

APPENDIX 2

Air Quality and GHG Impact Analyses

AIR QUALITY and GHG IMPACT ANALYSES
MS-257 MISSION SPRINGS WATER DISTRICT PROJECT
DESERT HOT SPRINGS AND RIVERSIDE COUNTY, CALIFORNIA

Prepared by:

Giroux & Associates
1800 E Garry St., #205
Santa Ana, CA 92705

Prepared for:

Tom Dodson & Associates
Attn: Kaitlyn Dodson
2150 N. Arrowhead Avenue
San Bernardino, California 92405

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METEOROLOGY/CLIMATE

The proposed project site is located in the Coachella Valley Planning Area (CVPA) of the Salton Sea Air Basin (SSAB). The SSAB was part of the Southeast Desert Air Basin (SEDAB) until May, 1996 when the SSAB was created. The project site is in the hottest and driest parts of California. The climate is characterized by hot, dry summers and relatively mild winters. Rainfall is scant in all seasons, so differences between the seasons are characterized principally by differences in temperature. Average annual precipitation in the air basin ranges from 2 to 6 inches per year.

Seasonal temperature differences in the basin are large, confirming the absence of marine influences due to the blocking action of the mountains to the west. Average monthly maximum temperatures in the project vicinity range from 108°F in July to 57°F in January. The average monthly minima range from about 40°F in January to about 80°F in July.

During much of the year, California is covered by a moderately intense high-pressure system. In winter, the Pacific High retreats to the south, so that frontal systems from the North Pacific can move onto the California coast. On average, 20 to 30 frontal systems pass through California each winter. The first front usually arrives around the middle of October, and the average period of frontal activity is five to six months. Most of these systems are relatively weak by the time they reach the SSAB, however, and they become more diffuse as they move southeastward.

Spring is a transition season between the winter period of frontal activity and the generally dry summer; some precipitation continues during the early part of the season.

During the summer, the Pacific High is well developed to the west of California, and a thermal trough overlies the SSAB. The intensity and orientation of the trough varies from day to day. Although the rugged mountainous country prevents a normal circulation, the influence of this trough does permit some inter-basin exchange with coastal locations through the passes. Summer is also the season with occasional moisture influx from the Gulfs of Mexico or California which causes isolated thundershowers and flash flooding (the summer "monsoon").

Fall is the transition period from the hot summer back to the season of frontal activity, but it is still very dry and temperatures are still mild.

Desert regions tend to be windy, since little friction is generated between the moving air and the low, sparse vegetation cover. In addition, the rapid daytime heating of the lower air over the desert leads to strong convection activity. This exchange of lower and upper air accelerates surface winds during the warm part of the day when convection is at a maximum. During winter, however, the rapid cooling in the surface layers at night retards this exchange of momentum, and the result is often a high frequency of nearly calm winds, especially at night.

During all seasons, the prevailing wind direction is predominantly from the west to east. Banning Pass is an area where air is squeezed through a narrow opening with accelerated airflow that supports wind farms. The strong winds also occasionally lead to blowing sand that sandblasts painted surfaces and makes driving unsafe. As the west to east winds fan out into the

Coachella Valley, they slow down quickly. By the time the onshore flow reaches the project site, it has again returned to its normal speed.

The mixing depth, i.e., the height available for dispersion of airborne pollutants emitted near the surface, is limited by the occurrence of temperature inversions. A temperature inversion is a layer of air in which the temperature increases with height. The temperature inversion conditions of the SSAB are quite different from those of the coastal regions of California. In coastal environments, warm, subsiding air aloft creates a lid above the shallow marine layer at the surface. The base of this subsidence inversion is perhaps 1,500 feet above the surface in coastal portions of the Los Angeles Basin. When a subsidence inversion exists over the desert, the height of the inversion base lies some 6,000 to 8,000 feet above the surface.

Nighttime surface inversions in the desert are common, especially during the cooler months. Mixing heights are predominantly 1,000 feet or less. These inversions are caused by nighttime radiational cooling of the land surface in contact with overlying air that cools more slowly. They tend to be destroyed early in the day in summer, due to intense solar radiation and heating of the land surface. In winter, however, these radiation inversions tend to persist until mid-morning, limiting mixing in the lower atmosphere to heights of 200 to 2,000 feet above the surface. Nuisance air quality problems in the Coachella Valley, such as dust near mining operations or odors near feedlots or wastewater plants, occur mainly late at night or early in the morning when such radiation inversions are strongest.

AIR QUALITY SETTING

AMBIENT AIR QUALITY STANDARDS (AAQS)

In order to gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the Environmental Protection Agency (EPA) adopted a rule, which extended and established a new attainment deadline for ozone for the year 2021. Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted in 1997 for these pollutants.

Planning and enforcement of the federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their required attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to "non-attainment" for the 8-hour ozone standard.

Table 1

Ambient Air Quality Standards									
Pollutant	Averaging Time	California Standards ¹		National Standards ²					
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷			
Ozone (O_3) ⁸	1 Hour	0.09 ppm (180 $\mu\text{g}/\text{m}^3$)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry			
	8 Hour	0.070 ppm (137 $\mu\text{g}/\text{m}^3$)		0.070 ppm (137 $\mu\text{g}/\text{m}^3$)					
Respirable Particulate Matter (PM10) ⁹	24 Hour	50 $\mu\text{g}/\text{m}^3$	Gravimetric or Beta Attenuation	150 $\mu\text{g}/\text{m}^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis			
	Annual Arithmetic Mean	20 $\mu\text{g}/\text{m}^3$		—					
Fine Particulate Matter (PM2.5) ⁹	24 Hour	—	Gravimetric or Beta Attenuation	35 $\mu\text{g}/\text{m}^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis			
	Annual Arithmetic Mean	12 $\mu\text{g}/\text{m}^3$		12.0 $\mu\text{g}/\text{m}^3$	15 $\mu\text{g}/\text{m}^3$				
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)			
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—				
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—				
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 $\mu\text{g}/\text{m}^3$)	Gas Phase Chemiluminescence	100 ppb (188 $\mu\text{g}/\text{m}^3$)	—	Gas Phase Chemiluminescence			
	Annual Arithmetic Mean	0.030 ppm (57 $\mu\text{g}/\text{m}^3$)		0.053 ppm (100 $\mu\text{g}/\text{m}^3$)	Same as Primary Standard				
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 $\mu\text{g}/\text{m}^3$)	Ultraviolet Fluorescence	75 ppb (196 $\mu\text{g}/\text{m}^3$)	—	Ultraviolet Fluorescence; Spectrophotometry (Parosaniline Method)			
	3 Hour	—		—	0.5 ppm (1300 $\mu\text{g}/\text{m}^3$)				
	24 Hour	0.04 ppm (105 $\mu\text{g}/\text{m}^3$)		0.14 ppm (for certain areas) ¹¹	—				
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹¹	—				
Lead ^{12,13}	30 Day Average	1.5 $\mu\text{g}/\text{m}^3$	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption			
	Calendar Quarter	—		1.5 $\mu\text{g}/\text{m}^3$ (for certain areas) ¹²	Same as Primary Standard				
	Rolling 3-Month Average	—		0.15 $\mu\text{g}/\text{m}^3$					
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards					
Sulfates	24 Hour	25 $\mu\text{g}/\text{m}^3$	Ion Chromatography						
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu\text{g}/\text{m}^3$)	Ultraviolet Fluorescence						
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 $\mu\text{g}/\text{m}^3$)	Gas Chromatography						

See footnotes on next page ...

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California Air Resources Board (5/4/16)

Table 1 (continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from $15 \mu\text{g}/\text{m}^3$ to $12.0 \mu\text{g}/\text{m}^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at $35 \mu\text{g}/\text{m}^3$, as was the annual secondary standard of $15 \mu\text{g}/\text{m}^3$. The existing 24-hour PM10 standards (primary and secondary) of $150 \mu\text{g}/\text{m}^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard ($1.5 \mu\text{g}/\text{m}^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Table 2
Health Effects of Major Criteria Pollutants

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> Reduced tolerance for exercise. Impairment of mental function. Impairment of fetal development. Death at high levels of exposure. Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> Motor vehicle exhaust. High temperature stationary combustion. Atmospheric reactions. 	<ul style="list-style-type: none"> Aggravation of respiratory illness. Reduced visibility. Reduced plant growth. Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> Aggravation of respiratory and cardiovascular diseases. Irritation of eyes. Impairment of cardiopulmonary function. Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> Contaminated soil. 	<ul style="list-style-type: none"> Impairment of blood function and nerve construction. Behavioral and hearing problems in children.
Respirable Particulate Matter (PM-10)	<ul style="list-style-type: none"> Stationary combustion of solid fuels. Construction activities. Industrial processes. Atmospheric chemical reactions. 	<ul style="list-style-type: none"> Reduced lung function. Aggravation of the effects of gaseous pollutants. Aggravation of respiratory and cardio respiratory diseases. Increased cough and chest discomfort. Soiling. Reduced visibility.
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> Fuel combustion in motor vehicles, equipment, and industrial sources. Residential and agricultural burning. Industrial processes. Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics. 	<ul style="list-style-type: none"> Increases respiratory disease. Lung damage. Cancer and premature death. Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> Combustion of sulfur-containing fossil fuels. Smelting of sulfur-bearing metal ores. Industrial processes. 	<ul style="list-style-type: none"> Aggravation of respiratory diseases (asthma, emphysema). Reduced lung function. Irritation of eyes. Reduced visibility. Plant injury. Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted in 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard, but only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in 2005, which aligned with the exposure period for the federal 8-hour standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.075 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress towards attaining state standards, but there are no hard deadlines or any consequences of non-attainment. During the same re-evaluation process, the ARB adopted an annual state standard for nitrogen dioxide (NO_2) that is more stringent than the corresponding federal standard, and strengthened the state one-hour NO_2 standard.

As part of EPA's 2002 consent decree on clean air standards, a further review of airborne particulate matter (PM) and human health was initiated. A substantial modification of federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to 10 micron size was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted. In December, 2012, the federal annual standard for PM-2.5 was reduced from $15 \mu\text{g}/\text{m}^3$ to $12 \mu\text{g}/\text{m}^3$ which matches the California AAQS. The severity of the basin's non-attainment status for PM-2.5 may be increased by this action and thus require accelerated planning for future PM-2.5 attainment.

In response to continuing evidence that ozone exposure at levels just meeting federal clean air standards is demonstrably unhealthy, EPA had proposed a further strengthening of the 8-hour standard. A new 8-hour ozone standard was adopted in 2015 after extensive analysis and public input. The adopted national 8-hour ozone standard is 0.07 ppm which matches the current California standard. It will require three years of ambient data collection, then 2 years of non-attainment findings and planning protocol adoption, then several years of plan development and approval. Final air quality plans for the new standard are likely to be adopted around 2022. Ultimate attainment of the new standard in ozone problem areas such as Southern California might be after 2025.

