds per day; 100 tons per year	4	0
Oxides of Nitrogen (NO <sub>x</sub> )	See ozone above	See ozone above	250 pounds per day; 40 tons per year	5	0
Volatile Organic Compounds (VOC)/ Reactive Organic Gases (ROG)	See ozone above	See ozone above	75 pounds per day; 13.7 tons per year	<1	0
Lead (Pb)	Attainment	--	3.2 pounds per day; 0.6 tons per year	-	-
Particulate Matter less than 2.5 microns in diameter (PM <sub>2.5</sub> )	Attainment/ Unclassifiable	--	55 pounds per day; 10 tons per year	<1	0
Particulate Matter less than 10 microns in diameter (PM <sub>10</sub> )	Unclassified	--	100 pounds per day; 15 tons per year	<1	0
Sulfur Dioxide (SO <sub>2</sub> )	Attainment	--	250 pounds per day; 40 tons per year	<1	0

Source: CalEEMod (output data is provided in Appendix A)

## 6.0 GREENHOUSE GASES

Emissions of GHGs are presented in metric tons (MT) of carbon dioxide equivalents (CO<sub>2</sub>e), which is a metric used to compare the emissions from various GHGs based on their global warming potential. The CO<sub>2</sub>e of a gas is determined by multiplying the tons of that gas by its global warming potential.

Project construction would generate GHG emissions associated with construction equipment exhaust and from construction worker vehicle trips to and from the Project site. The primary GHG emissions would be CO<sub>2</sub> from gasoline and diesel combustion, with more limited vehicle tailpipe emissions of nitrous oxide (N<sub>2</sub>O) and methane (CH<sub>4</sub>). Total GHG emissions during Project construction are presented in Table 9, *Project GHG Emissions*. As shown in Table 9, the Project would result in GHG emissions from

construction of 1,373 MT CO<sub>2</sub>e. Amortized over 30 years, the proposed construction activities would contribute approximately 46 MT CO<sub>2</sub>e emissions per year.

**Table 9**  
**PROJECT GHG EMISSIONS**

Source	Emissions (MT CO <sub>2</sub> e)
Project Construction	1,373
<b>Amortized Construction Emissions<sup>1</sup></b>	<b>46</b>

Source: CalEEMod (output data is provided in Appendix A)

<sup>1</sup> Construction emissions are amortized over 30 years in accordance with City guidance.

During operation, one maintenance trip per week would result in negligible GHG emissions. The valve vault would be powered electrically and may require electricity from off-site sources that would generate GHG emissions; however, this level of electricity would be minor and would result in negligible GHG emissions.

## 7.0 REFERENCES

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## Appendix A

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### CalEEMod Output

## La Jolla View Reservoir Project - San Diego County, Winter

**La Jolla View Reservoir Project**  
**San Diego County, Winter**

## 1.0 Project Characteristics

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### 1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	7.35	27,500.00	0

### 1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

### 1.3 User Entered Comments & Non-Default Data

## La Jolla View Reservoir Project - San Diego County, Winter

## Project Characteristics -

Land Use - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Tank itself = 12,470 SF; Entire tank site = 27,500; Entire work area = 7.35 acre

Construction Phase - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation; Excavator assumed for breaker

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City PW & IEC

Pump used as substitute for wrapping machine; generators used as substitute for manlift, concrete vibrator, trowel. 16 hour construction days possible for

foundation pour.

Trips and VMT - Demo: 100 truckloads; MG: 500 loads from LJVR site to EPR site; 1,650 loads from LJVR to offsite disposal site; FG: 550 loads offsite

Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Demolition - 329 tons per project's Waste Management Plan (HELIX 2018; 251 tons for reservoirs demolition; 78 tons for asphalt demolition)

Grading - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

## Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	180.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	20.00	116.00
tblConstructionPhase	NumDays	20.00	70.00
tblConstructionPhase	NumDays	20.00	60.00

## La Jolla View Reservoir Project - San Diego County, Winter

tblConstructionPhase	NumDays	20.00	15.00
tblGrading	AcresOfGrading	174.00	120.00
tblGrading	AcresOfGrading	105.00	90.00
tblGrading	AcresOfGrading	0.00	120.00
tblGrading	MaterialExported	0.00	21,500.00
tblGrading	MaterialExported	0.00	5,500.00
tblLandUse	LandUseSquareFeet	0.00	27,500.00
tblLandUse	LotAcreage	0.00	7.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

## La Jolla View Reservoir Project - San Diego County, Winter

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Mass Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Reservoir Construction
tblOffRoadEquipment	PhaseName		Mass Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Distribution)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Final Grading
tblOffRoadEquipment	PhaseName		Reservoir Construction
tblOffRoadEquipment	PhaseName		Mass Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Reservoir Backfill
tblOffRoadEquipment	PhaseName		Final Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)

## La Jolla View Reservoir Project - San Diego County, Winter

tblOffRoadEquipment	PhaseName		Mass Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Reservoir Backfill
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Supply Line)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Distribution)
tblOffRoadEquipment	UsageHours	8.00	16.00
tblTripsAndVMT	HaulingTripNumber	33.00	100.00
tblTripsAndVMT	HaulingTripNumber	2,688.00	2,150.00
tblTripsAndVMT	HaulingTripNumber	688.00	550.00

## 2.0 Emissions Summary

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## La Jolla View Reservoir Project - San Diego County, Winter

**2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day												lb/day			
2021	5.2096	56.8999	48.4034	0.0982	8.1125	2.3959	10.5084	3.6601	2.3181	5.8927	0.0000	9,708.000 8	9,708.000 8	2.3146	0.0000	9,765.864 7
2022	4.6645	41.2610	48.1758	0.0891	14.4615	2.0501	15.6827	6.9280	2.0323	8.0517	0.0000	8,443.389 2	8,443.389 2	1.1224	0.0000	8,458.229 3
2023	0.5027	4.1304	5.9959	9.7300e-003	0.0411	0.2044	0.2454	0.0109	0.1983	0.2092	0.0000	929.6620	929.6620	0.2303	0.0000	932.8534
Maximum	5.2096	56.8999	48.4034	0.0982	14.4615	2.3959	15.6827	6.9280	2.3181	8.0517	0.0000	9,708.000 8	9,708.000 8	2.3146	0.0000	9,765.864 7

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day												lb/day			
2021	5.2096	56.8999	48.4034	0.0982	4.0253	2.3959	6.4213	1.7484	2.3181	3.9810	0.0000	9,708.000 8	9,708.000 8	2.3146	0.0000	9,765.864 7
2022	4.6645	41.2610	48.1758	0.0891	6.6635	2.0501	7.8847	3.1597	2.0323	4.2835	0.0000	8,443.389 2	8,443.389 2	1.1224	0.0000	8,458.229 3
2023	0.5027	4.1304	5.9959	9.7300e-003	0.0411	0.2044	0.2454	0.0109	0.1983	0.2092	0.0000	929.6620	929.6620	0.2303	0.0000	932.8534
Maximum	5.2096	56.8999	48.4034	0.0982	6.6635	2.3959	7.8847	3.1597	2.3181	4.2835	0.0000	9,708.000 8	9,708.000 8	2.3146	0.0000	9,765.864 7

## La Jolla View Reservoir Project - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.55	0.00	44.96	53.59	0.00	40.13	0.00	0.00	0.00	0.00	0.00	0.00

## La Jolla View Reservoir Project - San Diego County, Winter

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Area	0.7631	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004	
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.7631	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004	

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Area	0.7631	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000		2.3000e-004	
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.7631	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		2.2000e-004	2.2000e-004	0.0000	0.0000	2.3000e-004	

## La Jolla View Reservoir Project - San Diego County, Winter

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2021	4/2/2021	5	25	
2	Mass Grading	Grading	3/12/2021	8/20/2021	5	116	
3	Pipeline Construction (Inlet/Outlet)	Trenching	8/23/2021	9/17/2021	5	20	
4	Reservoir Construction	Building Construction	9/20/2021	5/27/2022	5	180	
5	Reservoir Backfill	Grading	5/30/2022	9/2/2022	5	70	
6	Pipeline Construction (Supply Line)	Trenching	9/5/2022	9/23/2022	5	15	
7	Final Grading	Grading	9/26/2022	12/16/2022	5	60	
8	Pipeline Construction (Distribution)	Trenching	12/19/2022	4/20/2023	5	89	
9	Paving	Paving	4/21/2023	5/11/2023	5	15	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73

## La Jolla View Reservoir Project - San Diego County, Winter

Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	6.00	97	0.37
Mass Grading	Bore/Drill Rigs	1	8.00	221	0.50
Mass Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Mass Grading	Excavators	1	8.00	158	0.38
Mass Grading	Graders	1	8.00	187	0.41
Mass Grading	Rollers	1	8.00	80	0.38
Mass Grading	Rubber Tired Dozers	1	8.00	247	0.40
Mass Grading	Scrapers	1	8.00	367	0.48
Mass Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Construction (Inlet/Outlet)	Cement and Mortar Mixers	0	6.00	9	0.56
Pipeline Construction (Inlet/Outlet)	Concrete/Industrial Saws	1	8.00	81	0.73
Pipeline Construction (Inlet/Outlet)	Excavators	0	8.00	158	0.38
Pipeline Construction (Inlet/Outlet)	Graders	0	8.00	187	0.41
Pipeline Construction (Inlet/Outlet)	Pavers	0	7.00	130	0.42
Pipeline Construction (Inlet/Outlet)	Rollers	1	8.00	80	0.38
Pipeline Construction (Inlet/Outlet)	Rubber Tired Dozers	1	8.00	247	0.40
Pipeline Construction (Inlet/Outlet)	Scrapers	0	8.00	367	0.48
Pipeline Construction (Inlet/Outlet)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Reservoir Construction	Cement and Mortar Mixers	1	16.00	9	0.56
Reservoir Construction	Cranes	1	7.00	231	0.29
Reservoir Construction	Forklifts	1	8.00	89	0.20
Reservoir Construction	Generator Sets	4	16.00	84	0.74
Reservoir Construction	Pumps	2	16.00	84	0.74
Reservoir Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Reservoir Construction	Welders	0	8.00	46	0.45

