

Appendix A

Air Quality and Green House Gas Analysis



Technical Memorandum

To: Mario Zamora, Coachella Valley Water District

From: Eliza Laws, Senior Environmental Analyst
Noemi Avila, Assistant Environmental Analyst

Date: January 26, 2024

Re: Air Quality/Greenhouse Gas Analysis for the Highway 86 Water Transmission Main Project for Coachella Valley Water District (CVWD)

The following air quality assessment was prepared to evaluate whether the expected criteria air pollutant emissions generated as a result of construction and operation of the proposed Project would cause exceedances of applicable thresholds for air quality and greenhouse gas (GHG) emissions. The Project facilities are located in the Salton Sea Air Basin and extend through the South Coast Air Quality Management District (SCAQMD) and Imperial County Air Pollution Control District (ICAPCD) jurisdictions. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 *et seq.*). The methodology follows the SCAQMD's and ICAPCD's *CEQA Air Quality Handbook*, respectively, for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD and ICAPCD staff, the **California Emissions Estimator Model**[®] version 2020.4.0 (CalEEMod) was used to quantify Project-related emissions.

The analysis herein evaluates the proposed Highway 86 Water Transmission Main Project ("Project"). The Project facilities are located within unincorporated Riverside County and unincorporated Imperial County areas and includes the construction and operation of approximately 77,500 linear feet (LF) of 30-inch diameter ductile iron water transmission pipeline to replace existing 16- and 18-inch diameter pipeline. The northernmost portion of the Project alignment within Riverside County is within SCAQMD's jurisdiction while the remaining portion of the Project alignment in Imperial County is within ICAPCD's jurisdiction.

Pipeline installation will begin within Riverside County from 84TH Avenue in the community of Salton near Highway 86 and extend south to 86TH Avenue at the County boundary.

The Project alignment south of 86th Avenue along Highway 86 is within Imperial County. The pipeline will be constructed using typical trenching methods except at the Highway 86 crossing between Harbor Drive and Golden Avenue. Construction at this crossing is proposed to be via the trenchless jack-and-bore method.

▪ Regional Significance Thresholds

The thresholds contained in the *SCAQMD CEQA Air Quality Handbook*¹ (SCAQMD 1993) and posted in a supplemental table as mass daily thresholds on SCAQMD’s website² are considered regional thresholds. Likewise, the ICAPCD’s *CEQA Air Quality Handbook*³ (ICAPCD 2017) established screening thresholds of significance for criteria pollutants. Applicable thresholds are shown in **Table 1 – CEQA Daily Significance Thresholds**, below.

Table 1 – CEQA Daily Significance Thresholds

Threshold	Units	VOC	NO _x	CO	SO _x	PM-10	PM-2.5
Construction Emissions							
SCAQMD	lbs/day	75	100	550	150	150	55
ICAPCD	lbs/day	75	100	550	--	150	--
Operation Emissions							
SCAQMD	lbs/day	55	55	550	150	150	55
ICAPCD	lbs/day	137	137	550	150	150	550

Air quality impacts can be described in a short- and long-term perspective. Short-term impacts occur during site grading and Project construction and consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Long-term air quality impacts occur once the Project is in operation. The Project consists of the construction of water pipelines. Operational emissions related to the pipelines would be primarily from the infrequent visits by vehicles driven by maintenance personnel and are considered negligible; therefore, only short-term impacts were evaluated herein.

The Project will be required to comply with existing rules for the reduction of fugitive dust emissions. The portion of the Project alignment within SCAQMD’s jurisdiction will adhere to the procedures established by Rule 403 establishes these procedures. Compliance with Rule 403 is achieved through application of standard best management practices in construction and operation activities, such as the application of water or chemical stabilizers to disturbed soils, reducing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, SCAQMD Rule 403.1 requires specific measures for reducing fugitive dust in the Coachella Valley. Compliance with this regulation includes having an approved Fugitive Dust Control Plan for activities disturbing more than 5,000 square feet, maintenance of a daily dust control log on-site, installation of construction project signage with contact information for complaints, and the presence of an environmental observer for construction sites larger than 50 acres. Based on the size of this Project’s disturbance area (approximately 45.49 acres total), an environmental observer will not be required.

The portion of the Project alignment within ICAPCD jurisdiction will adhere to the procedures established by ICAPCD Regulation VIII for fugitive dust control, which includes Rules 800 through 805. Regulation VIII mandates Reasonably Available Control Measures during construction and operation to reduce particulate matter. Examples include water or chemical soil stabilizers, speed reduction for construction vehicles, covering haul vehicles, and Track-Out Prevention devices. Rule 800 addresses PM-10

¹ South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993. (Available at SCAQMD.)

² <https://www.aqmd.gov/docs/default-source/ceqa/handbook/south-coast-aqmd-air-quality-significance-thresholds.pdf?sfvrsn=25>

³ <https://apcd.imperialcounty.org/wp-content/uploads/2022/06/P36-CEQA-Air-Quality-Handbook-REV-06-07-22.pdf>

emissions from anthropogenic fugitive dust sources. Rules 801, 802, 803, 804, and 805 set opacity limits, require dust management plans, and limit dust emissions from various sources.