BASELINE AIR QUALITY

In the CVPA portion of the SSAB, air quality planning, enforcement and monitoring responsibilities are carried out by the South Coast Air Quality Management District (SCAQMD). Existing and probable future levels of air quality around the project area can be best inferred from ambient air quality measurements conducted by the SCAQMD at the Indio and Palm Springs air quality monitoring stations. In Indio, ozone and 10 microns or less in diameter, (respirable) particulates called PM-10, are monitored. These two pollutants are the main air pollution problems in the CVPA portion of the SSAB. Vehicular pollution levels such as carbon monoxide (CO) and nitrogen dioxide (NO₂) are monitored at Palm Springs. Levels of CO and NO₂ at the project site are likely lower than those monitored in Palm Springs. However, because CO and NO₂ levels in Palm Springs are well within acceptable limits, their use to characterize the project site introduces no complications. The last four years of published data from Indio and Palm Springs stations are summarized in Table 3. The following conclusions can be drawn from this data:

1. Photochemical smog (ozone) levels periodically exceed standards. The 1-hour state standard was violated less than one percent of all days in the last four years near Palm Springs. The 8-hour state ozone standard has been exceeded an average of seven percent of all days per year in the same time period. The Federal eight-hour ozone standard is violated on around three percent of all days per year. Ozone levels are much lower than 10 to 20 years ago. Attainment of all clean air standards in the project vicinity is not likely to occur soon, but the severity and frequency of violations is expected to continue to slowly decline during the current decade.
2. Carbon monoxide (CO) measurements near the project site have declined throughout the last decade, and 1 and 8-hour CO levels were at their lowest in the past two years. Federal and state CO standards have not been exceeded in the last 10+ years. Despite continued basin-wide growth, maximum one- or 8-hour CO levels at the closest air monitoring station are less than 25 percent of their most stringent standards because of continued vehicular improvements.
3. PM-10 levels as measured at Indio, have exceeded the state 24-hour standard on 23 percent of all measurement days in the last four years, but the national 24-hour particulate standard has not been exceeded during the same period. Particulate levels have frequently exceeded the more restrictive state standard.
4. A fraction of PM-10 is comprised of ultra-small diameter particulates capable of being inhaled into deep lung tissue (PM-2.5). There have no violations of the 24-hour federal PM-2.5 standard in recent years. With dustier conditions along the I-10 Corridor, there may be occasional violations of PM-2.5 standards at the project site.

Table 3
Air Quality Monitoring Summary
(Days Standards Were Exceeded and Maximum Observed Concentrations 2013-2016)

Pollutant/Standard	2013	2014	2015	2016
Ozone^a				
1-Hour > 0.09 ppm (S)	2	2	0	2
8-Hour > 0.07 ppm (S)	38	30	12	27
8- Hour > 0.075 ppm (F)	18	10	4	12
Max. 1-Hour Conc. (ppm)	0.105	0.095	0.093	0.099
Max. 8-Hour Conc. (ppm)	0.087	0.091	0.085	0.089
Carbon Monoxide^b				
1-hour > 20. ppm (S)	0	0	0	0
8- Hour > 9. ppm (S,F)	0	0	0	0
Max 8-hour Conc. (ppm)	1.5	0.9	0.7	1.5
Nitrogen Dioxide^b				
1-Hour > 0.18 ppm (S)	0	0	0	0
Max 1-hour Conc. (ppm)	0.05	0.05	0.04	0.04
Respirable Particulates (PM-10)^a				
24-hour > 50 µg/m ³ (S)	23/120	64/359	36/270	56/313
24-hour > 150 µg/m ³ (F)	0/120	1/359*	0/270	0/313
Max. 24-Hr. Conc. (µg/m ³)	38.1	152*	145.	137.
Ultra-Fine Particulates (PM-2.5)^a				
24-Hour > 35 µg/m ³ (F)	0/118	0/112	0/94	0/115
Max. 24-Hr. Conc. (µg/m ³)	25.8	26.5	24.6	25.8

*high wind event, excluded from annual statistics

(S) = state standard, (F) = federal standard

^aData from Indio monitoring station.

^bData from Palm Springs air monitoring station.

Source: SCAQMD Air Monitoring Summaries.

AIR QUALITY PLANNING

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The 1990 Federal Clean Air Act Amendment (CAA) required that all states with air-sheds with “serious” or worse ozone problems submit a revision to the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised and approved over the past decade. The most current regional attainment emissions forecast for ozone precursors (ROG and NOx) and for carbon monoxide (CO) and for particulate matter are shown in Table 4. Substantial reductions in emissions of ROG, NOx and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

The Air Quality Management District (AQMD) adopted an updated clean air “blueprint” in August 2003. The 2003 Air Quality Management Plan (AQMP) was approved by the EPA in 2004. The AQMP outlined the air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated.

With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. As previously noted, the attainment date was to “slip” from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard.

Because projected attainment by 2021 required control technologies that did not exist yet, the SCAQMD requested a voluntary “bump-up” from a “severe non-attainment” area to an “extreme non-attainment” designation for ozone. The extreme designation was to allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on “black-box” measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from “severe-17” to “extreme.” This reclassification set a later attainment deadline (2024), but also required the air basin to adopt even more stringent emissions controls.

Table 4
South Coast Air Basin Emissions Forecasts (Emissions in tons/day)

Pollutant	2015 ^a	2020 ^b	2025 ^b	2030 ^b
NOx	357	289	266	257
VOC	400	393	393	391
PM-10	161	165	170	172
PM-2.5	67	68	70	71

^a2015 Base Year.

^bWith current emissions reduction programs and adopted growth forecasts.

Source: California Air Resources Board, 2013 Almanac of Air Quality

In other air quality attainment plan reviews, EPA had disapproved part of the SCAB PM-2.5 attainment plan included in the AQMP. EPA stated that the current attainment plan relied on PM-2.5 control regulations that had not yet been approved or implemented. It was expected that a number of rules that were pending approval would remove the identified deficiencies. If these issues were not resolved within the next several years, federal funding sanctions for transportation projects could result. The 2012 AQMP included in the current California State Implementation Plan (SIP) was expected to remedy identified PM-2.5 planning deficiencies.

The federal Clean Air Act requires that non-attainment air basins have EPA approved attainment plans in place. This requirement includes the federal one-hour ozone standard even though that standard was revoked almost ten years ago. There was no approved attainment plan for the one-hour federal standard at the time of revocation. Through a legal quirk, the SCAQMD is now required to develop an AQMP for the long since revoked one-hour federal ozone standard. Because the current SIP for the basin contains a number of control measures for the 8-hour ozone standard that are equally effective for one-hour levels, the 2012 AQMP was believed to satisfy hourly attainment planning requirements.

AQMPs are required to be updated every three years. The 2012 AQMP was adopted in early 2013. An updated AQMP was required for completion in 2016. The 2016 AQMP was adopted by the SCAQMD Board in March, 2017, and has been submitted the California Air Resources Board for forwarding to the EPA. The 2016 AQMP acknowledges that motor vehicle emissions have been effectively controlled and that reductions in NOx, the continuing ozone problem pollutant, may need to come from major stationary sources (power plants, refineries, landfill flares, etc.) . The current attainment deadlines for all federal non-attainment pollutants are now as follows:

8-hour ozone (70 ppb)	2032
Annual PM-2.5 (12 µg/m ³)	2025
8-hour ozone (75 ppb)	2024 (old standard)
1-hour ozone (120 ppb)	2023 (rescinded standard)

24-hour PM-2.5 (35 µg/m³) 2019

The key challenge is that NOx emission levels, as a critical ozone precursor pollutant, are forecast to continue to exceed the levels that would allow the above deadlines to be met. Unless additional stringent NOx control measures are adopted and implemented, ozone attainment goals may not be met.

The proposed project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing water improvement projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

AIR QUALITY IMPACT

STANDARDS OF SIGNIFICANCE

Air quality impacts are considered “significant” if they cause clean air standards to be violated where they are currently met, or if they “substantially” contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following five tests of air quality impact significance. A project would have a potentially significant impact if it:

- a. Conflicts with or obstructs implementation of the applicable air quality plan.
- b. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
- c. Results in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- d. Exposes sensitive receptors to substantial pollutant concentrations.
- e. Creates objectionable odors affecting a substantial number of people.

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based

upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects in the Coachella Valley portion of the SCAQMD with daily emissions that exceed any of the following emission thresholds are to be considered significant under CEQA guidelines.

Table 5
Daily Emissions Thresholds

Pollutant	Construction ¹	Operations ²
ROG	75	75
NOx	100	100
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

¹ Construction thresholds apply to both the SCAB and the Coachella Valley (Salton Sea and Mojave Desert Air Basins.

² For Coachella Valley the mass daily emissions thresholds for operation are the same as the construction daily emissions thresholds.

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.
- Project could generate vehicle trips that cause a CO hot spot.

CONSTRUCTION ACTIVITY IMPACTS

CalEEMod was developed by the SCAQMD to provide a model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions.

The project will construct the West Valley Water Reclamation Facility (WVWRF) near the junction of Little Morongo Road and 20th Avenue. Approximately 7,200 residences currently with septic systems will tie into the plant. Conveyance pipelines for these residences as well as construction of a conveyance system connecting existing sewer areas to the WVWRF will be installed.

Construction of the WVWRF is expected to take 18 months. The approximately 80,000 linear feet of pipeline is expected to take 100 days with two teams working concurrently at a progress rate of 200-400 feet per day. Estimated construction emissions were modeled using CalEEMod2016.3.2 to identify maximum daily emissions for each pollutant during project construction.

Table 6
WVWRF Construction Activity Equipment Fleet
100 workers per day

Phase Name and Duration	Equipment
Excavation and Grading (2 months)	1 Excavator
	1 Dozer
	1 Grader
	2 Loader/Backhoes
Building and Equipping (14 months)	1 Crane
	3 Loader/Backhoes
	1 Generator Set
	1 Welder
	3 Forklifts
Finish and Clean Up (2 months)	1 Paver
	2 Compactors
	2 Rollers

Pipeline Installation (per team)

Phase Name and Duration	Equipment
Prep and Concrete Removal (20 days)	1 Concrete Saw
	2 Loader/Backhoes
Trenching and Pipeline Install (60 days)	2 Trenchers
	1 Excavator
	2 Forklifts
	2 Loader/Backhoes
Backfill and Paving (20 days)	4 Mixers
	1 Paver
	2 Rollers
	2 Loader/Backhoes
	2 Compactors

Utilizing this indicated equipment fleet and durations shown in Table 6 the following worst case daily construction emissions are calculated by CalEEMod and are listed in Table 7. Pipeline construction is assumed to occur concurrently with construction of the WVWRF. There will be two teams laying pipeline simultaneously.

Table 7
WVWRF Construction Activity Emissions
Maximum Daily Emissions (pounds/day)

Maximal Construction Emissions	ROG	NOx	CO	SO₂	PM-10	PM-2.5
2019						
WVWRF	2.8	26.3	20.6	0.0	8.4	4.7
1st Pipeline Team	2.1	21.0	16.9	0.0	7.5	4.5
2nd Pipeline Team	2.1	21.0	16.9	0.0	7.5	4.5
2019 Total	7.0	68.3	54.4	0.0	23.4	13.7
2020						
WVWRF	2.5	19.6	20.0	0.0	2.0	1.3
2020Total	2.5	19.6	20.0	0.0	2.0	1.3
SCAQMD Thresholds	75	100	550	150	150	55

Peak daily construction activity emissions are estimated be below SCAQMD CEQA thresholds even if construction of the plant and two teams of pipeline installation were under simultaneous construction. There is no need for added mitigation.