## La Jolla View Reservoir Project - San Diego County, Winter

Reservoir Backfill	Graders	1	8.00	187	0.41
Reservoir Backfill	Rollers	1	7.00	80	0.38
Reservoir Backfill	Rubber Tired Dozers	1	8.00	247	0.40
Reservoir Backfill	Scrapers	1	8.00	367	0.48
Reservoir Backfill	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipeline Construction (Supply Line)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Final Grading	Pavers	1	8.00	130	0.42
Final Grading	Rollers	1	8.00	80	0.38
Final Grading	Rubber Tired Dozers	2	8.00	247	0.40
Final Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Construction (Distribution)	Concrete/Industrial Saws	1	8.00	81	0.73
Pipeline Construction (Distribution)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

**Trips and VMT**

## La Jolla View Reservoir Project - San Diego County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	100.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Mass Grading	8	20.00	0.00	2,150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction /Inlet/Outlet)	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction /Inlet/Outlet)	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Reservoir Construction	9	12.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Reservoir Backfill	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction (Supply Line)	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction (Supply Line)	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Final Grading	6	15.00	0.00	550.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction (Distribution)	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

## La Jolla View Reservoir Project - San Diego County, Winter

**3.2 Demolition - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					0.2860	0.0000	0.2860	0.0433	0.0000	0.0433			0.0000			0.0000	
Off-Road	1.4202	12.4948	15.7054	0.0247		0.7022	0.7022		0.6737	0.6737		2,362.546 4	2,362.546 4	0.4496		2,373.785 6	
Total	1.4202	12.4948	15.7054	0.0247	0.2860	0.7022	0.9882	0.0433	0.6737	0.7170		2,362.546 4	2,362.546 4	0.4496		2,373.785 6	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0305	1.0342	0.2666	3.0300e-003	0.0699	3.1900e-003	0.0731	0.0192	3.0600e-003	0.0222		332.4277	332.4277	0.0309		333.1993	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0588	0.0378	0.3740	1.1500e-003	0.1232	8.5000e-004	0.1241	0.0327	7.8000e-004	0.0335		114.6821	114.6821	3.2900e-003		114.7645	
Total	0.0894	1.0720	0.6406	4.1800e-003	0.1931	4.0400e-003	0.1972	0.0518	3.8400e-003	0.0557		447.1098	447.1098	0.0342		447.9638	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.2 Demolition - 2021****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					0.1287	0.0000	0.1287	0.0195	0.0000	0.0195			0.0000			0.0000	
Off-Road	1.4202	12.4948	15.7054	0.0247		0.7022	0.7022		0.6737	0.6737	0.0000	2,362.546 4	2,362.546 4	0.4496		2,373.785 6	
Total	1.4202	12.4948	15.7054	0.0247	0.1287	0.7022	0.8309	0.0195	0.6737	0.6932	0.0000	2,362.546 4	2,362.546 4	0.4496		2,373.785 6	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0305	1.0342	0.2666	3.0300e-003	0.0699	3.1900e-003	0.0731	0.0192	3.0600e-003	0.0222		332.4277	332.4277	0.0309		333.1993	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0588	0.0378	0.3740	1.1500e-003	0.1232	8.5000e-004	0.1241	0.0327	7.8000e-004	0.0335		114.6821	114.6821	3.2900e-003		114.7645	
Total	0.0894	1.0720	0.6406	4.1800e-003	0.1931	4.0400e-003	0.1972	0.0518	3.8400e-003	0.0557		447.1098	447.1098	0.0342		447.9638	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.3 Mass Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					7.1452	0.0000	7.1452	3.4326	0.0000	3.4326			0.0000			0.0000	
Off-Road	3.4802	38.4907	24.5563	0.0537		1.6738	1.6738		1.5399	1.5399		5,205.091 2	5,205.091 2	1.6834		5,247.177 0	
Total	3.4802	38.4907	24.5563	0.0537	7.1452	1.6738	8.8190	3.4326	1.5399	4.9725		5,205.091 2	5,205.091 2	1.6834		5,247.177 0	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.1414	4.7920	1.2355	0.0141	0.3239	0.0148	0.3387	0.0888	0.0142	0.1029		1,540.343 8	1,540.343 8	0.1430		1,543.919 0	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193	
Total	0.2198	4.8424	1.7341	0.0156	0.4882	0.0159	0.5041	0.1323	0.0152	0.1475		1,693.253 3	1,693.253 3	0.1474		1,696.938 4	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.3 Mass Grading - 2021****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					3.2153	0.0000	3.2153	1.5447	0.0000	1.5447			0.0000			0.0000	
Off-Road	3.4802	38.4907	24.5563	0.0537		1.6738	1.6738		1.5399	1.5399	0.0000	5,205.091 2	5,205.091 2	1.6834		5,247.177 0	
Total	3.4802	38.4907	24.5563	0.0537	3.2153	1.6738	4.8891	1.5447	1.5399	3.0846	0.0000	5,205.091 2	5,205.091 2	1.6834		5,247.177 0	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.1414	4.7920	1.2355	0.0141	0.3239	0.0148	0.3387	0.0888	0.0142	0.1029		1,540.343 8	1,540.343 8	0.1430		1,543.919 0	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0785	0.0505	0.4987	1.5300e-003	0.1643	1.1300e-003	0.1654	0.0436	1.0500e-003	0.0446		152.9095	152.9095	4.3900e-003		153.0193	
Total	0.2198	4.8424	1.7341	0.0156	0.4882	0.0159	0.5041	0.1323	0.0152	0.1475		1,693.253 3	1,693.253 3	0.1474		1,696.938 4	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.4 Pipeline Construction (Inlet/Outlet) - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	1.8080	17.8292	11.8525	0.0205		0.9350	0.9350		0.8740	0.8740	1,975.005 8	1,975.005 8	1,975.005 8	0.4815		1,987.043 1	
<b>Total</b>	<b>1.8080</b>	<b>17.8292</b>	<b>11.8525</b>	<b>0.0205</b>		<b>0.9350</b>	<b>0.9350</b>		<b>0.8740</b>	<b>0.8740</b>		<b>1,975.005 8</b>	<b>1,975.005 8</b>	<b>0.4815</b>		<b>1,987.043 1</b>	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0785	0.0505	0.4987	1.5300e-003	0.3071	1.1300e-003	0.3082	0.0786	1.0500e-003	0.0797	152.9095	152.9095	4.3900e-003			153.0193	
<b>Total</b>	<b>0.0785</b>	<b>0.0505</b>	<b>0.4987</b>	<b>1.5300e-003</b>	<b>0.3071</b>	<b>1.1300e-003</b>	<b>0.3082</b>	<b>0.0786</b>	<b>1.0500e-003</b>	<b>0.0797</b>		<b>152.9095</b>	<b>152.9095</b>	<b>4.3900e-003</b>		<b>153.0193</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.4 Pipeline Construction (Inlet/Outlet) - 2021****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	1.8080	17.8292	11.8525	0.0205		0.9350	0.9350		0.8740	0.8740	0.0000	1,975.005 8	1,975.005 8	0.4815		1,987.043 1	
<b>Total</b>	<b>1.8080</b>	<b>17.8292</b>	<b>11.8525</b>	<b>0.0205</b>		<b>0.9350</b>	<b>0.9350</b>		<b>0.8740</b>	<b>0.8740</b>	<b>0.0000</b>	<b>1,975.005 8</b>	<b>1,975.005 8</b>	<b>0.4815</b>		<b>1,987.043 1</b>	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0785	0.0505	0.4987	1.5300e-003	0.3071	1.1300e-003	0.3082	0.0786	1.0500e-003	0.0797		152.9095	152.9095	4.3900e-003		153.0193
<b>Total</b>	<b>0.0785</b>	<b>0.0505</b>	<b>0.4987</b>	<b>1.5300e-003</b>	<b>0.3071</b>	<b>1.1300e-003</b>	<b>0.3082</b>	<b>0.0786</b>	<b>1.0500e-003</b>	<b>0.0797</b>		<b>152.9095</b>	<b>152.9095</b>	<b>4.3900e-003</b>		<b>153.0193</b>

## La Jolla View Reservoir Project - San Diego County, Winter

**3.5 Reservoir Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	4.9890	44.3280	47.9598	0.0869		2.3369	2.3369		2.3164	2.3164	8,214.379 1	8,214.379 1	0.6068			8,229.548 4	
<b>Total</b>	<b>4.9890</b>	<b>44.3280</b>	<b>47.9598</b>	<b>0.0869</b>		<b>2.3369</b>	<b>2.3369</b>		<b>2.3164</b>	<b>2.3164</b>	<b>8,214.379 1</b>	<b>8,214.379 1</b>	<b>0.6068</b>			<b>8,229.548 4</b>	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0159	0.5078	0.1445	1.3200e-003	0.0339	1.1100e-003	0.0350	9.7400e-003	1.0600e-003	0.0108	141.9097	141.9097	0.0111			142.1860	
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268	91.7457	91.7457	2.6400e-003			91.8116	
<b>Total</b>	<b>0.0630</b>	<b>0.5381</b>	<b>0.4437</b>	<b>2.2400e-003</b>	<b>0.1324</b>	<b>1.7900e-003</b>	<b>0.1342</b>	<b>0.0359</b>	<b>1.6900e-003</b>	<b>0.0376</b>	<b>233.6554</b>	<b>233.6554</b>	<b>0.0137</b>			<b>233.9976</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.5 Reservoir Construction - 2021****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	4.9890	44.3280	47.9598	0.0869		2.3369	2.3369		2.3164	2.3164	0.0000	8,214.379 1	8,214.379 1	0.6068		8,229.548 4	
<b>Total</b>	<b>4.9890</b>	<b>44.3280</b>	<b>47.9598</b>	<b>0.0869</b>		<b>2.3369</b>	<b>2.3369</b>		<b>2.3164</b>	<b>2.3164</b>	<b>0.0000</b>	<b>8,214.379 1</b>	<b>8,214.379 1</b>	<b>0.6068</b>		<b>8,229.548 4</b>	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0159	0.5078	0.1445	1.3200e-003	0.0339	1.1100e-003	0.0350	9.7400e-003	1.0600e-003	0.0108		141.9097	141.9097	0.0111		142.1860	
Worker	0.0471	0.0303	0.2992	9.2000e-004	0.0986	6.8000e-004	0.0993	0.0262	6.3000e-004	0.0268		91.7457	91.7457	2.6400e-003		91.8116	
<b>Total</b>	<b>0.0630</b>	<b>0.5381</b>	<b>0.4437</b>	<b>2.2400e-003</b>	<b>0.1324</b>	<b>1.7900e-003</b>	<b>0.1342</b>	<b>0.0359</b>	<b>1.6900e-003</b>	<b>0.0376</b>		<b>233.6554</b>	<b>233.6554</b>	<b>0.0137</b>		<b>233.9976</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.5 Reservoir Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	4.6051	40.7538	47.7614	0.0869		2.0485	2.0485		2.0307	2.0307	8,214.454 9	8,214.454 9	0.5805			8,228.967 0	
<b>Total</b>	<b>4.6051</b>	<b>40.7538</b>	<b>47.7614</b>	<b>0.0869</b>		<b>2.0485</b>	<b>2.0485</b>		<b>2.0307</b>	<b>2.0307</b>	<b>8,214.454 9</b>	<b>8,214.454 9</b>	<b>0.5805</b>			<b>8,228.967 0</b>	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0148	0.4795	0.1368	1.3000e-003	0.0339	9.6000e-004	0.0348	9.7400e-003	9.2000e-004	0.0107	140.5513	140.5513	0.0107			140.8189	
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268	88.3831	88.3831	2.4100e-003			88.4434	
<b>Total</b>	<b>0.0594</b>	<b>0.5071</b>	<b>0.4144</b>	<b>2.1900e-003</b>	<b>0.1324</b>	<b>1.6300e-003</b>	<b>0.1341</b>	<b>0.0359</b>	<b>1.5300e-003</b>	<b>0.0374</b>	<b>228.9344</b>	<b>228.9344</b>	<b>0.0131</b>			<b>229.2623</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.5 Reservoir Construction - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	4.6051	40.7538	47.7614	0.0869		2.0485	2.0485		2.0307	2.0307	0.0000	8,214.454 8	8,214.454 8	0.5805		8,228.967 0	
<b>Total</b>	<b>4.6051</b>	<b>40.7538</b>	<b>47.7614</b>	<b>0.0869</b>		<b>2.0485</b>	<b>2.0485</b>		<b>2.0307</b>	<b>2.0307</b>	<b>0.0000</b>	<b>8,214.454 8</b>	<b>8,214.454 8</b>	<b>0.5805</b>		<b>8,228.967 0</b>	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0148	0.4795	0.1368	1.3000e-003	0.0339	9.6000e-004	0.0348	9.7400e-003	9.2000e-004	0.0107	140.5513	140.5513	0.0107			140.8189	
Worker	0.0446	0.0276	0.2776	8.9000e-004	0.0986	6.7000e-004	0.0992	0.0262	6.1000e-004	0.0268	88.3831	88.3831	2.4100e-003			88.4434	
<b>Total</b>	<b>0.0594</b>	<b>0.5071</b>	<b>0.4144</b>	<b>2.1900e-003</b>	<b>0.1324</b>	<b>1.6300e-003</b>	<b>0.1341</b>	<b>0.0359</b>	<b>1.5300e-003</b>	<b>0.0374</b>	<b>228.9344</b>	<b>228.9344</b>	<b>0.0131</b>			<b>229.2623</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.6 Reservoir Backfill - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					7.3856	0.0000	7.3856	3.4575	0.0000	3.4575			0.0000			0.0000	
Off-Road	2.3815	26.1805	15.5453	0.0358		1.1109	1.1109		1.0220	1.0220		3,462.1880	3,462.1880	1.1197		3,490.1815	
Total	2.3815	26.1805	15.5453	0.0358	7.3856	1.1109	8.4964	3.4575	1.0220	4.4794		3,462.1880	3,462.1880	1.1197		3,490.1815	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Worker	0.0483	0.0299	0.3008	9.6000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290			95.7483	95.7483	2.6100e-003	95.8137	
Total	0.0483	0.0299	0.3008	9.6000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290			95.7483	95.7483	2.6100e-003	95.8137	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.6 Reservoir Backfill - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					3.3235	0.0000	3.3235	1.5559	0.0000	1.5559			0.0000			0.0000	
Off-Road	2.3815	26.1805	15.5453	0.0358		1.1109	1.1109		1.0220	1.0220	0.0000	3,462.188 0	3,462.188 0	1.1197		3,490.181 5	
Total	2.3815	26.1805	15.5453	0.0358	3.3235	1.1109	4.4344	1.5559	1.0220	2.5778	0.0000	3,462.188 0	3,462.188 0	1.1197		3,490.181 5	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Worker	0.0483	0.0299	0.3008	9.6000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290			95.7483	95.7483	2.6100e-003	95.8137	
Total	0.0483	0.0299	0.3008	9.6000e-004	0.1068	7.2000e-004	0.1075	0.0283	6.6000e-004	0.0290			95.7483	95.7483	2.6100e-003	95.8137	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.7 Pipeline Construction (Supply Line) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829		301.2390	301.2390	0.0974		303.6746	
<b>Total</b>	<b>0.1647</b>	<b>1.6756</b>	<b>2.2379</b>	<b>3.1100e-003</b>		<b>0.0901</b>	<b>0.0901</b>		<b>0.0829</b>	<b>0.0829</b>		<b>301.2390</b>	<b>301.2390</b>	<b>0.0974</b>		<b>303.6746</b>	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0223	0.0138	0.1388	4.4000e-004	0.0921	3.3000e-004	0.0925	0.0236	3.1000e-004	0.0239		44.1915	44.1915	1.2100e-003		44.2217	
<b>Total</b>	<b>0.0223</b>	<b>0.0138</b>	<b>0.1388</b>	<b>4.4000e-004</b>	<b>0.0921</b>	<b>3.3000e-004</b>	<b>0.0925</b>	<b>0.0236</b>	<b>3.1000e-004</b>	<b>0.0239</b>		<b>44.1915</b>	<b>44.1915</b>	<b>1.2100e-003</b>		<b>44.2217</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.7 Pipeline Construction (Supply Line) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.1647	1.6756	2.2379	3.1100e-003		0.0901	0.0901		0.0829	0.0829	0.0000	301.2390	301.2390	0.0974		303.6746	
<b>Total</b>	<b>0.1647</b>	<b>1.6756</b>	<b>2.2379</b>	<b>3.1100e-003</b>		<b>0.0901</b>	<b>0.0901</b>		<b>0.0829</b>	<b>0.0829</b>	<b>0.0000</b>	<b>301.2390</b>	<b>301.2390</b>	<b>0.0974</b>		<b>303.6746</b>	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0223	0.0138	0.1388	4.4000e-004	0.0921	3.3000e-004	0.0925	0.0236	3.1000e-004	0.0239	44.1915	44.1915	1.2100e-003			44.2217	
<b>Total</b>	<b>0.0223</b>	<b>0.0138</b>	<b>0.1388</b>	<b>4.4000e-004</b>	<b>0.0921</b>	<b>3.3000e-004</b>	<b>0.0925</b>	<b>0.0236</b>	<b>3.1000e-004</b>	<b>0.0239</b>	<b>44.1915</b>	<b>44.1915</b>	<b>1.2100e-003</b>			<b>44.2217</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.8 Final Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					14.1781	0.0000	14.1781	6.8514	0.0000	6.8514			0.0000			0.0000	
Off-Road	2.3768	24.7634	16.3841	0.0306		1.2142	1.2142		1.1170	1.1170		2,965.910 4	2,965.910 4	0.9592		2,989.891 3	
Total	2.3768	24.7634	16.3841	0.0306	14.1781	1.2142	15.3922	6.8514	1.1170	7.9684		2,965.910 4	2,965.910 4	0.9592		2,989.891 3	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0657	2.1663	0.6057	6.8400e-003	0.1602	6.2100e-003	0.1664	0.0439	5.9400e-003	0.0498		751.7426	751.7426	0.0699		753.4909	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0558	0.0345	0.3470	1.1100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335		110.4788	110.4788	3.0200e-003		110.5543	
Total	0.1214	2.2008	0.9527	7.9500e-003	0.2834	7.0400e-003	0.2904	0.0766	6.7100e-003	0.0833		862.2214	862.2214	0.0730		864.0451	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.8 Final Grading - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Fugitive Dust					6.3801	0.0000	6.3801	3.0831	0.0000	3.0831			0.0000			0.0000	
Off-Road	2.3768	24.7634	16.3841	0.0306		1.2142	1.2142		1.1170	1.1170	0.0000	2,965.910 4	2,965.910 4	0.9592		2,989.891 2	
Total	2.3768	24.7634	16.3841	0.0306	6.3801	1.2142	7.5943	3.0831	1.1170	4.2002	0.0000	2,965.910 4	2,965.910 4	0.9592		2,989.891 2	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0657	2.1663	0.6057	6.8400e-003	0.1602	6.2100e-003	0.1664	0.0439	5.9400e-003	0.0498			751.7426	751.7426	0.0699		753.4909
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Worker	0.0558	0.0345	0.3470	1.1100e-003	0.1232	8.3000e-004	0.1241	0.0327	7.7000e-004	0.0335			110.4788	110.4788	3.0200e-003		110.5543
Total	0.1214	2.2008	0.9527	7.9500e-003	0.2834	7.0400e-003	0.2904	0.0766	6.7100e-003	0.0833			862.2214	862.2214	0.0730		864.0451