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-,

or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

LOCALIZED SIGNIFICANCE THRESHOLDS

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

Use of an LST analysis for a project is optional. For the proposed project, the only source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NOx), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500 meter source-receptor distances. For this project distances to the closest sensitive use will vary by project component. For the treatment plant the nearest residence is 1.8 miles away so a 500 meter source-receptor distance was used. However, the pipeline will be much closer to homes, and therefore the most stringent 25 meter distance was selected for analysis. Screening level concentration data is currently published for 1, 2 and 5 acre sites. For this project the most stringent standards for a 1 acre site were used. For the LST analysis it was assumed that emissions associated with 200 linear feet could impact a single receptor on a single day.

The following thresholds and emissions in Table 8 are therefore determined (pounds per day):

Table 8
LST and Project Emissions (pounds/day)

LST 1.0 acres/500 meters Coachella Valley	CO	NOx	PM-10	PM-2.5
LST Significance Threshold	24,417	733	214	105
Treatment Plant Emissions	21	26	8	5

LST 1.0 acres/25 meters Coachella Valley	CO	NOx	PM-10	PM-2.5
LST Significance Threshold	878	132	4	3
Pipeline Emissions	15	17	2	2

CalEEMod Output in Appendix

LSTs were compared to the maximum daily construction activities. As seen in Table 8, emissions meet the LST for construction thresholds without the need for added mitigation. LST impacts are less-than-significant.

OPERATIONAL IMPACTS

Operational air pollution emissions will be minimal. Electrical generation of power will be used for pumping. Electrical consumption has no single uniquely related air pollution emissions source because power is supplied to and drawn from a regional grid. Electrical power is generated regionally by a combination of non-combustion (nuclear, hydroelectric, solar, wind, geothermal, etc.) and fossil fuel combustion sources. There is no direct nexus between consumption and the type of power source or the air basin where the source is located. Operational air pollution emissions from electrical generation are therefore not attributable on a project-specific basis. The project is expected to require only 20 employees.

ODORS

Odors will be controlled by a system consisting of covers over selected process areas, foul air collection, and activated carbon treatment before exhausting to atmosphere. The predominant wind direction is from the west. The exhaust from the odor control system will be located near the middle interior of the site to allow for air dispersion before reaching the east property boundary.

CONSTRUCTION EMISSIONS MINIMIZATION

Construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds. Nevertheless, emissions minimization through enhanced dust control measures is recommended for use because of the non-attainment status of the air and proximity of residential uses. Recommended measures include:

Fugitive Dust Control

- Apply soil stabilizers or moisten inactive areas.
- Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day).
- Cover all stock piles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site

Similarly, ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD CEQA thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control options include:

Exhaust Emissions Control

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better rated heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

GREENHOUSE GAS EMISSIONS

“Greenhouse gases” (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as “global warming.” These greenhouse gases contribute to an increase in the temperature of the earth’s atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statutes and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07.

AB 32 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California’s reputation as a “national and international leader on energy conservation and environmental stewardship.” It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Requires immediate “early action” control programs on the most readily controlled GHG sources.
- Mandates that by 2020, California’s GHG emissions be reduced to 1990 levels.
- Forces an overall reduction of GHG gases in California by 25-40%, from business as usual, to be achieved by 2020.
- Must complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been

developed. GHG sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

THRESHOLDS OF SIGNIFICANCE

In response to the requirements of SB97, the State Resources Agency developed guidelines for the treatment of GHG emissions under CEQA. These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March, 2010. The CEQA Appendix G guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or,
- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The process is broken down into quantification of project-related GHG emissions, making a determination of significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. At each of these steps, the new GHG guidelines afford the lead agency with substantial flexibility.

Emissions identification may be quantitative, qualitative or based on performance standards. CEQA guidelines allow the lead agency to “select the model or methodology it considers most appropriate.” The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the ensuing analysis.

The significance of those emissions then must be evaluated; the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO₂ equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT CO₂e for all land use types. Although the 10,000 MT industrial threshold would be appropriate for this project, the more stringent 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, project related GHG

emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

PROJECT RELATED GHG EMISSIONS GENERATION

Construction Activity GHG Emissions

The project is assumed to require less than two years for construction. During project construction, the CalEEMod2016.3.2 computer model predicts that the construction activities will generate the annual CO₂e emissions identified in Table 9.

Table 9
Construction Emissions (Metric Tons CO₂e)

	CO ₂ e
Year 2019	
WVWRP	359.1
2 Pipelines	196.8
Total	555.9
Amortized	18.5
Year 2020	
WVWRP	170.7
Amortized	5.7

CalEEMod Output provided in appendix

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less-than-significant.

Project Operational GHG Emissions

Except for employee commuting, the only operational source of GHG emissions would be associated with electrical motors. Electricity is generated from a variety of resources at various locations in the western United States. The California Climate Action Registry Protocol (2009) states that each megawatt-hour (MW-HR) of electricity consumption in California results in the release of 0.331 MT of CO₂(e).

The project proposes equipment totaling approximately 1,030 HP which would translate into 770 KW. Assuming the equipment operates with an 80% load factor this would translate to an annual average of 5,400 MWH per year in increased project electrical consumption. Electricity use will result in GHG emissions from the fossil fueled fraction of Southern California's electrical resource calculated as follows:

$$5,400 \text{ MWH/year} \times 0.331 \text{ MT/MWH} = 1,787 \text{ MT/year}$$

Therefore, the Table 10 summarizes the total project contribution to GHG.

Table 10
Total Project GHG Emissions

Source:	MT/year CO ₂ (e)
Electrical Consumption	1,787.0
Employee Commuting and On-Site Energy Use*	129.4
Amortized Construction	24.2
Total	1,940.6

*mobile emissions associated with commuting and on-site area source, energy, water and waste emissions for employees working at the site

The screening threshold of 3,000 MT of CO₂(e) GHG emissions will not be exceeded. Both the construction and operations GHG emissions are far below the 3,000 MT CO₂(e) advisory threshold for impact significance

CALEEMOD2016.3.2 COMPUTER MODEL OUTPUT

TREATMENT PLANT CONSTRUCTION

- DAILY EMISSIONS
- ANNUAL EMISSIONS

PIPELINE INSTALLATION

- DAILY EMISSIONS
- ANNUAL EMISSIONS

TREATMENT PLANT OPERATIONAL EMISSIONS

- ANNUAL EMISSIONS

LST FOR PIPELINE CONSTRUCTION

- DAILY EMISSIONS

WVWRP - Riverside-Salton Sea County, Summer

WVWRP
Riverside-Salton Sea County, Summer

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	8.50	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2020
Utility Company					
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - plant and basin area

Construction Phase - 2 months grade and prep, 14 months construct and equip, 2 month finish and clean up

Off-road Equipment - Grade: 1 excavator, 1 grader, 1 dozer, 2 loader/backhoes

Off-road Equipment - Building and Equip: 1 crane, 3 forklifts, 1 gen set, 3 loader.backhoes, 1 welder

Off-road Equipment - Finish and Clean Up: 1 paver, 2 rollers, 2 compactors

Trips and VMT - 100 workers, 2 vendor trips/day

Construction Off-road Equipment Mitigation - water 3x daily

WVWRP - Riverside-Salton Sea County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	280.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseEndDate	1/27/2020	5/5/2020
tblConstructionPhase	PhaseEndDate	3/11/2019	4/8/2019
tblConstructionPhase	PhaseEndDate	2/24/2020	7/24/2020
tblConstructionPhase	PhaseStartDate	3/12/2019	4/10/2019
tblConstructionPhase	PhaseStartDate	1/28/2020	6/1/2020
tblGrading	AcresOfGrading	20.00	10.00
tblLandUse	LotAcreage	0.00	8.50
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblTripsAndVMT	Hauling TripLength	20.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	100.00
tblTripsAndVMT	WorkerTripNumber	13.00	100.00
tblTripsAndVMT	WorkerTripNumber	13.00	100.00

2.0 Emissions Summary

WVWRP - Riverside-Salton Sea County, Summer

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					
2019	2.8211	26.2725	20.6444	0.0360	7.1239	1.2966	8.3705	3.5608	1.2189	4.7077	0.0000	3,495.660 3	3,495.660 3	0.8563	0.0000	3,512.162 3
2020	2.5441	19.6100	20.0052	0.0357	0.8467	1.1232	1.9699	0.2248	1.0560	1.2808	0.0000	3,429.772 4	3,429.772 4	0.6485	0.0000	3,445.985 6
Maximum	2.8211	26.2725	20.6444	0.0360	7.1239	1.2966	8.3705	3.5608	1.2189	4.7077	0.0000	3,495.660 3	3,495.660 3	0.8563	0.0000	3,512.162 3

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					
2019	2.8211	26.2725	20.6444	0.0360	3.2887	1.2966	4.5353	1.5241	1.2189	2.6710	0.0000	3,495.660 3	3,495.660 3	0.8563	0.0000	3,512.162 3
2020	2.5441	19.6100	20.0052	0.0357	0.8467	1.1232	1.9699	0.2248	1.0560	1.2808	0.0000	3,429.772 4	3,429.772 4	0.6485	0.0000	3,445.985 6
Maximum	2.8211	26.2725	20.6444	0.0360	3.2887	1.2966	4.5353	1.5241	1.2189	2.6710	0.0000	3,495.660 3	3,495.660 3	0.8563	0.0000	3,512.162 3

	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	48.12	0.00	37.09	53.80	0.00	34.01	0.00	0.00	0.00	0.00	0.00	0.00

WVWRP - Riverside-Salton Sea County, Summer

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	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	
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	0.0000	
Total	1.0000e-005	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	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	
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	0.0000	
Total	1.0000e-005	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		

WVWRP - Riverside-Salton Sea County, Summer

	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	Grading	Grading	2/12/2019	4/8/2019	5	40	
2	Building Construction	Building Construction	4/10/2019	5/5/2020	5	280	
3	Finish and Clean Up	Paving	6/1/2020	7/24/2020	5	40	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

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

WVWRP - Riverside-Salton Sea County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Finish and Clean Up	Plate Compactors	2	8.00	8	0.43
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Finish and Clean Up	Pavers	1	8.00	130	0.42
Finish and Clean Up	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

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
Building Construction	9	100.00	2.00	0.00	11.00	5.40	40.00	LD_Mix	HDT_Mix	HHDT
Grading	5	100.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Finish and Clean Up	5	100.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

WVWRP - Riverside-Salton Sea County, Summer

3.2 Grading - 2019**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					6.2872	0.0000	6.2872	3.3389	0.0000	3.3389			0.0000			0.0000	
Off-Road	2.3477	26.0106	13.9907	0.0265		1.2413	1.2413		1.1420	1.1420		2,629.264 9	2,629.264 9	0.8319		2,650.061 7	
Total	2.3477	26.0106	13.9907	0.0265	6.2872	1.2413	7.5285	3.3389	1.1420	4.4809		2,629.264 9	2,629.264 9	0.8319		2,650.061 7	

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	0.4540	0.2618	3.4417	8.6100e-003	0.8367	5.3300e-003	0.8420	0.2219	4.9100e-003	0.2268			857.1022	857.1022	0.0245		857.7133
Total	0.4540	0.2618	3.4417	8.6100e-003	0.8367	5.3300e-003	0.8420	0.2219	4.9100e-003	0.2268			857.1022	857.1022	0.0245		857.7133