## La Jolla View Reservoir Project - San Diego County, Winter

**3.9 Pipeline Construction (Distribution) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.5224	4.4768	5.9026	9.3700e-003		0.2403	0.2403		0.2331	0.2331		893.9036	893.9036	0.1298		897.1475	
<b>Total</b>	<b>0.5224</b>	<b>4.4768</b>	<b>5.9026</b>	<b>9.3700e-003</b>		<b>0.2403</b>	<b>0.2403</b>		<b>0.2331</b>	<b>0.2331</b>		<b>893.9036</b>	<b>893.9036</b>	<b>0.1298</b>		<b>897.1475</b>	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0186	0.0115	0.1157	3.7000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112		36.8263	36.8263	1.0100e-003		36.8514	
<b>Total</b>	<b>0.0186</b>	<b>0.0115</b>	<b>0.1157</b>	<b>3.7000e-004</b>	<b>0.0411</b>	<b>2.8000e-004</b>	<b>0.0414</b>	<b>0.0109</b>	<b>2.6000e-004</b>	<b>0.0112</b>		<b>36.8263</b>	<b>36.8263</b>	<b>1.0100e-003</b>		<b>36.8514</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.9 Pipeline Construction (Distribution) - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.5224	4.4768	5.9026	9.3700e-003		0.2403	0.2403		0.2331	0.2331	0.0000	893.9036	893.9036	0.1298		897.1475	
<b>Total</b>	<b>0.5224</b>	<b>4.4768</b>	<b>5.9026</b>	<b>9.3700e-003</b>		<b>0.2403</b>	<b>0.2403</b>		<b>0.2331</b>	<b>0.2331</b>	<b>0.0000</b>	<b>893.9036</b>	<b>893.9036</b>	<b>0.1298</b>		<b>897.1475</b>	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Worker	0.0186	0.0115	0.1157	3.7000e-004	0.0411	2.8000e-004	0.0414	0.0109	2.6000e-004	0.0112			36.8263	36.8263	1.0100e-003	36.8514	
<b>Total</b>	<b>0.0186</b>	<b>0.0115</b>	<b>0.1157</b>	<b>3.7000e-004</b>	<b>0.0411</b>	<b>2.8000e-004</b>	<b>0.0414</b>	<b>0.0109</b>	<b>2.6000e-004</b>	<b>0.0112</b>			<b>36.8263</b>	<b>36.8263</b>	<b>1.0100e-003</b>	<b>36.8514</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.9 Pipeline Construction (Distribution) - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.4851	4.1199	5.8887	9.3700e-003		0.2041	0.2041		0.1980	0.1980		894.2422	894.2422	0.1267		897.4106	
<b>Total</b>	<b>0.4851</b>	<b>4.1199</b>	<b>5.8887</b>	<b>9.3700e-003</b>		<b>0.2041</b>	<b>0.2041</b>		<b>0.1980</b>	<b>0.1980</b>		<b>894.2422</b>	<b>894.2422</b>	<b>0.1267</b>		<b>897.4106</b>	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0177	0.0105	0.1072	3.6000e-004	0.0411	2.7000e-004	0.0414	0.0109	2.5000e-004	0.0112		35.4198	35.4198	9.2000e-004		35.4428	
<b>Total</b>	<b>0.0177</b>	<b>0.0105</b>	<b>0.1072</b>	<b>3.6000e-004</b>	<b>0.0411</b>	<b>2.7000e-004</b>	<b>0.0414</b>	<b>0.0109</b>	<b>2.5000e-004</b>	<b>0.0112</b>		<b>35.4198</b>	<b>35.4198</b>	<b>9.2000e-004</b>		<b>35.4428</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.9 Pipeline Construction (Distribution) - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.4851	4.1199	5.8887	9.3700e-003		0.2041	0.2041		0.1980	0.1980	0.0000	894.2422	894.2422	0.1267		897.4106	
<b>Total</b>	<b>0.4851</b>	<b>4.1199</b>	<b>5.8887</b>	<b>9.3700e-003</b>		<b>0.2041</b>	<b>0.2041</b>		<b>0.1980</b>	<b>0.1980</b>	<b>0.0000</b>	<b>894.2422</b>	<b>894.2422</b>	<b>0.1267</b>		<b>897.4106</b>	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0177	0.0105	0.1072	3.6000e-004	0.0411	2.7000e-004	0.0414	0.0109	2.5000e-004	0.0112	35.4198	35.4198	9.2000e-004			35.4428	
<b>Total</b>	<b>0.0177</b>	<b>0.0105</b>	<b>0.1072</b>	<b>3.6000e-004</b>	<b>0.0411</b>	<b>2.7000e-004</b>	<b>0.0414</b>	<b>0.0109</b>	<b>2.5000e-004</b>	<b>0.0112</b>	<b>35.4198</b>	<b>35.4198</b>	<b>9.2000e-004</b>			<b>35.4428</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.10 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.3457	3.4929	4.7354	7.3300e-003		0.1772	0.1772		0.1630	0.1630		709.3250	709.3250	0.2294		715.0603	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
<b>Total</b>	<b>0.3457</b>	<b>3.4929</b>	<b>4.7354</b>	<b>7.3300e-003</b>		<b>0.1772</b>	<b>0.1772</b>		<b>0.1630</b>	<b>0.1630</b>		<b>709.3250</b>	<b>709.3250</b>	<b>0.2294</b>		<b>715.0603</b>	

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	
Worker	0.0177	0.0105	0.1072	3.6000e-004	0.0411	2.7000e-004	0.0414	0.0109	2.5000e-004	0.0112		35.4198	35.4198	9.2000e-004		35.4428	
<b>Total</b>	<b>0.0177</b>	<b>0.0105</b>	<b>0.1072</b>	<b>3.6000e-004</b>	<b>0.0411</b>	<b>2.7000e-004</b>	<b>0.0414</b>	<b>0.0109</b>	<b>2.5000e-004</b>	<b>0.0112</b>		<b>35.4198</b>	<b>35.4198</b>	<b>9.2000e-004</b>		<b>35.4428</b>	

## La Jolla View Reservoir Project - San Diego County, Winter

**3.10 Paving - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	0.3457	3.4929	4.7354	7.3300e-003		0.1772	0.1772		0.1630	0.1630	0.0000	709.3250	709.3250	0.2294		715.0603	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
<b>Total</b>	<b>0.3457</b>	<b>3.4929</b>	<b>4.7354</b>	<b>7.3300e-003</b>		<b>0.1772</b>	<b>0.1772</b>		<b>0.1630</b>	<b>0.1630</b>	<b>0.0000</b>	<b>709.3250</b>	<b>709.3250</b>	<b>0.2294</b>		<b>715.0603</b>	

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	
Worker	0.0177	0.0105	0.1072	3.6000e-004	0.0411	2.7000e-004	0.0414	0.0109	2.5000e-004	0.0112			35.4198	35.4198	9.2000e-004	35.4428	
<b>Total</b>	<b>0.0177</b>	<b>0.0105</b>	<b>0.1072</b>	<b>3.6000e-004</b>	<b>0.0411</b>	<b>2.7000e-004</b>	<b>0.0414</b>	<b>0.0109</b>	<b>2.5000e-004</b>	<b>0.0112</b>			<b>35.4198</b>	<b>35.4198</b>	<b>9.2000e-004</b>	<b>35.4428</b>	