WVWRP - Riverside-Salton Sea County, Summer

3.2 Grading - 2019**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					2.4520	0.0000	2.4520	1.3022	0.0000	1.3022			0.0000			0.0000	
Off-Road	2.3477	26.0106	13.9907	0.0265		1.2413	1.2413		1.1420	1.1420	0.0000	2,629.264 9	2,629.264 9	0.8319		2,650.061 7	
Total	2.3477	26.0106	13.9907	0.0265	2.4520	1.2413	3.6933	1.3022	1.1420	2.4442	0.0000	2,629.264 9	2,629.264 9	0.8319		2,650.061 7	

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	0.4540	0.2618	3.4417	8.6100e-003	0.8367	5.3300e-003	0.8420	0.2219	4.9100e-003	0.2268			857.1022	857.1022	0.0245	857.7133	
Total	0.4540	0.2618	3.4417	8.6100e-003	0.8367	5.3300e-003	0.8420	0.2219	4.9100e-003	0.2268			857.1022	857.1022	0.0245	857.7133	

WVWRP - Riverside-Salton Sea County, Summer

3.3 Building Construction - 2019**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	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	2,591.580 2	2,591.580 2	0.6313		2,607.363 5	
Total	2.3612	21.0788	17.1638	0.0269		1.2899	1.2899		1.2127	1.2127	2,591.580 2	2,591.580 2	0.6313		2,607.363 5	

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	
Vendor	5.9500e-003	0.2091	0.0389	4.5000e-004	0.0100	1.3700e-003	0.0114	2.8900e-003	1.3100e-003	4.2000e-003	46.9780	46.9780	4.3000e-003		47.0855	
Worker	0.4540	0.2618	3.4417	8.6100e-003	0.8367	5.3300e-003	0.8420	0.2219	4.9100e-003	0.2268	857.1022	857.1022	0.0245		857.7133	
Total	0.4600	0.4710	3.4807	9.0600e-003	0.8467	6.7000e-003	0.8534	0.2248	6.2200e-003	0.2310	904.0802	904.0802	0.0288		904.7988	

WVWRP - Riverside-Salton Sea County, Summer

3.3 Building Construction - 2019**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	2.3612	21.0788	17.1638	0.0269			1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 5
Total	2.3612	21.0788	17.1638	0.0269			1.2899	1.2899		1.2127	1.2127	0.0000	2,591.580 2	2,591.580 2	0.6313		2,607.363 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	5.9500e-003	0.2091	0.0389	4.5000e-004	0.0100	1.3700e-003	0.0114	2.8900e-003	1.3100e-003	4.2000e-003			46.9780	46.9780	4.3000e-003	47.0855	
Worker	0.4540	0.2618	3.4417	8.6100e-003	0.8367	5.3300e-003	0.8420	0.2219	4.9100e-003	0.2268			857.1022	857.1022	0.0245	857.7133	
Total	0.4600	0.4710	3.4807	9.0600e-003	0.8467	6.7000e-003	0.8534	0.2248	6.2200e-003	0.2310			904.0802	904.0802	0.0288		904.7988

WVWRP - Riverside-Salton Sea County, Summer

3.3 Building Construction - 2020**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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	2,553.063 1	2,553.063 1	0.6229			2,568.634 5
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	2,553.063 1	2,553.063 1	0.6229			2,568.634 5

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	5.0300e-003	0.1909	0.0346	4.4000e-004	0.0100	9.3000e-004	0.0110	2.8900e-003	8.9000e-004	3.7800e-003	46.6611	46.6611	4.0000e-003			46.7612
Worker	0.4192	0.2331	3.1221	8.3400e-003	0.8367	5.2200e-003	0.8419	0.2219	4.8100e-003	0.2267	830.0482	830.0482	0.0217			830.5899
Total	0.4243	0.4240	3.1567	8.7800e-003	0.8467	6.1500e-003	0.8529	0.2248	5.7000e-003	0.2305	876.7093	876.7093	0.0257			877.3511

WVWRP - Riverside-Salton Sea County, Summer

3.3 Building Construction - 2020**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	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 5	
Total	2.1198	19.1860	16.8485	0.0269		1.1171	1.1171		1.0503	1.0503	0.0000	2,553.063 1	2,553.063 1	0.6229		2,568.634 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	0.0000	0.0000	
Vendor	5.0300e-003	0.1909	0.0346	4.4000e-004	0.0100	9.3000e-004	0.0110	2.8900e-003	8.9000e-004	3.7800e-003	46.6611	46.6611	4.0000e-003			46.7612	
Worker	0.4192	0.2331	3.1221	8.3400e-003	0.8367	5.2200e-003	0.8419	0.2219	4.8100e-003	0.2267	830.0482	830.0482	0.0217			830.5899	
Total	0.4243	0.4240	3.1567	8.7800e-003	0.8467	6.1500e-003	0.8529	0.2248	5.7000e-003	0.2305		876.7093	876.7093	0.0257		877.3511	

WVWRP - Riverside-Salton Sea County, Summer

3.4 Finish and Clean Up - 2020**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	0.7592	7.4752	7.1060	0.0109		0.4215	0.4215		0.3894	0.3894	1,032.363 8	1,032.363 8	0.3187			1,040.332 4	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	0.7592	7.4752	7.1060	0.0109		0.4215	0.4215		0.3894	0.3894		1,032.363 8	1,032.363 8	0.3187			1,040.332 4

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	0.4192	0.2331	3.1221	8.3400e-003	0.8367	5.2200e-003	0.8419	0.2219	4.8100e-003	0.2267	830.0482	830.0482	0.0217			830.5899
Total	0.4192	0.2331	3.1221	8.3400e-003	0.8367	5.2200e-003	0.8419	0.2219	4.8100e-003	0.2267		830.0482	830.0482	0.0217		830.5899

WVWRP - Riverside-Salton Sea County, Summer

3.4 Finish and Clean Up - 2020**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	0.7592	7.4752	7.1060	0.0109		0.4215	0.4215		0.3894	0.3894	0.0000	1,032.363 8	1,032.363 8	0.3187		1,040.332 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7592	7.4752	7.1060	0.0109		0.4215	0.4215		0.3894	0.3894	0.0000	1,032.363 8	1,032.363 8	0.3187		1,040.332 4

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	0.4192	0.2331	3.1221	8.3400e-003	0.8367	5.2200e-003	0.8419	0.2219	4.8100e-003	0.2267		830.0482	830.0482	0.0217		830.5899
Total	0.4192	0.2331	3.1221	8.3400e-003	0.8367	5.2200e-003	0.8419	0.2219	4.8100e-003	0.2267		830.0482	830.0482	0.0217		830.5899

4.0 Operational Detail - Mobile

WVWRP - Riverside-Salton Sea County, Summer

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	12.50	4.20	5.40	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	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

WVWRP - Riverside-Salton Sea County, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

WVWRP - Riverside-Salton Sea County, Summer

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
Total		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000						

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
Total		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000						

6.0 Area Detail**6.1 Mitigation Measures Area**

WVWRP - Riverside-Salton Sea County, Summer

	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	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
Unmitigated	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

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	0.0000					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000
Consumer Products	0.0000					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	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

WVWRP - Riverside-Salton Sea County, Summer

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	0.0000						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	0.0000						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	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

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**

WVWRP - Riverside-Salton Sea County, Summer

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

WVWRP - Riverside-Salton Sea County, Annual

WVWRP
Riverside-Salton Sea 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	8.50	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2020
Utility Company Southern California Edison					
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - plant and basin area

Construction Phase - 2 months grade and prep, 14 months construct and equip, 2 month finish and clean up

Off-road Equipment - Grade: 1 excavator, 1 grader, 1 dozer, 2 loader/backhoes

Off-road Equipment - Building and Equip: 1 crane, 3 forklifts, 1 gen set, 3 loader.backhoes, 1 welder

Off-road Equipment - Finish and Clean Up: 1 paver, 2 rollers, 2 compactors

Trips and VMT - 100 workers, 2 vendor trips/day

Construction Off-road Equipment Mitigation - water 3x daily

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Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	280.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	NumDays	20.00	40.00
tblConstructionPhase	PhaseEndDate	1/27/2020	5/5/2020
tblConstructionPhase	PhaseEndDate	3/11/2019	4/8/2019
tblConstructionPhase	PhaseEndDate	2/24/2020	7/24/2020
tblConstructionPhase	PhaseStartDate	3/12/2019	4/10/2019
tblConstructionPhase	PhaseStartDate	1/28/2020	6/1/2020
tblGrading	AcresOfGrading	20.00	10.00
tblLandUse	LotAcreage	0.00	8.50
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblTripsAndVMT	Hauling TripLength	20.00	40.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	100.00
tblTripsAndVMT	WorkerTripNumber	13.00	100.00
tblTripsAndVMT	WorkerTripNumber	13.00	100.00

2.0 Emissions Summary

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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					
2019	0.3181	2.5750	2.2560	4.0400e-003	0.2213	0.1481	0.3694	0.0922	0.1387	0.2309	0.0000	357.3441	357.3441	0.0722	0.0000	359.1491
2020	0.1350	1.0377	1.0769	1.9500e-003	0.0539	0.0591	0.1130	0.0143	0.0554	0.0697	0.0000	169.8821	169.8821	0.0325	0.0000	170.6955
Maximum	0.3181	2.5750	2.2560	4.0400e-003	0.2213	0.1481	0.3694	0.0922	0.1387	0.2309	0.0000	357.3441	357.3441	0.0722	0.0000	359.1491

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					
2019	0.3181	2.5750	2.2560	4.0400e-003	0.1446	0.1481	0.2927	0.0514	0.1387	0.1902	0.0000	357.3438	357.3438	0.0722	0.0000	359.1488
2020	0.1350	1.0377	1.0769	1.9500e-003	0.0539	0.0591	0.1130	0.0143	0.0554	0.0697	0.0000	169.8819	169.8819	0.0325	0.0000	170.6954
Maximum	0.3181	2.5750	2.2560	4.0400e-003	0.1446	0.1481	0.2927	0.0514	0.1387	0.1902	0.0000	357.3438	357.3438	0.0722	0.0000	359.1488

	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	27.87	0.00	15.90	38.25	0.00	13.55	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	0.4982	0.4982
2	4-1-2019	6-30-2019	0.7968	0.7968
3	7-1-2019	9-30-2019	0.8008	0.8008
4	10-1-2019	12-31-2019	0.8003	0.8003
5	1-1-2020	3-31-2020	0.7196	0.7196
6	4-1-2020	6-30-2020	0.3721	0.3721
7	7-1-2020	9-30-2020	0.0762	0.0762
		Highest	0.8008	0.8008

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	0.0000	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		
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	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		

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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	0.0000	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	
Total	0.0000	0.0000	1.0000e-005	0.0000	0.0000	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	

	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**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	2/12/2019	4/8/2019	5	40	
2	Building Construction	Building Construction	4/10/2019	5/5/2020	5	280	
3	Finish and Clean Up	Paving	6/1/2020	7/24/2020	5	40	