**4.0 Operational Detail - Mobile**

## La Jolla View Reservoir Project - San Diego County, Winter

**4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00	-	-	-	-
Total	0.00	0.00	0.00	-	-	-	-

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

La Jolla View Reservoir Project - San Diego County, Winter

## 5.0 Energy Detail

## Historical Energy Use: N

## **5.1 Mitigation Measures Energy**

## La Jolla View Reservoir Project - San Diego County, Winter

**5.2 Energy by Land Use - NaturalGas****Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>						

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>						

**6.0 Area Detail****6.1 Mitigation Measures Area**

## La Jolla View Reservoir Project - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Mitigated	0.7631	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004	
Unmitigated	0.7631	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004	

**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1746					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000
Consumer Products	0.5885					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000			2.3000e-004
<b>Total</b>	<b>0.7631</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>2.2000e-004</b>	<b>2.2000e-004</b>	<b>0.0000</b>			<b>2.3000e-004</b>

## La Jolla View Reservoir Project - San Diego County, Winter

**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1746						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	0.5885						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	1.0000e-005	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004
Total	0.7631	0.0000	1.0000e-004	0.0000			0.0000	0.0000		0.0000	0.0000	2.2000e-004	2.2000e-004	0.0000		2.3000e-004

**7.0 Water Detail****7.1 Mitigation Measures Water****8.0 Waste Detail****8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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**10.0 Stationary Equipment****Fire Pumps and Emergency Generators**

## La Jolla View Reservoir Project - San Diego County, Winter

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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## La Jolla View Reservoir Project - San Diego County, Annual

**La Jolla View Reservoir Project**  
**San Diego County, Annual****1.0 Project Characteristics****1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	1.00	User Defined Unit	7.35	27,500.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	720.49	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

**1.3 User Entered Comments & Non-Default Data**

## La Jolla View Reservoir Project - San Diego County, Annual

## Project Characteristics -

Land Use - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Tank itself = 12,470 SF; Entire tank site = 27,500; Entire work area = 7.35 acre

Construction Phase - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation; Excavator assumed for breaker

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Off-road Equipment - Source: City PW & IEC

Pump used as substitute for wrapping machine; generators used as substitute for manlift, concrete vibrator, trowel. 16 hour construction days possible for

foundation pour.

Trips and VMT - Demo: 100 truckloads; MG: 500 loads from LJVR site to EPR site; 1,650 loads from LJVR to offsite disposal site; FG: 550 loads offsite

Source: City of San Diego Public Works and Infrastructure Engineering Corporation

Demolition - 329 tons per project's Waste Management Plan (HELIX 2018; 251 tons for reservoirs demolition; 78 tons for asphalt demolition)

Grading - Source: City of San Diego Public Works and Infrastructure Engineering Corporation

## Construction Off-road Equipment Mitigation -

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	230.00	180.00
tblConstructionPhase	NumDays	20.00	25.00
tblConstructionPhase	NumDays	20.00	116.00
tblConstructionPhase	NumDays	20.00	70.00
tblConstructionPhase	NumDays	20.00	60.00

## La Jolla View Reservoir Project - San Diego County, Annual

tblConstructionPhase	NumDays	20.00	15.00
tblGrading	AcresOfGrading	174.00	120.00
tblGrading	AcresOfGrading	105.00	90.00
tblGrading	AcresOfGrading	0.00	120.00
tblGrading	MaterialExported	0.00	21,500.00
tblGrading	MaterialExported	0.00	5,500.00
tblLandUse	LandUseSquareFeet	0.00	27,500.00
tblLandUse	LotAcreage	0.00	7.35
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00

## La Jolla View Reservoir Project - San Diego County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Mass Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Reservoir Construction
tblOffRoadEquipment	PhaseName		Mass Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Distribution)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Final Grading
tblOffRoadEquipment	PhaseName		Reservoir Construction
tblOffRoadEquipment	PhaseName		Mass Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Reservoir Backfill
tblOffRoadEquipment	PhaseName		Final Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)

## La Jolla View Reservoir Project - San Diego County, Annual

tblOffRoadEquipment	PhaseName		Mass Grading
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Reservoir Backfill
tblOffRoadEquipment	PhaseName		Pipeline Construction (Inlet/Outlet)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Supply Line)
tblOffRoadEquipment	PhaseName		Pipeline Construction (Distribution)
tblOffRoadEquipment	UsageHours	8.00	16.00
tblTripsAndVMT	HaulingTripNumber	33.00	100.00
tblTripsAndVMT	HaulingTripNumber	2,688.00	2,150.00
tblTripsAndVMT	HaulingTripNumber	688.00	550.00

## 2.0 Emissions Summary

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## La Jolla View Reservoir Project - San Diego County, Annual

**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2021	0.4407	4.5473	3.6651	7.9600e-003	0.4559	0.2039	0.6598	0.2099	0.1943	0.4042	0.0000	702.6084	702.6084	0.1272	0.0000	705.7879	
2022	0.4083	3.9285	3.6510	7.2000e-003	0.7035	0.1851	0.8885	0.3319	0.1780	0.5098	0.0000	626.2830	626.2830	0.0932	0.0000	628.6135	
2023	0.0225	0.1894	0.2732	4.4000e-004	1.8800e-003	9.4000e-003	0.0113	5.0000e-004	9.0600e-003	9.5600e-003	0.0000	38.3956	38.3956	6.1400e-003	0.0000	38.5491	
Maximum	<b>0.4407</b>	<b>4.5473</b>	<b>3.6651</b>	<b>7.9600e-003</b>	<b>0.7035</b>	<b>0.2039</b>	<b>0.8885</b>	<b>0.3319</b>	<b>0.1943</b>	<b>0.5098</b>	<b>0.0000</b>	<b>702.6084</b>	<b>702.6084</b>	<b>0.1272</b>	<b>0.0000</b>	<b>705.7879</b>	

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Year	tons/yr											MT/yr					
2021	0.4407	4.5473	3.6651	7.9600e-003	0.2260	0.2039	0.4299	0.1001	0.1943	0.2944	0.0000	702.6077	702.6077	0.1272	0.0000	705.7872	
2022	0.4082	3.9285	3.6510	7.2000e-003	0.3274	0.1851	0.5124	0.1522	0.1780	0.3302	0.0000	626.2823	626.2823	0.0932	0.0000	628.6128	
2023	0.0225	0.1894	0.2732	4.4000e-004	1.8800e-003	9.4000e-003	0.0113	5.0000e-004	9.0600e-003	9.5600e-003	0.0000	38.3955	38.3955	6.1400e-003	0.0000	38.5491	
Maximum	<b>0.4407</b>	<b>4.5473</b>	<b>3.6651</b>	<b>7.9600e-003</b>	<b>0.3274</b>	<b>0.2039</b>	<b>0.5124</b>	<b>0.1522</b>	<b>0.1943</b>	<b>0.3302</b>	<b>0.0000</b>	<b>702.6077</b>	<b>702.6077</b>	<b>0.1272</b>	<b>0.0000</b>	<b>705.7872</b>	

## La Jolla View Reservoir Project - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	52.19	0.00	38.86	53.37	0.00	31.33	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2021	5-31-2021	1.5370	1.5370
2	6-1-2021	8-31-2021	1.4224	1.4224
3	9-1-2021	11-30-2021	1.4035	1.4035
4	12-1-2021	2-28-2022	1.5204	1.5204
5	3-1-2022	5-31-2022	1.4637	1.4637
6	6-1-2022	8-31-2022	0.9407	0.9407
7	9-1-2022	11-30-2022	0.7276	0.7276
8	12-1-2022	2-28-2023	0.2893	0.2893
9	3-1-2023	5-31-2023	0.1133	0.1133
		Highest	1.5370	1.5370

## La Jolla View Reservoir Project - San Diego County, Annual

**2.2 Overall Operational****Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.1393	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005	
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>	<b>0.1393</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	

## La Jolla View Reservoir Project - San Diego County, Annual

**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Area	0.1393	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005	
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>	<b>0.1393</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail****Construction Phase**

## La Jolla View Reservoir Project - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/1/2021	4/2/2021	5	25	
2	Mass Grading	Grading	3/12/2021	8/20/2021	5	116	
3	Pipeline Construction (Inlet/Outlet)	Trenching	8/23/2021	9/17/2021	5	20	
4	Reservoir Construction	Building Construction	9/20/2021	5/27/2022	5	180	
5	Reservoir Backfill	Grading	5/30/2022	9/2/2022	5	70	
6	Pipeline Construction (Supply Line)	Trenching	9/5/2022	9/23/2022	5	15	
7	Final Grading	Grading	9/26/2022	12/16/2022	5	60	
8	Pipeline Construction (Distribution)	Trenching	12/19/2022	4/20/2023	5	89	
9	Paving	Paving	4/21/2023	5/11/2023	5	15	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 0**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)**

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	2	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	6.00	97	0.37
Mass Grading	Bore/Drill Rigs	1	8.00	221	0.50
Mass Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Mass Grading	Excavators	1	8.00	158	0.38