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Acres of Grading (Site Preparation Phase): 0**Acres of Grading (Grading Phase): 10****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
Finish and Clean Up	Plate Compactors	2	8.00	8	0.43
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Finish and Clean Up	Pavers	1	8.00	130	0.42
Finish and Clean Up	Rollers	2	8.00	80	0.38
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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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
Building Construction	9	100.00	2.00	0.00	11.00	5.40	40.00	LD_Mix	HDT_Mix	HHDT
Grading	5	100.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Finish and Clean Up	5	100.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2019**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					0.1257	0.0000	0.1257	0.0668	0.0000	0.0668	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0470	0.5202	0.2798	5.3000e-004		0.0248	0.0248		0.0228	0.0228	0.0000	47.7046	47.7046	0.0151	0.0000	48.0819		
Total	0.0470	0.5202	0.2798	5.3000e-004	0.1257	0.0248	0.1506	0.0668	0.0228	0.0896	0.0000	47.7046	47.7046	0.0151	0.0000	48.0819		

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3.2 Grading - 2019**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	8.0500e-003	5.6000e-003	0.0594	1.6000e-004	0.0165	1.1000e-004	0.0166	4.3700e-003	1.0000e-004	4.4700e-003	0.0000	14.3160	14.3160	4.0000e-004	0.0000	14.3260	
Total	8.0500e-003	5.6000e-003	0.0594	1.6000e-004	0.0165	1.1000e-004	0.0166	4.3700e-003	1.0000e-004	4.4700e-003	0.0000	14.3160	14.3160	4.0000e-004	0.0000	14.3260	

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					0.0490	0.0000	0.0490	0.0260	0.0000	0.0260	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0470	0.5202	0.2798	5.3000e-004		0.0248	0.0248		0.0228	0.0228	0.0000	47.7045	47.7045	0.0151	0.0000	48.0819	
Total	0.0470	0.5202	0.2798	5.3000e-004	0.0490	0.0248	0.0739	0.0260	0.0228	0.0489	0.0000	47.7045	47.7045	0.0151	0.0000	48.0819	

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3.2 Grading - 2019**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	8.0500e-003	5.6000e-003	0.0594	1.6000e-004	0.0165	1.1000e-004	0.0166	4.3700e-003	1.0000e-004	4.4700e-003	0.0000	14.3160	14.3160	4.0000e-004	0.0000	14.3260	
Total	8.0500e-003	5.6000e-003	0.0594	1.6000e-004	0.0165	1.1000e-004	0.0166	4.3700e-003	1.0000e-004	4.4700e-003	0.0000	14.3160	14.3160	4.0000e-004	0.0000	14.3260	

3.3 Building Construction - 2019**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	0.2243	2.0025	1.6306	2.5600e-003		0.1225	0.1225		0.1152	0.1152	0.0000	223.3490	223.3490	0.0544	0.0000	224.7092	
Total	0.2243	2.0025	1.6306	2.5600e-003		0.1225	0.1225		0.1152	0.1152	0.0000	223.3490	223.3490	0.0544	0.0000	224.7092	

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3.3 Building Construction - 2019**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	0.0201	4.0100e-003	4.0000e-005	9.4000e-004	1.3000e-004	1.0700e-003	2.7000e-004	1.3000e-004	4.0000e-004	0.0000	3.9737	3.9737	3.9000e-004	0.0000	3.9834	
Worker	0.0382	0.0266	0.2822	7.5000e-004	0.0782	5.1000e-004	0.0787	0.0208	4.7000e-004	0.0212	0.0000	68.0009	68.0009	1.9100e-003	0.0000	68.0486	
Total	0.0388	0.0467	0.2862	7.9000e-004	0.0791	6.4000e-004	0.0797	0.0210	6.0000e-004	0.0216	0.0000	71.9746	71.9746	2.3000e-003	0.0000	72.0319	

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	0.2243	2.0025	1.6306	2.5600e-003		0.1225	0.1225		0.1152	0.1152	0.0000	223.3487	223.3487	0.0544	0.0000	224.7090	
Total	0.2243	2.0025	1.6306	2.5600e-003		0.1225	0.1225		0.1152	0.1152	0.0000	223.3487	223.3487	0.0544	0.0000	224.7090	

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3.3 Building Construction - 2019**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	0.0201	4.0100e-003	4.0000e-005	9.4000e-004	1.3000e-004	1.0700e-003	2.7000e-004	1.3000e-004	4.0000e-004	0.0000	3.9737	3.9737	3.9000e-004	0.0000	3.9834	
Worker	0.0382	0.0266	0.2822	7.5000e-004	0.0782	5.1000e-004	0.0787	0.0208	4.7000e-004	0.0212	0.0000	68.0009	68.0009	1.9100e-003	0.0000	68.0486	
Total	0.0388	0.0467	0.2862	7.9000e-004	0.0791	6.4000e-004	0.0797	0.0210	6.0000e-004	0.0216	0.0000	71.9746	71.9746	2.3000e-003	0.0000	72.0319	

3.3 Building Construction - 2020**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	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2245	104.2245	0.0254	0.0000	104.8602	
Total	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2245	104.2245	0.0254	0.0000	104.8602	

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3.3 Building Construction - 2020**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	2.3000e-004	8.6500e-003	1.6900e-003	2.0000e-005	4.5000e-004	4.0000e-005	4.9000e-004	1.3000e-004	4.0000e-005	1.7000e-004	0.0000	1.8694	1.8694	1.7000e-004	0.0000	1.8737	
Worker	0.0167	0.0112	0.1211	3.5000e-004	0.0370	2.4000e-004	0.0373	9.8300e-003	2.2000e-004	0.0101	0.0000	31.1935	31.1935	8.0000e-004	0.0000	31.2135	
Total	0.0170	0.0199	0.1227	3.7000e-004	0.0375	2.8000e-004	0.0378	9.9600e-003	2.6000e-004	0.0102	0.0000	33.0629	33.0629	9.7000e-004	0.0000	33.0872	

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	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2244	104.2244	0.0254	0.0000	104.8601	
Total	0.0954	0.8634	0.7582	1.2100e-003		0.0503	0.0503		0.0473	0.0473	0.0000	104.2244	104.2244	0.0254	0.0000	104.8601	

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3.3 Building Construction - 2020**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	2.3000e-004	8.6500e-003	1.6900e-003	2.0000e-005	4.5000e-004	4.0000e-005	4.9000e-004	1.3000e-004	4.0000e-005	1.7000e-004	0.0000	1.8694	1.8694	1.7000e-004	0.0000	1.8737	
Worker	0.0167	0.0112	0.1211	3.5000e-004	0.0370	2.4000e-004	0.0373	9.8300e-003	2.2000e-004	0.0101	0.0000	31.1935	31.1935	8.0000e-004	0.0000	31.2135	
Total	0.0170	0.0199	0.1227	3.7000e-004	0.0375	2.8000e-004	0.0378	9.9600e-003	2.6000e-004	0.0102	0.0000	33.0629	33.0629	9.7000e-004	0.0000	33.0872	

3.4 Finish and Clean Up - 2020**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	0.0152	0.1495	0.1421	2.2000e-004		8.4300e-003	8.4300e-003		7.7900e-003	7.7900e-003	0.0000	18.7309	18.7309	5.7800e-003	0.0000	18.8755
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0152	0.1495	0.1421	2.2000e-004		8.4300e-003	8.4300e-003		7.7900e-003	7.7900e-003	0.0000	18.7309	18.7309	5.7800e-003	0.0000	18.8755

WVWRP - Riverside-Salton Sea County, Annual

3.4 Finish and Clean Up - 2020**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	7.4400e-003	4.9800e-003	0.0538	1.5000e-004	0.0165	1.0000e-004	0.0166	4.3700e-003	1.0000e-004	4.4700e-003	0.0000	13.8638	13.8638	3.6000e-004	0.0000	13.8727	
Total	7.4400e-003	4.9800e-003	0.0538	1.5000e-004	0.0165	1.0000e-004	0.0166	4.3700e-003	1.0000e-004	4.4700e-003	0.0000	13.8638	13.8638	3.6000e-004	0.0000	13.8727	

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	0.0152	0.1495	0.1421	2.2000e-004		8.4300e-003	8.4300e-003		7.7900e-003	7.7900e-003	0.0000	18.7309	18.7309	5.7800e-003	0.0000	18.8755	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0152	0.1495	0.1421	2.2000e-004		8.4300e-003	8.4300e-003		7.7900e-003	7.7900e-003	0.0000	18.7309	18.7309	5.7800e-003	0.0000	18.8755	

WVWRP - Riverside-Salton Sea County, Annual

3.4 Finish and Clean Up - 2020**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	7.4400e-003	4.9800e-003	0.0538	1.5000e-004	0.0165	1.0000e-004	0.0166	4.3700e-003	1.0000e-004	4.4700e-003	0.0000	13.8638	13.8638	3.6000e-004	0.0000	13.8727	
Total	7.4400e-003	4.9800e-003	0.0538	1.5000e-004	0.0165	1.0000e-004	0.0166	4.3700e-003	1.0000e-004	4.4700e-003	0.0000	13.8638	13.8638	3.6000e-004	0.0000	13.8727	

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

WVWRP - Riverside-Salton Sea 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	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	12.50	4.20	5.40	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	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

5.0 Energy Detail

Historical Energy Use: N

WVWRP - Riverside-Salton Sea County, Annual

5.1 Mitigation Measures Energy

5.2 Energy by Land Use - NaturalGas

Unmitigated

WVWRP - Riverside-Salton Sea County, Annual

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	0.0000
Total		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000						

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
Total		0.0000	0.0000	0.0000	0.0000

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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
Total		0.0000	0.0000	0.0000	0.0000

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	0.0000	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	2.0000e-005
Unmitigated	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	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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					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	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	0.0000	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

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	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					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	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	0.0000	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

7.0 Water Detail

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
Total		0.0000	0.0000	0.0000	0.0000

WVWRP - Riverside-Salton Sea County, Annual

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
Total		0.0000	0.0000	0.0000	0.0000

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

WVWRP - Riverside-Salton Sea County, Annual

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
Total		0.0000	0.0000	0.0000	0.0000

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
Total		0.0000	0.0000	0.0000	0.0000

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

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

Mission Springs Water District Pipeline

Riverside-Salton Sea County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	80,000.00	User Defined Unit	3.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2020
Utility Company Southern California Edison					
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 80,000 lf

Construction Phase - Prep: 20 days, Pipeline Install: 60 days, Backfill and Cover: 20 days

Off-road Equipment - 1 Concrete Saw, 2 Loader/Backhoes

Off-road Equipment - 1 Crane, 2 Forklifts, 2 Trenchers, 2 Loader/Backhoes

Trips and VMT - 22 worker trips/day

Off-road Equipment - 4 Mixers, 1 Paver, 2 Rollers, 2 Loader/Backhoes, 2 Compactors

Construction Off-road Equipment Mitigation -

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6.00	60.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	2/8/2019	4/25/2019
tblConstructionPhase	PhaseEndDate	12/27/2019	5/28/2019
tblConstructionPhase	PhaseStartDate	12/14/2019	5/1/2019
tblGrading	AcresOfGrading	30.00	3.00
tblLandUse	LotAcreage	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	PhaseName		Trenching and Pipeline Install
tblOffRoadEquipment	PhaseName		Trenching and Pipeline Install
tblOffRoadEquipment	PhaseName		Trenching and Pipeline Install
tblOffRoadEquipment	PhaseName		Backfill and Cover
tblOffRoadEquipment	PhaseName		Prep and Concrete Removal
tblOffRoadEquipment	PhaseName		Trenching and Pipeline Install
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	15.00	22.00
tblTripsAndVMT	WorkerTripNumber	15.00	22.00
tblTripsAndVMT	WorkerTripNumber	20.00	22.00