## La Jolla View Reservoir Project - San Diego County, Annual

Mass Grading	Graders	1	8.00	187	0.41
Mass Grading	Rollers	1	8.00	80	0.38
Mass Grading	Rubber Tired Dozers	1	8.00	247	0.40
Mass Grading	Scrapers	1	8.00	367	0.48
Mass Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Construction (Inlet/Outlet)	Cement and Mortar Mixers	0	6.00	9	0.56
Pipeline Construction (Inlet/Outlet)	Concrete/Industrial Saws	1	8.00	81	0.73
Pipeline Construction (Inlet/Outlet)	Excavators	0	8.00	158	0.38
Pipeline Construction (Inlet/Outlet)	Graders	0	8.00	187	0.41
Pipeline Construction (Inlet/Outlet)	Pavers	0	7.00	130	0.42
Pipeline Construction (Inlet/Outlet)	Rollers	1	8.00	80	0.38
Pipeline Construction (Inlet/Outlet)	Rubber Tired Dozers	1	8.00	247	0.40
Pipeline Construction (Inlet/Outlet)	Scrapers	0	8.00	367	0.48
Pipeline Construction (Inlet/Outlet)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Reservoir Construction	Cement and Mortar Mixers	1	16.00	9	0.56
Reservoir Construction	Cranes	1	7.00	231	0.29
Reservoir Construction	Forklifts	1	8.00	89	0.20
Reservoir Construction	Generator Sets	4	16.00	84	0.74
Reservoir Construction	Pumps	2	16.00	84	0.74
Reservoir Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Reservoir Construction	Welders	0	8.00	46	0.45
Reservoir Backfill	Graders	1	8.00	187	0.41
Reservoir Backfill	Rollers	1	7.00	80	0.38
Reservoir Backfill	Rubber Tired Dozers	1	8.00	247	0.40
Reservoir Backfill	Scrapers	1	8.00	367	0.48
Reservoir Backfill	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Pipeline Construction (Supply Line)	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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Final Grading	Pavers	1	8.00	130	0.42
Final Grading	Rollers	1	8.00	80	0.38
Final Grading	Rubber Tired Dozers	2	8.00	247	0.40
Final Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Pipeline Construction (Distribution)	Concrete/Industrial Saws	1	8.00	81	0.73
Pipeline Construction (Distribution)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	100.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Mass Grading	8	20.00	0.00	2,150.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction (*Inlet/Outlet*)	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction (*Inlet/Outlet*)	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Reservoir Construction	9	12.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Reservoir Backfill	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction (*Supply Line*)	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction (*Supply Line*)	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Final Grading	6	15.00	0.00	550.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Pipeline Construction (Distribution)	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	5.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

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Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

**3.2 Demolition - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					3.5700e-003	0.0000	3.5700e-003	5.4000e-004	0.0000	5.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0178	0.1562	0.1963	3.1000e-004		8.7800e-003	8.7800e-003		8.4200e-003	8.4200e-003	0.0000	26.7908	26.7908	5.1000e-003	0.0000	26.9183	
Total	0.0178	0.1562	0.1963	3.1000e-004	3.5700e-003	8.7800e-003	0.0124	5.4000e-004	8.4200e-003	8.9600e-003	0.0000	26.7908	26.7908	5.1000e-003	0.0000	26.9183	

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**3.2 Demolition - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	3.8000e-004	0.0131	3.2200e-003	4.0000e-005	8.6000e-004	4.0000e-005	9.0000e-004	2.3000e-004	4.0000e-005	2.7000e-004	0.0000	3.8081	3.8081	3.4000e-004	0.0000	3.8167	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.5000e-004	4.7000e-004	4.6800e-003	1.0000e-005	1.5000e-003	1.0000e-005	1.5100e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3135	1.3135	4.0000e-005	0.0000	1.3144	
Total	1.0300e-003	0.0135	7.9000e-003	5.0000e-005	2.3600e-003	5.0000e-005	2.4100e-003	6.3000e-004	5.0000e-005	6.8000e-004	0.0000	5.1216	5.1216	3.8000e-004	0.0000	5.1311	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					1.6100e-003	0.0000	1.6100e-003	2.4000e-004	0.0000	2.4000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0178	0.1562	0.1963	3.1000e-004		8.7800e-003	8.7800e-003		8.4200e-003	8.4200e-003	0.0000	26.7908	26.7908	5.1000e-003	0.0000	26.9182	
Total	0.0178	0.1562	0.1963	3.1000e-004	1.6100e-003	8.7800e-003	0.0104	2.4000e-004	8.4200e-003	8.6600e-003	0.0000	26.7908	26.7908	5.1000e-003	0.0000	26.9182	

## La Jolla View Reservoir Project - San Diego County, Annual

**3.2 Demolition - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	3.8000e-004	0.0131	3.2200e-003	4.0000e-005	8.6000e-004	4.0000e-005	9.0000e-004	2.3000e-004	4.0000e-005	2.7000e-004	0.0000	3.8081	3.8081	3.4000e-004	0.0000	3.8167	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.5000e-004	4.7000e-004	4.6800e-003	1.0000e-005	1.5000e-003	1.0000e-005	1.5100e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.3135	1.3135	4.0000e-005	0.0000	1.3144	
Total	1.0300e-003	0.0135	7.9000e-003	5.0000e-005	2.3600e-003	5.0000e-005	2.4100e-003	6.3000e-004	5.0000e-005	6.8000e-004	0.0000	5.1216	5.1216	3.8000e-004	0.0000	5.1311	

**3.3 Mass Grading - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4144	0.0000	0.4144	0.1991	0.0000	0.1991	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2019	2.2325	1.4243	3.1200e-003		0.0971	0.0971		0.0893	0.0893	0.0000	273.8748	273.8748	0.0886	0.0000	276.0892
Total	0.2019	2.2325	1.4243	3.1200e-003	0.4144	0.0971	0.5115	0.1991	0.0893	0.2884	0.0000	273.8748	273.8748	0.0886	0.0000	276.0892

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**3.3 Mass Grading - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	8.0700e-003	0.2808	0.0693	8.2000e-004	0.0184	8.5000e-004	0.0192	5.0500e-003	8.1000e-004	5.8600e-003	0.0000	81.8743	81.8743	7.3900e-003	0.0000	82.0590	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.0300e-003	2.8800e-003	0.0290	9.0000e-005	9.3000e-003	7.0000e-005	9.3700e-003	2.4700e-003	6.0000e-005	2.5300e-003	0.0000	8.1261	8.1261	2.3000e-004	0.0000	8.1319	
Total	0.0121	0.2836	0.0982	9.1000e-004	0.0277	9.2000e-004	0.0286	7.5200e-003	8.7000e-004	8.3900e-003	0.0000	90.0003	90.0003	7.6200e-003	0.0000	90.1909	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.1865	0.0000	0.1865	0.0896	0.0000	0.0896	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.2019	2.2325	1.4243	3.1200e-003		0.0971	0.0971		0.0893	0.0893	0.0000	273.8745	273.8745	0.0886	0.0000	276.0889	
Total	0.2019	2.2325	1.4243	3.1200e-003	0.1865	0.0971	0.2836	0.0896	0.0893	0.1789	0.0000	273.8745	273.8745	0.0886	0.0000	276.0889	

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**3.3 Mass Grading - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	8.0700e-003	0.2808	0.0693	8.2000e-004	0.0184	8.5000e-004	0.0192	5.0500e-003	8.1000e-004	5.8600e-003	0.0000	81.8743	81.8743	7.3900e-003	0.0000	82.0590	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	4.0300e-003	2.8800e-003	0.0290	9.0000e-005	9.3000e-003	7.0000e-005	9.3700e-003	2.4700e-003	6.0000e-005	2.5300e-003	0.0000	8.1261	8.1261	2.3000e-004	0.0000	8.1319	
Total	0.0121	0.2836	0.0982	9.1000e-004	0.0277	9.2000e-004	0.0286	7.5200e-003	8.7000e-004	8.3900e-003	0.0000	90.0003	90.0003	7.6200e-003	0.0000	90.1909	

**3.4 Pipeline Construction (Inlet/Outlet) - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0181	0.1783	0.1185	2.1000e-004		9.3500e-003	9.3500e-003		8.7400e-003	8.7400e-003	0.0000	17.9170	17.9170	4.3700e-003	0.0000	18.0262	
Total	0.0181	0.1783	0.1185	2.1000e-004		9.3500e-003	9.3500e-003		8.7400e-003	8.7400e-003	0.0000	17.9170	17.9170	4.3700e-003	0.0000	18.0262	

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**3.4 Pipeline Construction (Inlet/Outlet) - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.0000e-004	5.0000e-004	5.0000e-003	2.0000e-005	2.9900e-003	1.0000e-005	3.0000e-003	7.7000e-004	1.0000e-005	7.8000e-004	0.0000	1.4011	1.4011	4.0000e-005	0.0000	1.4021	
Total	7.0000e-004	5.0000e-004	5.0000e-003	2.0000e-005	2.9900e-003	1.0000e-005	3.0000e-003	7.7000e-004	1.0000e-005	7.8000e-004	0.0000	1.4011	1.4011	4.0000e-005	0.0000	1.4021	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0181	0.1783	0.1185	2.1000e-004		9.3500e-003	9.3500e-003		8.7400e-003	8.7400e-003	0.0000	17.9169	17.9169	4.3700e-003	0.0000	18.0261	
Total	0.0181	0.1783	0.1185	2.1000e-004		9.3500e-003	9.3500e-003		8.7400e-003	8.7400e-003	0.0000	17.9169	17.9169	4.3700e-003	0.0000	18.0261	