2.0 Emissions Summary

Mission Springs Water District Pipeline - Riverside-Salton Sea 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			
2019	2.1001	20.9909	16.8883	0.0263	6.2692	1.2641	7.5333	3.3677	1.1630	4.5307	0.0000	2,608.739 4	2,608.739 4	0.7671	0.0000	2,627.917 5
Maximum	2.1001	20.9909	16.8883	0.0263	6.2692	1.2641	7.5333	3.3677	1.1630	4.5307	0.0000	2,608.739 4	2,608.739 4	0.7671	0.0000	2,627.917 5

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			
2019	2.1001	9.9875	16.8883	0.0263	2.9279	1.2641	4.1920	1.5439	1.1630	2.7069	0.0000	2,608.739 4	2,608.739 4	0.7671	0.0000	2,627.917 5
Maximum	2.1001	9.9875	16.8883	0.0263	2.9279	1.2641	4.1920	1.5439	1.1630	2.7069	0.0000	2,608.739 4	2,608.739 4	0.7671	0.0000	2,627.917 5

	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	52.42	0.00	0.00	53.30	0.00	44.35	54.16	0.00	40.25	0.00	0.00	0.00	0.00	0.00	0.00

Mission Springs Water District Pipeline - Riverside-Salton Sea 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	0.7733	0.0759	8.2203	6.1000e-004			0.0295	0.0295		0.0295	0.0295		17.5082	17.5082	0.0470		18.6820
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	0.7733	0.0759	8.2203	6.1000e-004	0.0000	0.0295	0.0295	0.0000	0.0295	0.0295		17.5082	17.5082	0.0470	0.0000	18.6820	

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	0.7733	0.0759	8.2203	6.1000e-004			0.0295	0.0295		0.0295	0.0295		17.5082	17.5082	0.0470		18.6820
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	0.7733	0.0759	8.2203	6.1000e-004	0.0000	0.0295	0.0295	0.0000	0.0295	0.0295		17.5082	17.5082	0.0470	0.0000	18.6820	

Mission Springs Water District Pipeline - Riverside-Salton Sea 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	Prep and Concrete Removal	Demolition	1/1/2019	1/28/2019	5	20	
2	Trenching and Pipeline Install	Grading	2/1/2019	4/25/2019	5	60	
3	Backfill and Cover	Paving	5/1/2019	5/28/2019	5	20	

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

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Prep and Concrete Removal	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Backfill and Cover	Cement and Mortar Mixers	4	6.00	9	0.56
Prep and Concrete Removal	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching and Pipeline Install	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching and Pipeline Install	Rough Terrain Forklifts	2	8.00	100	0.40
Trenching and Pipeline Install	Cranes	1	6.00	231	0.29
Trenching and Pipeline Install	Trenchers	2	8.00	78	0.50
Backfill and Cover	Pavers	1	8.00	130	0.42
Backfill and Cover	Rollers	2	6.00	80	0.38
Backfill and Cover	Plate Compactors	2	8.00	8	0.43
Backfill and Cover	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Prep and Concrete Removal	6	22.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Trenching and Pipeline Install	6	22.00	2.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Backfill and Cover	8	22.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

3.2 Prep and Concrete Removal - 2019**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	0.9257	8.2443	8.2889	0.0124		0.5403	0.5403		0.5154	0.5154	1,205.255 8	1,205.255 8	0.2355			1,211.1441
Total	0.9257	8.2443	8.2889	0.0124		0.5403	0.5403		0.5154	0.5154	1,205.255 8	1,205.255 8	0.2355			1,211.144 1

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	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499	169.2566	169.2566	4.7100e-003			169.3745
Total	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499	169.2566	169.2566	4.7100e-003			169.3745

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

3.2 Prep and Concrete Removal - 2019**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	0.9257	8.2443	8.2889	0.0124		0.5403	0.5403		0.5154	0.5154	0.0000	1,205.255 8	1,205.255 8	0.2355		1,211.1441	
Total	0.9257	8.2443	8.2889	0.0124		0.5403	0.5403		0.5154	0.5154	0.0000	1,205.255 8	1,205.255 8	0.2355		1,211.144 1	

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	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499			169.2566	169.2566	4.7100e-003	169.3745	
Total	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499			169.2566	169.2566	4.7100e-003	169.3745	

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

3.3 Trenching and Pipeline Install - 2019**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					6.0751	0.0000	6.0751	3.3160	0.0000	3.3160			0.0000			0.0000	
Off-Road	1.9986	20.7236	16.2203	0.0242		1.2615	1.2615		1.1606	1.1606		2,394.577 6	2,394.577 6	0.7576		2,413.518 0	
Total	1.9986	20.7236	16.2203	0.0242	6.0751	1.2615	7.3366	3.3160	1.1606	4.4765		2,394.577 6	2,394.577 6	0.7576		2,413.518 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	0.0000	0.0000	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	6.2800e-003	0.2077	0.0459	4.3000e-004	0.0100	1.3900e-003	0.0114	2.8900e-003	1.3300e-003	4.2200e-003	44.9052	44.9052	4.7900e-003		45.0250		
Worker	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499		169.2566	169.2566	4.7100e-003		169.3745	
Total	0.1016	0.2673	0.6679	2.1300e-003	0.1941	2.5600e-003	0.1967	0.0517	2.4100e-003	0.0541		214.1618	214.1618	9.5000e-003		214.3995	

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

3.3 Trenching and Pipeline Install - 2019**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					2.7338	0.0000	2.7338	1.4922	0.0000	1.4922			0.0000			0.0000	
Off-Road	1.9986	4.6558	16.2203	0.0242		1.2615	1.2615		1.1606	1.1606	0.0000	2,394.577 6	2,394.577 6	0.7576		2,413.518 0	
Total	1.9986	4.6558	16.2203	0.0242	2.7338	1.2615	3.9953	1.4922	1.1606	2.6528	0.0000	2,394.577 6	2,394.577 6	0.7576		2,413.518 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	0.0000	0.0000	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	6.2800e-003	0.2077	0.0459	4.3000e-004	0.0100	1.3900e-003	0.0114	2.8900e-003	1.3300e-003	4.2200e-003	44.9052	44.9052	4.7900e-003			45.0250	
Worker	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499		169.2566	169.2566	4.7100e-003		169.3745	
Total	0.1016	0.2673	0.6679	2.1300e-003	0.1941	2.5600e-003	0.1967	0.0517	2.4100e-003	0.0541		214.1618	214.1618	9.5000e-003		214.3995	

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

3.4 Backfill and Cover - 2019**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	1.1168	10.4305	9.4113	0.0148		0.5928	0.5928		0.5504	0.5504	1,383.073 4	1,383.073 4	0.3907		1,392.841 3	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Total	1.1168	10.4305	9.4113	0.0148		0.5928	0.5928		0.5504	0.5504	1,383.073 4	1,383.073 4	0.3907		1,392.841 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	0.0000	0.0000	0.0000	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	
Worker	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499	169.2566	169.2566	4.7100e-003		169.3745	
Total	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499	169.2566	169.2566	4.7100e-003		169.3745	

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

3.4 Backfill and Cover - 2019**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	1.1168	9.9279	9.4113	0.0148		0.5928	0.5928		0.5504	0.5504	0.0000	1,383.073 4	1,383.073 4	0.3907		1,392.841 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1168	9.9279	9.4113	0.0148		0.5928	0.5928		0.5504	0.5504	0.0000	1,383.073 4	1,383.073 4	0.3907		1,392.841 3

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	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499		169.2566	169.2566	4.7100e-003		169.3745
Total	0.0953	0.0596	0.6220	1.7000e-003	0.1841	1.1700e-003	0.1852	0.0488	1.0800e-003	0.0499		169.2566	169.2566	4.7100e-003		169.3745

4.0 Operational Detail - Mobile

Mission Springs Water District Pipeline - Riverside-Salton Sea 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	12.50	4.20	5.40	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	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Winter

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Mission Springs Water District Pipeline - Riverside-Salton Sea 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
Total		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000						

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
Total		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000						

6.0 Area Detail**6.1 Mitigation Measures Area**

Mission Springs Water District Pipeline - Riverside-Salton Sea 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	0.7733	0.0759	8.2203	6.1000e-004		0.0295	0.0295		0.0295	0.0295		17.5082	17.5082	0.0470		18.6820	
Unmitigated	0.7733	0.0759	8.2203	6.1000e-004		0.0295	0.0295		0.0295	0.0295		17.5082	17.5082	0.0470		18.6820	

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	0.0000					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000
Landscaping	0.7733	0.0759	8.2203	6.1000e-004		0.0295	0.0295		0.0295	0.0295		17.5082	17.5082	0.0470		18.6820
Total	0.7733	0.0759	8.2203	6.1000e-004		0.0295	0.0295		0.0295	0.0295		17.5082	17.5082	0.0470		18.6820

Mission Springs Water District Pipeline - Riverside-Salton Sea 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	0.0000						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	0.0000						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	0.7733	0.0759	8.2203	6.1000e-004		0.0295	0.0295		0.0295	0.0295		17.5082	17.5082	0.0470		18.6820
Total	0.7733	0.0759	8.2203	6.1000e-004		0.0295	0.0295		0.0295	0.0295		17.5082	17.5082	0.0470		18.6820

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**

Mission Springs Water District Pipeline - Riverside-Salton Sea 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

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Annual

Mission Springs Water District Pipeline

Riverside-Salton Sea County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	80,000.00	User Defined Unit	3.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2020
Utility Company Southern California Edison					
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 80,000 lf

Construction Phase - Prep: 20 days, Pipeline Install: 60 days, Backfill and Cover: 20 days

Off-road Equipment - 1 Concrete Saw, 2 Loader/Backhoes

Off-road Equipment - 1 Crane, 2 Forklifts, 2 Trenchers, 2 Loader/Backhoes

Trips and VMT - 22 worker trips/day

Off-road Equipment - 4 Mixers, 1 Paver, 2 Rollers, 2 Loader/Backhoes, 2 Compactors

Construction Off-road Equipment Mitigation -

Mission Springs Water District Pipeline - Riverside-Salton Sea County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	6.00	60.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	PhaseEndDate	2/8/2019	4/25/2019
tblConstructionPhase	PhaseEndDate	12/27/2019	5/28/2019
tblConstructionPhase	PhaseStartDate	12/14/2019	5/1/2019
tblGrading	AcresOfGrading	30.00	3.00
tblLandUse	LotAcreage	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	4.00
tblOffRoadEquipment	PhaseName		Trenching and Pipeline Install
tblOffRoadEquipment	PhaseName		Trenching and Pipeline Install
tblOffRoadEquipment	PhaseName		Trenching and Pipeline Install
tblOffRoadEquipment	PhaseName		Backfill and Cover
tblOffRoadEquipment	PhaseName		Prep and Concrete Removal
tblOffRoadEquipment	PhaseName		Trenching and Pipeline Install
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	15.00	22.00
tblTripsAndVMT	WorkerTripNumber	15.00	22.00
tblTripsAndVMT	WorkerTripNumber	20.00	22.00

2.0 Emissions Summary

Mission Springs Water District Pipeline - Riverside-Salton Sea 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			
2019	0.0850	0.8179	0.6976	1.1000e-003	0.1916	0.0493	0.2409	0.1020	0.0456	0.1475	0.0000	97.7793	97.7793	0.0266	0.0000	98.4454
Maximum	0.0850	0.8179	0.6976	1.1000e-003	0.1916	0.0493	0.2409	0.1020	0.0456	0.1475	0.0000	97.7793	97.7793	0.0266	0.0000	98.4454

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			
2019	0.0850	0.3308	0.6976	1.1000e-003	0.0914	0.0493	0.1406	0.0473	0.0456	0.0928	0.0000	97.7792	97.7792	0.0266	0.0000	98.4453
Maximum	0.0850	0.3308	0.6976	1.1000e-003	0.0914	0.0493	0.1406	0.0473	0.0456	0.0928	0.0000	97.7792	97.7792	0.0266	0.0000	98.4453

	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	59.55	0.00	0.00	52.32	0.00	41.61	53.66	0.00	37.09	0.00	0.00	0.00	0.00	0.00	0.00

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	0.5798	0.2412
2	4-1-2019	6-30-2019	0.3233	0.1748
		Highest	0.5798	0.2412

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	0.0696	6.8300e-003	0.7398	5.0000e-005		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253
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
Total	0.0696	6.8300e-003	0.7398	5.0000e-005	0.0000	2.6500e-003	2.6500e-003	0.0000	2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253

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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	0.0696	6.8300e-003	0.7398	5.0000e-005		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253	
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	
Total	0.0696	6.8300e-003	0.7398	5.0000e-005	0.0000	2.6500e-003	2.6500e-003	0.0000	2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253	

	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**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Prep and Concrete Removal	Demolition	1/1/2019	1/28/2019	5	20	
2	Trenching and Pipeline Install	Grading	2/1/2019	4/25/2019	5	60	
3	Backfill and Cover	Paving	5/1/2019	5/28/2019	5	20	

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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
Prep and Concrete Removal	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Backfill and Cover	Cement and Mortar Mixers	4	6.00	9	0.56
Prep and Concrete Removal	Concrete/Industrial Saws	1	8.00	81	0.73
Trenching and Pipeline Install	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Trenching and Pipeline Install	Rough Terrain Forklifts	2	8.00	100	0.40
Trenching and Pipeline Install	Cranes	1	6.00	231	0.29
Trenching and Pipeline Install	Trenchers	2	8.00	78	0.50
Backfill and Cover	Pavers	1	8.00	130	0.42
Backfill and Cover	Rollers	2	6.00	80	0.38
Backfill and Cover	Plate Compactors	2	8.00	8	0.43
Backfill and Cover	Tractors/Loaders/Backhoes	1	8.00	97	0.37

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
Prep and Concrete Removal	6	22.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Trenching and Pipeline Install	6	22.00	2.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT
Backfill and Cover	8	22.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

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3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Prep and Concrete Removal - 2019**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	9.2600e-003	0.0824	0.0829	1.2000e-004		5.4000e-003	5.4000e-003		5.1500e-003	5.1500e-003	0.0000	10.9339	10.9339	2.1400e-003	0.0000	10.9873
Total	9.2600e-003	0.0824	0.0829	1.2000e-004		5.4000e-003	5.4000e-003		5.1500e-003	5.1500e-003	0.0000	10.9339	10.9339	2.1400e-003	0.0000	10.9873

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3.2 Prep and Concrete Removal - 2019**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	8.9000e-004	6.2000e-004	6.5300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5748	1.5748	4.0000e-005	0.0000	1.5759	
Total	8.9000e-004	6.2000e-004	6.5300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5748	1.5748	4.0000e-005	0.0000	1.5759	

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	9.2600e-003	0.0824	0.0829	1.2000e-004		5.4000e-003	5.4000e-003		5.1500e-003	5.1500e-003	0.0000	10.9339	10.9339	2.1400e-003	0.0000	10.9873	
Total	9.2600e-003	0.0824	0.0829	1.2000e-004		5.4000e-003	5.4000e-003		5.1500e-003	5.1500e-003	0.0000	10.9339	10.9339	2.1400e-003	0.0000	10.9873	

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3.2 Prep and Concrete Removal - 2019**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	8.9000e-004	6.2000e-004	6.5300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5748	1.5748	4.0000e-005	0.0000	1.5759	
Total	8.9000e-004	6.2000e-004	6.5300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5748	1.5748	4.0000e-005	0.0000	1.5759	

3.3 Trenching and Pipeline Install - 2019**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					0.1823	0.0000	0.1823	0.0995	0.0000	0.0995	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0600	0.6217	0.4866	7.3000e-004		0.0378	0.0378		0.0348	0.0348	0.0000	65.1697	65.1697	0.0206	0.0000	65.6852	
Total	0.0600	0.6217	0.4866	7.3000e-004	0.1823	0.0378	0.2201	0.0995	0.0348	0.1343	0.0000	65.1697	65.1697	0.0206	0.0000	65.6852	

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3.3 Trenching and Pipeline Install - 2019**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	1.8000e-004	6.3300e-003	1.2700e-003	1.0000e-005	3.0000e-004	4.0000e-005	3.4000e-004	9.0000e-005	4.0000e-005	1.3000e-004	0.0000	1.2548	1.2548	1.2000e-004	0.0000	1.2579	
Worker	2.6600e-003	1.8500e-003	0.0196	5.0000e-005	5.4300e-003	4.0000e-005	5.4700e-003	1.4400e-003	3.0000e-005	1.4700e-003	0.0000	4.7243	4.7243	1.3000e-004	0.0000	4.7276	
Total	2.8400e-003	8.1800e-003	0.0209	6.0000e-005	5.7300e-003	8.0000e-005	5.8100e-003	1.5300e-003	7.0000e-005	1.6000e-003	0.0000	5.9791	5.9791	2.5000e-004	0.0000	5.9855	

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					0.0820	0.0000	0.0820	0.0448	0.0000	0.0448	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0600	0.1397	0.4866	7.3000e-004		0.0378	0.0378		0.0348	0.0348	0.0000	65.1697	65.1697	0.0206	0.0000	65.6851	
Total	0.0600	0.1397	0.4866	7.3000e-004	0.0820	0.0378	0.1199	0.0448	0.0348	0.0796	0.0000	65.1697	65.1697	0.0206	0.0000	65.6851	

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3.3 Trenching and Pipeline Install - 2019**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	1.8000e-004	6.3300e-003	1.2700e-003	1.0000e-005	3.0000e-004	4.0000e-005	3.4000e-004	9.0000e-005	4.0000e-005	1.3000e-004	0.0000	1.2548	1.2548	1.2000e-004	0.0000	1.2579	
Worker	2.6600e-003	1.8500e-003	0.0196	5.0000e-005	5.4300e-003	4.0000e-005	5.4700e-003	1.4400e-003	3.0000e-005	1.4700e-003	0.0000	4.7243	4.7243	1.3000e-004	0.0000	4.7276	
Total	2.8400e-003	8.1800e-003	0.0209	6.0000e-005	5.7300e-003	8.0000e-005	5.8100e-003	1.5300e-003	7.0000e-005	1.6000e-003	0.0000	5.9791	5.9791	2.5000e-004	0.0000	5.9855	

3.4 Backfill and Cover - 2019**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	0.0112	0.1043	0.0941	1.5000e-004		5.9300e-003	5.9300e-003		5.5000e-003	5.5000e-003	0.0000	12.5470	12.5470	3.5400e-003	0.0000	12.6356	
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total	0.0112	0.1043	0.0941	1.5000e-004		5.9300e-003	5.9300e-003		5.5000e-003	5.5000e-003	0.0000	12.5470	12.5470	3.5400e-003	0.0000	12.6356	

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3.4 Backfill and Cover - 2019**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	8.9000e-004	6.2000e-004	6.5300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5748	1.5748	4.0000e-005	0.0000	1.5759	
Total	8.9000e-004	6.2000e-004	6.5300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5748	1.5748	4.0000e-005	0.0000	1.5759	

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	0.0112	0.0993	0.0941	1.5000e-004			5.9300e-003	5.9300e-003		5.5000e-003	5.5000e-003	0.0000	12.5470	12.5470	3.5400e-003	0.0000	12.6356
Paving	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0112	0.0993	0.0941	1.5000e-004			5.9300e-003	5.9300e-003		5.5000e-003	5.5000e-003	0.0000	12.5470	12.5470	3.5400e-003	0.0000	12.6356

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3.4 Backfill and Cover - 2019**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	8.9000e-004	6.2000e-004	6.5300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5748	1.5748	4.0000e-005	0.0000	1.5759	
Total	8.9000e-004	6.2000e-004	6.5300e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.5748	1.5748	4.0000e-005	0.0000	1.5759	

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	12.50	4.20	5.40	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	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

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	
Total		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	

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
Total		0.0000	0.0000	0.0000	0.0000

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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
Total		0.0000	0.0000	0.0000	0.0000

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	0.0696	6.8300e-003	0.7398	5.0000e-005		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253
Unmitigated	0.0696	6.8300e-003	0.7398	5.0000e-005		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253

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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	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0696	6.8300e-003	0.7398	5.0000e-005		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253	
Total	0.0696	6.8300e-003	0.7398	5.0000e-005		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253	

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	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0696	6.8300e-003	0.7398	5.0000e-005		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253	
Total	0.0696	6.8300e-003	0.7398	5.0000e-005		2.6500e-003	2.6500e-003		2.6500e-003	2.6500e-003	0.0000	1.4295	1.4295	3.8300e-003	0.0000	1.5253	

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
Total		0.0000	0.0000	0.0000	0.0000

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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
Total		0.0000	0.0000	0.0000	0.0000

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
Total		0.0000	0.0000	0.0000	0.0000

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
Total		0.0000	0.0000	0.0000	0.0000

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

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

Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

Mission Springs Operational Emissions

Riverside-Salton Sea County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - operational emissions only

Construction Phase - no construction

Off-road Equipment -

Vehicle Trips - 20 additional employees

Stationary Sources - Emergency Generators and Fire Pumps -

Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	CC_TL	4.20	20.00
tblVehicleTrips	CNW_TL	5.40	20.00
tblVehicleTrips	CW_TL	12.50	20.00
tblVehicleTrips	ST_TR	1.50	40.00
tblVehicleTrips	SU_TR	1.50	40.00
tblVehicleTrips	WD_TR	1.50	40.00

2.0 Emissions Summary

Mission Springs Operational Emissions - Riverside-Salton Sea 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						
2019	0.0123	4.5900e-003	4.6000e-003	1.0000e-005	0.0000	3.2000e-004	3.2000e-004	0.0000	3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397	
Maximum	0.0123	4.5900e-003	4.6000e-003	1.0000e-005	0.0000	3.2000e-004	3.2000e-004	0.0000	3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397	

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						
2019	0.0123	4.5900e-003	4.6000e-003	1.0000e-005	0.0000	3.2000e-004	3.2000e-004	0.0000	3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397	
Maximum	0.0123	4.5900e-003	4.6000e-003	1.0000e-005	0.0000	3.2000e-004	3.2000e-004	0.0000	3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397	

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	2-26-2019	5-25-2019	0.0168	0.0168
		Highest	0.0168	0.0168