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**3.4 Pipeline Construction (Inlet/Outlet) - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	7.0000e-004	5.0000e-004	5.0000e-003	2.0000e-005	2.9900e-003	1.0000e-005	3.0000e-003	7.7000e-004	1.0000e-005	7.8000e-004	0.0000	1.4011	1.4011	4.0000e-005	0.0000	1.4021	
Total	7.0000e-004	5.0000e-004	5.0000e-003	2.0000e-005	2.9900e-003	1.0000e-005	3.0000e-003	7.7000e-004	1.0000e-005	7.8000e-004	0.0000	1.4011	1.4011	4.0000e-005	0.0000	1.4021	

**3.5 Reservoir Construction - 2021****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1871	1.6623	1.7985	3.2600e-003		0.0876	0.0876		0.0869	0.0869	0.0000	279.4485	279.4485	0.0206	0.0000	279.9645	
Total	0.1871	1.6623	1.7985	3.2600e-003		0.0876	0.0876		0.0869	0.0869	0.0000	279.4485	279.4485	0.0206	0.0000	279.9645	

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**3.5 Reservoir Construction - 2021****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	5.8000e-004	0.0193	5.1400e-003	5.0000e-005	1.2400e-003	4.0000e-005	1.2900e-003	3.6000e-004	4.0000e-005	4.0000e-004	0.0000	4.9020	4.9020	3.6000e-004	0.0000	4.9111	
Worker	1.5600e-003	1.1200e-003	0.0112	3.0000e-005	3.6100e-003	3.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.1524	3.1524	9.0000e-005	0.0000	3.1546	
Total	2.1400e-003	0.0204	0.0164	8.0000e-005	4.8500e-003	7.0000e-005	4.9200e-003	1.3200e-003	6.0000e-005	1.3800e-003	0.0000	8.0544	8.0544	4.5000e-004	0.0000	8.0657	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.1871	1.6623	1.7985	3.2600e-003		0.0876	0.0876		0.0869	0.0869	0.0000	279.4481	279.4481	0.0206	0.0000	279.9642	
Total	0.1871	1.6623	1.7985	3.2600e-003		0.0876	0.0876		0.0869	0.0869	0.0000	279.4481	279.4481	0.0206	0.0000	279.9642	

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**3.5 Reservoir Construction - 2021****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	5.8000e-004	0.0193	5.1400e-003	5.0000e-005	1.2400e-003	4.0000e-005	1.2900e-003	3.6000e-004	4.0000e-005	4.0000e-004	0.0000	4.9020	4.9020	3.6000e-004	0.0000	4.9111	
Worker	1.5600e-003	1.1200e-003	0.0112	3.0000e-005	3.6100e-003	3.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.1524	3.1524	9.0000e-005	0.0000	3.1546	
Total	2.1400e-003	0.0204	0.0164	8.0000e-005	4.8500e-003	7.0000e-005	4.9200e-003	1.3200e-003	6.0000e-005	1.3800e-003	0.0000	8.0544	8.0544	4.5000e-004	0.0000	8.0657	

**3.5 Reservoir Construction - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.2418	2.1396	2.5075	4.5600e-003		0.1075	0.1075		0.1066	0.1066	0.0000	391.2315	391.2315	0.0277	0.0000	391.9227	
Total	0.2418	2.1396	2.5075	4.5600e-003		0.1075	0.1075		0.1066	0.1066	0.0000	391.2315	391.2315	0.0277	0.0000	391.9227	

## La Jolla View Reservoir Project - San Diego County, Annual

**3.5 Reservoir Construction - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	7.5000e-004	0.0255	6.8100e-003	7.0000e-005	1.7400e-003	5.0000e-005	1.7900e-003	5.0000e-004	5.0000e-005	5.5000e-004	0.0000	6.7978	6.7978	4.9000e-004	0.0000	6.8102	
Worker	2.0700e-003	1.4200e-003	0.0146	5.0000e-005	5.0500e-003	3.0000e-005	5.0900e-003	1.3400e-003	3.0000e-005	1.3700e-003	0.0000	4.2515	4.2515	1.2000e-004	0.0000	4.2544	
Total	2.8200e-003	0.0269	0.0214	1.2000e-004	6.7900e-003	8.0000e-005	6.8800e-003	1.8400e-003	8.0000e-005	1.9200e-003	0.0000	11.0493	11.0493	6.1000e-004	0.0000	11.0646	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.2418	2.1396	2.5075	4.5600e-003		0.1075	0.1075		0.1066	0.1066	0.0000	391.2310	391.2310	0.0277	0.0000	391.9222	
Total	0.2418	2.1396	2.5075	4.5600e-003		0.1075	0.1075		0.1066	0.1066	0.0000	391.2310	391.2310	0.0277	0.0000	391.9222	

## La Jolla View Reservoir Project - San Diego County, Annual

**3.5 Reservoir Construction - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	7.5000e-004	0.0255	6.8100e-003	7.0000e-005	1.7400e-003	5.0000e-005	1.7900e-003	5.0000e-004	5.0000e-005	5.5000e-004	0.0000	6.7978	6.7978	4.9000e-004	0.0000	6.8102	
Worker	2.0700e-003	1.4200e-003	0.0146	5.0000e-005	5.0500e-003	3.0000e-005	5.0900e-003	1.3400e-003	3.0000e-005	1.3700e-003	0.0000	4.2515	4.2515	1.2000e-004	0.0000	4.2544	
Total	2.8200e-003	0.0269	0.0214	1.2000e-004	6.7900e-003	8.0000e-005	6.8800e-003	1.8400e-003	8.0000e-005	1.9200e-003	0.0000	11.0493	11.0493	6.1000e-004	0.0000	11.0646	

**3.6 Reservoir Backfill - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2585	0.0000	0.2585	0.1210	0.0000	0.1210	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0834	0.9163	0.5441	1.2500e-003		0.0389	0.0389		0.0358	0.0358	0.0000	109.9295	109.9295	0.0356	0.0000	110.8184
Total	0.0834	0.9163	0.5441	1.2500e-003	0.2585	0.0389	0.2974	0.1210	0.0358	0.1568	0.0000	109.9295	109.9295	0.0356	0.0000	110.8184

## La Jolla View Reservoir Project - San Diego County, Annual

**3.6 Reservoir Backfill - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.5000e-003	1.0300e-003	0.0106	3.0000e-005	3.6500e-003	3.0000e-005	3.6700e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	3.0705	3.0705	8.0000e-005	0.0000	3.0726	
Total	1.5000e-003	1.0300e-003	0.0106	3.0000e-005	3.6500e-003	3.0000e-005	3.6700e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	3.0705	3.0705	8.0000e-005	0.0000	3.0726	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.1163	0.0000	0.1163	0.0545	0.0000	0.0545	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0834	0.9163	0.5441	1.2500e-003		0.0389	0.0389		0.0358	0.0358	0.0000	109.9294	109.9294	0.0356	0.0000	110.8183	
Total	0.0834	0.9163	0.5441	1.2500e-003	0.1163	0.0389	0.1552	0.0545	0.0358	0.0902	0.0000	109.9294	109.9294	0.0356	0.0000	110.8183	

## La Jolla View Reservoir Project - San Diego County, Annual

**3.6 Reservoir Backfill - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.5000e-003	1.0300e-003	0.0106	3.0000e-005	3.6500e-003	3.0000e-005	3.6700e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	3.0705	3.0705	8.0000e-005	0.0000	3.0726	
Total	1.5000e-003	1.0300e-003	0.0106	3.0000e-005	3.6500e-003	3.0000e-005	3.6700e-003	9.7000e-004	2.0000e-005	9.9000e-004	0.0000	3.0705	3.0705	8.0000e-005	0.0000	3.0726	

**3.7 Pipeline Construction (Supply Line) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	1.2400e-003	0.0126	0.0168	2.0000e-005		6.8000e-004	6.8000e-004		6.2000e-004	6.2000e-004	0.0000	2.0496	2.0496	6.6000e-004	0.0000	2.0662	
Total	1.2400e-003	0.0126	0.0168	2.0000e-005		6.8000e-004	6.8000e-004		6.2000e-004	6.2000e-004	0.0000	2.0496	2.0496	6.6000e-004	0.0000	2.0662	

## La Jolla View Reservoir Project - San Diego County, Annual

**3.7 Pipeline Construction (Supply Line) - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.5000e-004	1.0000e-004	1.0400e-003	0.0000	6.7000e-004	0.0000	6.8000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.3037	0.3037	1.0000e-005	0.0000	0.3039	
Total	1.5000e-004	1.0000e-004	1.0400e-003	0.0000	6.7000e-004	0.0000	6.8000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.3037	0.3037	1.0000e-005	0.0000	0.3039	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	1.2400e-003	0.0126	0.0168	2.0000e-005		6.8000e-004	6.8000e-004		6.2000e-004	6.2000e-004	0.0000	2.0496	2.0496	6.6000e-004	0.0000	2.0662	
Total	1.2400e-003	0.0126	0.0168	2.0000e-005		6.8000e-004	6.8000e-004		6.2000e-004	6.2000e-004	0.0000	2.0496	2.0496	6.6000e-004	0.0000	2.0662	