2.2 Overall OperationalUnmitigated 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	5.0700e-003	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	1.8000e-004	1.5900e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004	1.2000e-004	1.2000e-004	0.0000	4.9678	4.9678	1.7000e-004	6.0000e-005	4.9897	
Mobile	0.0186	0.1737	0.3067	1.3200e-003	0.1037	1.2700e-003	0.1050	0.0278	1.2000e-003	0.0290	0.0000	122.3974	122.3974	5.0500e-003	0.0000	122.5238
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.6236
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.9594	1.0328	7.5700e-003	1.9000e-004	1.2776
Total	0.0239	0.1752	0.3081	1.3300e-003	0.1037	1.3900e-003	0.1051	0.0278	1.3200e-003	0.0291	0.3251	128.3247	128.6497	0.0277	2.5000e-004	129.4147

Mission Springs Operational Emissions - Riverside-Salton Sea 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	5.0700e-003	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	1.8000e-004	1.5900e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	4.9678	4.9678	1.7000e-004	6.0000e-005	4.9897
Mobile	0.0186	0.1737	0.3067	1.3200e-003	0.1037	1.2700e-003	0.1050	0.0278	1.2000e-003	0.0290	0.0000	122.3974	122.3974	5.0500e-003	0.0000	122.5238
Waste						0.0000	0.0000		0.0000	0.0000	0.2517	0.0000	0.2517	0.0149	0.0000	0.6236
Water						0.0000	0.0000		0.0000	0.0000	0.0734	0.9594	1.0328	7.5700e-003	1.9000e-004	1.2776
Total	0.0239	0.1752	0.3081	1.3300e-003	0.1037	1.3900e-003	0.1051	0.0278	1.3200e-003	0.0291	0.3251	128.3247	128.6497	0.0277	2.5000e-004	129.4147

	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**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	2/26/2019	3/4/2019	5	5	

Acres of Grading (Site Preparation Phase): 0

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

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,500; Non-Residential Outdoor: 500; Striped Parking Area: 0
(Architectural Coating – sqft)**

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48

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
Architectural Coating	1	0.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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3.2 Architectural Coating - 2019

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						
Archit. Coating	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397	
Total	0.0123	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397	

Unmitigated Construction Off-Site

Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

3.2 Architectural Coating - 2019**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					
Archit. Coating	0.0116						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7000e-004	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397	
Total	0.0123	4.5900e-003	4.6000e-003	1.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	0.6383	0.6383	5.0000e-005	0.0000	0.6397	

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	0.0000	0.0000	0.0000	0.0000	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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000								

4.0 Operational Detail - Mobile

Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

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	tons/yr										MT/yr					
Mitigated	0.0186	0.1737	0.3067	1.3200e-003	0.1037	1.2700e-003	0.1050	0.0278	1.2000e-003	0.0290	0.0000	122.3974	122.3974	5.0500e-003	0.0000	122.5238
Unmitigated	0.0186	0.1737	0.3067	1.3200e-003	0.1037	1.2700e-003	0.1050	0.0278	1.2000e-003	0.0290	0.0000	122.3974	122.3974	5.0500e-003	0.0000	122.5238

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
General Heavy Industry	40.00	40.00	40.00	271,588	271,588	271,588	271,588
Total	40.00	40.00	40.00	271,588	271,588	271,588	271,588

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
General Heavy Industry	20.00	20.00	20.00	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Heavy Industry	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

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5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	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					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	3.2340	3.2340	1.3000e-004	3.0000e-005	3.2456	
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	3.2340	3.2340	1.3000e-004	3.0000e-005	3.2456	
NaturalGas Mitigated	1.8000e-004	1.5900e-003	1.3400e-003	1.0000e-005			1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	1.7338	1.7338	3.0000e-005	3.0000e-005	1.7441	
NaturalGas Unmitigated	1.8000e-004	1.5900e-003	1.3400e-003	1.0000e-005			1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	1.7338	1.7338	3.0000e-005	3.0000e-005	1.7441	

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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	tons/yr										MT/yr					
General Heavy Industry	32490	1.8000e-004	1.5900e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7338	1.7338	3.0000e-005	3.0000e-005	1.7441
Total		1.8000e-004	1.5900e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7338	1.7338	3.0000e-005	3.0000e-005	1.7441

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					
General Heavy Industry	32490	1.8000e-004	1.5900e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7338	1.7338	3.0000e-005	3.0000e-005	1.7441
Total		1.8000e-004	1.5900e-003	1.3400e-003	1.0000e-005		1.2000e-004	1.2000e-004		1.2000e-004	1.2000e-004	0.0000	1.7338	1.7338	3.0000e-005	3.0000e-005	1.7441

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	10150	3.2340	1.3000e-004	3.0000e-005	3.2456
Total		3.2340	1.3000e-004	3.0000e-005	3.2456

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	10150	3.2340	1.3000e-004	3.0000e-005	3.2456
Total		3.2340	1.3000e-004	3.0000e-005	3.2456

6.0 Area Detail**6.1 Mitigation Measures Area**

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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	5.0700e-003	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	
Unmitigated	5.0700e-003	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	

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	1.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	3.9100e-003					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	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005	
Total	5.0700e-003	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	

Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

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	tons/yr										MT/yr					
Architectural Coating	1.1600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.9100e-003					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	0.0000	2.0000e-005	2.0000e-005	0.0000	0.0000	2.0000e-005
Total	5.0700e-003	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

7.0 Water Detail**7.1 Mitigation Measures Water**

Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.0328	7.5700e-003	1.9000e-004	1.2776
Unmitigated	1.0328	7.5700e-003	1.9000e-004	1.2776

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	0.23125 / 0	1.0328	7.5700e-003	1.9000e-004	1.2776
Total		1.0328	7.5700e-003	1.9000e-004	1.2776

Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

7.2 Water by Land Use**Mitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	0.23125 / 0	1.0328	7.5700e- 003	1.9000e- 004	1.2776
Total		1.0328	7.5700e- 003	1.9000e- 004	1.2776

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

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2517	0.0149	0.0000	0.6236
Unmitigated	0.2517	0.0149	0.0000	0.6236

Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	1.24	0.2517	0.0149	0.0000	0.6236
Total		0.2517	0.0149	0.0000	0.6236

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	1.24	0.2517	0.0149	0.0000	0.6236
Total		0.2517	0.0149	0.0000	0.6236

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Mission Springs Operational Emissions - Riverside-Salton Sea County, Annual

10.0 Stationary Equipment

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
----------------	--------

11.0 Vegetation

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

Mission Springs Pipeline Construction for LST

Riverside-Salton Sea County, Summer

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	0.10	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2020
Utility Company Southern California Edison					
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - 200 feet of pipeline

Construction Phase - activity only in front of single residence for 1 day w progress rate of 200 ft/day

Off-road Equipment -

Off-road Equipment -

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	1.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	PhaseEndDate	3/14/2019	3/13/2019
tblLandUse	LotAcreage	0.00	0.10
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Pavers
tblOffRoadEquipment	OffRoadEquipmentType		Trenchers
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Tractors/Loaders/Backhoes
tblOffRoadEquipment	OffRoadEquipmentType		Plate Compactors
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Paving
tblOffRoadEquipment	PhaseName		Paving

2.0 Emissions Summary

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

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						
2019	1.8511	16.9722	14.7826	0.0206	0.8364	1.1823	2.0187	0.4360	1.0877	1.5237	0.0000	2,035.9039	2,035.9039	0.6195	0.0000	2,051.3905	
Maximum	1.8511	16.9722	14.7826	0.0206	0.8364	1.1823	2.0187	0.4360	1.0877	1.5237	0.0000	2,035.9039	2,035.9039	0.6195	0.0000	2,051.3905	

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						
2019	1.8511	4.6558	14.7826	0.0206	0.8364	1.1823	2.0187	0.4360	1.0877	1.5237	0.0000	2,035.903	2,035.903	0.6195	0.0000	2,051.390	
Maximum	1.8511	4.6558	14.7826	0.0206	0.8364	1.1823	2.0187	0.4360	1.0877	1.5237	0.0000	2,035.903	2,035.903	0.6195	0.0000	2,051.390	

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

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	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
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	0.0000
Total	1.0000e-005	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	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
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	0.0000
Total	1.0000e-005	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	

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

	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	Grading	Grading	3/13/2019	3/13/2019	5	1	
2	Paving	Paving	3/14/2019	3/14/2019	5	1	

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

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Trenchers	2	8.00	78	0.50
Grading	Excavators	1	8.00	158	0.38
Grading	Forklifts	2	8.00	89	0.20
Paving	Cement and Mortar Mixers	4	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Plate Compactors	2	8.00	8	0.43
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37

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
Grading	4	10.00	0.00	0.00	11.00	5.40	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

3.2 Grading - 2019**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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000	
Off-Road	1.8057	16.9461	14.4384	0.0197		1.1817	1.1817		1.0872	1.0872	1,950.193 7	1,950.193 7	0.6170			1,965.619 2	
Total	1.8057	16.9461	14.4384	0.0197	0.7528	1.1817	1.9345	0.4138	1.0872	1.5010	1,950.193 7	1,950.193 7	0.6170			1,965.619 2	

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	0.0454	0.0262	0.3442	8.6000e-004	0.0837	5.3000e-004	0.0842	0.0222	4.9000e-004	0.0227			85.7102	85.7102	2.4400e-003	85.7713	
Total	0.0454	0.0262	0.3442	8.6000e-004	0.0837	5.3000e-004	0.0842	0.0222	4.9000e-004	0.0227			85.7102	85.7102	2.4400e-003	85.7713	

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

3.2 Grading - 2019**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					0.7528	0.0000	0.7528	0.4138	0.0000	0.4138			0.0000			0.0000	
Off-Road	1.8057	3.5061	14.4384	0.0197		1.1817	1.1817		1.0872	1.0872	0.0000	1,950.193 7	1,950.193 7	0.6170		1,965.619 2	
Total	1.8057	3.5061	14.4384	0.0197	0.7528	1.1817	1.9345	0.4138	1.0872	1.5010	0.0000	1,950.193 7	1,950.193 7	0.6170		1,965.619 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	0.0000	0.0000	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	0.0454	0.0262	0.3442	8.6000e-004	0.0837	5.3000e-004	0.0842	0.0222	4.9000e-004	0.0227			85.7102	85.7102	2.4400e-003	85.7713	
Total	0.0454	0.0262	0.3442	8.6000e-004	0.0837	5.3000e-004	0.0842	0.0222	4.9000e-004	0.0227			85.7102	85.7102	2.4400e-003	85.7713	

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

3.3 Paving - 2019**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	1.5109	14.1467	12.8773	0.0198		0.8302	0.8302		0.7700	0.7700	1,856.821 2	1,856.821 2	0.5299			1,870.067 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5109	14.1467	12.8773	0.0198		0.8302	0.8302		0.7700	0.7700	1,856.821 2	1,856.821 2	0.5299			1,870.067 8

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	1.5109	4.6558	12.8773	0.0198		0.8302	0.8302		0.7700	0.7700	0.0000	1,856.821 2	1,856.821 2	0.5299		1,870.067 8
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.5109	4.6558	12.8773	0.0198		0.8302	0.8302		0.7700	0.7700	0.0000	1,856.821 2	1,856.821 2	0.5299		1,870.067 8

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

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

	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	12.50	4.20	5.40	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	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

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
Total		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000						

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
Total		0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000						

6.0 Area Detail**6.1 Mitigation Measures Area**

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

	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	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
Unmitigated	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

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	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					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	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

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

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	0.0000						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	0.0000						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	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

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**

Mission Springs Pipeline Construction for LST - Riverside-Salton Sea County, Summer

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