## La Jolla View Reservoir Project - San Diego County, Annual

**3.7 Pipeline Construction (Supply Line) - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.5000e-004	1.0000e-004	1.0400e-003	0.0000	6.7000e-004	0.0000	6.8000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.3037	0.3037	1.0000e-005	0.0000	0.3039	
Total	1.5000e-004	1.0000e-004	1.0400e-003	0.0000	6.7000e-004	0.0000	6.8000e-004	1.7000e-004	0.0000	1.7000e-004	0.0000	0.3037	0.3037	1.0000e-005	0.0000	0.3039	

**3.8 Final Grading - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4253	0.0000	0.4253	0.2055	0.0000	0.2055	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0713	0.7429	0.4915	9.2000e-004		0.0364	0.0364		0.0335	0.0335	0.0000	80.7189	80.7189	0.0261	0.0000	81.3715
Total	0.0713	0.7429	0.4915	9.2000e-004	0.4253	0.0364	0.4618	0.2055	0.0335	0.2391	0.0000	80.7189	80.7189	0.0261	0.0000	81.3715

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**3.8 Final Grading - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.9400e-003	0.0657	0.0176	2.1000e-004	4.7100e-003	1.8000e-004	4.8900e-003	1.2900e-003	1.8000e-004	1.4700e-003	0.0000	20.6698	20.6698	1.8700e-003	0.0000	20.7166	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.4800e-003	1.0200e-003	0.0104	3.0000e-005	3.6100e-003	2.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.0368	3.0368	8.0000e-005	0.0000	3.0389	
Total	3.4200e-003	0.0667	0.0280	2.4000e-004	8.3200e-003	2.0000e-004	8.5200e-003	2.2500e-003	2.0000e-004	2.4500e-003	0.0000	23.7066	23.7066	1.9500e-003	0.0000	23.7555	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Fugitive Dust					0.1914	0.0000	0.1914	0.0925	0.0000	0.0925	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0713	0.7429	0.4915	9.2000e-004		0.0364	0.0364		0.0335	0.0335	0.0000	80.7188	80.7188	0.0261	0.0000	81.3714	
Total	0.0713	0.7429	0.4915	9.2000e-004	0.1914	0.0364	0.2278	0.0925	0.0335	0.1260	0.0000	80.7188	80.7188	0.0261	0.0000	81.3714	

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**3.8 Final Grading - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	1.9400e-003	0.0657	0.0176	2.1000e-004	4.7100e-003	1.8000e-004	4.8900e-003	1.2900e-003	1.8000e-004	1.4700e-003	0.0000	20.6698	20.6698	1.8700e-003	0.0000	20.7166	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.4800e-003	1.0200e-003	0.0104	3.0000e-005	3.6100e-003	2.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.0368	3.0368	8.0000e-005	0.0000	3.0389	
Total	3.4200e-003	0.0667	0.0280	2.4000e-004	8.3200e-003	2.0000e-004	8.5200e-003	2.2500e-003	2.0000e-004	2.4500e-003	0.0000	23.7066	23.7066	1.9500e-003	0.0000	23.7555	

**3.9 Pipeline Construction (Distribution) - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	2.6100e-003	0.0224	0.0295	5.0000e-005		1.2000e-003	1.2000e-003		1.1700e-003	1.1700e-003	0.0000	4.0547	4.0547	5.9000e-004	0.0000	4.0694	
Total	2.6100e-003	0.0224	0.0295	5.0000e-005		1.2000e-003	1.2000e-003		1.1700e-003	1.1700e-003	0.0000	4.0547	4.0547	5.9000e-004	0.0000	4.0694	

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**3.9 Pipeline Construction (Distribution) - 2022****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.0000e-005	6.0000e-005	5.8000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1687	0.1687	0.0000	0.0000	0.1688	
Total	8.0000e-005	6.0000e-005	5.8000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1687	0.1687	0.0000	0.0000	0.1688	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	2.6100e-003	0.0224	0.0295	5.0000e-005		1.2000e-003	1.2000e-003	1.1700e-003	1.1700e-003	0.0000	4.0547	4.0547	5.9000e-004	0.0000	4.0694		
Total	2.6100e-003	0.0224	0.0295	5.0000e-005		1.2000e-003	1.2000e-003	1.1700e-003	1.1700e-003	0.0000	4.0547	4.0547	5.9000e-004	0.0000	4.0694		

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**3.9 Pipeline Construction (Distribution) - 2022****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	8.0000e-005	6.0000e-005	5.8000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1687	0.1687	0.0000	0.0000	0.1688	
Total	8.0000e-005	6.0000e-005	5.8000e-004	0.0000	2.0000e-004	0.0000	2.0000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.1687	0.1687	0.0000	0.0000	0.1688	

**3.9 Pipeline Construction (Distribution) - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0192	0.1627	0.2326	3.7000e-004		8.0600e-003	8.0600e-003		7.8200e-003	7.8200e-003	0.0000	32.0441	32.0441	4.5400e-003	0.0000	32.1576	
Total	0.0192	0.1627	0.2326	3.7000e-004		8.0600e-003	8.0600e-003		7.8200e-003	7.8200e-003	0.0000	32.0441	32.0441	4.5400e-003	0.0000	32.1576	

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**3.9 Pipeline Construction (Distribution) - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.2000e-004	4.1000e-004	4.2500e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2819	1.2819	3.0000e-005	0.0000	1.2827	
Total	6.2000e-004	4.1000e-004	4.2500e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2819	1.2819	3.0000e-005	0.0000	1.2827	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0192	0.1627	0.2326	3.7000e-004		8.0600e-003	8.0600e-003		7.8200e-003	7.8200e-003	0.0000	32.0441	32.0441	4.5400e-003	0.0000	32.1576	
Total	0.0192	0.1627	0.2326	3.7000e-004		8.0600e-003	8.0600e-003		7.8200e-003	7.8200e-003	0.0000	32.0441	32.0441	4.5400e-003	0.0000	32.1576	

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**3.9 Pipeline Construction (Distribution) - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	6.2000e-004	4.1000e-004	4.2500e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2819	1.2819	3.0000e-005	0.0000	1.2827	
Total	6.2000e-004	4.1000e-004	4.2500e-003	1.0000e-005	1.5800e-003	1.0000e-005	1.5900e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.2819	1.2819	3.0000e-005	0.0000	1.2827	

**3.10 Paving - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.5900e-003	0.0262	0.0355	5.0000e-005		1.3300e-003	1.3300e-003		1.2200e-003	1.2200e-003	0.0000	4.8262	4.8262	1.5600e-003	0.0000	4.8652
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.5900e-003	0.0262	0.0355	5.0000e-005		1.3300e-003	1.3300e-003		1.2200e-003	1.2200e-003	0.0000	4.8262	4.8262	1.5600e-003	0.0000	4.8652

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**3.10 Paving - 2023****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.2000e-004	8.0000e-005	8.1000e-004	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.2434	0.2434	1.0000e-005	0.0000	0.0000	0.2436	
Total	1.2000e-004	8.0000e-005	8.1000e-004	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.2434	0.2434	1.0000e-005	0.0000	0.0000	0.2436	

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	2.5900e-003	0.0262	0.0355	5.0000e-005		1.3300e-003	1.3300e-003		1.2200e-003	1.2200e-003	0.0000	4.8262	4.8262	1.5600e-003	0.0000	4.8652	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	2.5900e-003	0.0262	0.0355	5.0000e-005		1.3300e-003	1.3300e-003		1.2200e-003	1.2200e-003	0.0000	4.8262	4.8262	1.5600e-003	0.0000	4.8652	

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**3.10 Paving - 2023****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	1.2000e-004	8.0000e-005	8.1000e-004	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2434	0.2434	1.0000e-005	0.0000	0.2436	
Total	1.2000e-004	8.0000e-005	8.1000e-004	0.0000	3.0000e-004	0.0000	3.0000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2434	0.2434	1.0000e-005	0.0000	0.2436	

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

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

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
User Defined Industrial	0.00	0.00	0.00	-	-	-	-
Total	0.00	0.00	0.00	-	-	-	-

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

**5.0 Energy Detail**

Historical Energy Use: N

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### **5.1 Mitigation Measures Energy**

## 5.2 Energy by Land Use - NaturalGas

### **Unmitigated**

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**5.2 Energy by Land Use - NaturalGas****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>			<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	

**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

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**5.3 Energy by Land Use - Electricity****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1393	0.0000	1.0000e-005	0.0000			0.0000	0.0000		0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	0.1393	0.0000	1.0000e-005	0.0000			0.0000	0.0000		0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005

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**6.2 Area by SubCategory****Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.0319						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1074						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000			0.0000	0.0000		0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.1393</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>			<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.0319						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1074						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000			0.0000	0.0000		0.0000	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	0.0000	2.0000e-005
<b>Total</b>	<b>0.1393</b>	<b>0.0000</b>	<b>1.0000e-005</b>	<b>0.0000</b>			<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>2.0000e-005</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

**7.2 Water by Land Use****Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

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**7.2 Water by Land Use****Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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**8.2 Waste by Land Use****Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
<b>Total</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>

**9.0 Operational Offroad**

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

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### Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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### User Defined Equipment

Equipment Type	Number
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## 11.0 Vegetation

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