Short-Term Analysis

Short-term emissions from Project construction were evaluated using the CalEEMod program. The estimated construction period for the proposed Project is approximately 17 months as identified below. The default parameters within CalEEMod were used, except as identified below, and these default values generally reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated emissions. In addition to the default values used (shown in the CalEEMod output Attachment to this memo), assumptions for the Project relevant to model inputs for short-term construction emission estimates used are:

- Construction of the Project is anticipated to begin no sooner than September 2023. The modeled construction schedule for each Project activity is shown below:

Construction Activity	Start Date	End Date	Total Working Days
Pipeline Trenching	September 1, 2023	January 16, 2025	360 days
Paving	January 17, 2025	February 17, 2025	22 days
Jack and Bore	October 4, 2024	November 14, 2024	30 days

Note: The exact schedule for each construction activity is unknown but has been assumed for analysis purposes and to be conservative. Should construction occur any time after the respective dates, resulting emissions are anticipated to be lower since emission factors for construction decrease as time passes due to emission regulations becoming more stringent.

- The off-road equipment to be used by each crew during the construction of the Project is shown below based on engineering estimates and assumes all equipment operates 8-hours per day. The off-road equipment list for Pipeline Trenching/Installation activities assumes two crews operating at one time.

Construction Activity	Off-Road Equipment	Unit Amount
Pipeline Trenching/Installation	Concrete/Industrial Saws	2
	Excavators	2
	Tractors/Loaders/Backhoes	2
Pipeline Paving	Pavers	1
	Paving Equipment	1
	Rollers	1
Jack and Bore	Bore/Drill Rig	1
	Concrete/Industrial Saw	1
	Excavators	1
	Pavers	1
	Paving Equipment	1
	Rollers	1
	Tractors /Loaders/Backhoes	1

- Installation includes approximately 14.67 miles of 30-inch diameter water transmission pipeline within existing rights-of-way. The construction footprint is estimated to be 25-feet wide with a trench width five feet wide. The last 1,500 LF of pipeline at the southern end of the Project alignment is assumed to be repaved, at a width of 12 feet.
- Pipeline Trenching/Installation assumes two crews working concurrently using the open trench construction method operating the equipment listed above. Each crew will have a staging area that is assumed to be 0.5 acres in size, which results in a cumulative disturbance area of one acre for staging purposes.

- The two jack-and-bore pit locations (receiving pit and jacking pit) where trenchless construction methods (i.e., jack-and-bore operations) are proposed are estimated to disturb a total of 624 square feet.
- To evaluate Project compliance with SCAQMD Rule 403 and ICACPD Regulation VIII for fugitive dust control, the Project utilized the mitigation option of watering the Project site three times daily, which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions, and limiting vehicle speeds to 15 miles per hour (mph) on unpaved roads.
- The Project assumes worker, vendor and hauling trips will travel on 95% paved roads.
- Four (4) one-way vendor trips per day were added to the pipeline installation and paving activities for each crew to account for water truck trips.
- Four (4) one way vendor trips per day were added to the pipeline installation and paving activities for each crew to account for the crew trucks.
- Eight (8) one way hauling trips per day were added to the pipeline installation and paving activities to account for two truckloads of soil hauling per day and two truckloads of material handling (pipes and construction materials), for each crew.

The results of this analysis are summarized below. The results are shown in **Table 2**.

Table 2 –Unmitigated Estimated Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
Pipeline Trenching/Installation 2023	1.49	13.64	19.73	0.04	29.85	3.57
Pipeline Trenching/Installation 2024	1.41	12.84	19.69	0.04	29.79	3.50
Pipeline Trenching/Installation 2025	1.32	11.94	19.60	0.04	29.71	3.43
Jack and Bore 2024	1.46	13.11	19.66	0.04	22.21	2.74
Pipeline Paving 2025	1.02	5.43	7.98	0.02	15.19	1.74
Maximum	2.87	25.95	39.33	0.08	51.99	6.24
SCAQMD Threshold	75	100	550	150	150	55
ICAPCD Threshold	75	100	550	--	150	--
Exceeds Threshold?	No	No	No	No	No	No

Note: Maximum emissions are the greater of either Pipeline Trenching/Installation 2023, the sum of Pipeline Trenching/Installation 2024 and Jack and Bore 2024, Pipeline Trenching/Installation 2025, or Paving 2025 since some activities overlap. Maximum Emissions are shown in bold.

As shown in **Table 2**, above, the emissions from construction of the Project are below the SCAQMD and ICAPCD daily construction thresholds for all criteria pollutants.

Long-Term Analysis

Long-term air quality impacts occur once the Project is in operation. Operations emissions refer to a full range of activities that can or may generate pollutant emissions when the development is functioning in its intended use, and typically include vehicle emissions, area source emissions that include stationary combustion of natural gas used for space and water heating, landscape maintenance, use of consumer products, and energy use.

Operational emissions related to the water transmission pipelines would be primarily from infrequent visits by vehicles driven by maintenance personnel and are considered negligible.

▪ Localized Significance Threshold Analysis

The SCAQMD has established Localized Significance Thresholds (LST) to assist in evaluating localized effects; however, the ICAPCD has not established any localized thresholds. Accordingly, the analysis presented below identifies the localized impacts from the Project's proposed activities that are located exclusively within the jurisdiction of SCAQMD. Specifically, only the Project's pipeline trenching activities in the northernmost portion of the Project alignment occur within the SCAQMD boundary.

Background

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD developed LST methodology⁴ that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short- and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The portion of the Project within SCAQMD's jurisdiction is located within SRA 30.

Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO₂, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables⁵ to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. The LST tables can be used as a screening tool to determine if dispersion modeling would be necessary. If project-related emissions are below the LST table emissions, no further analysis is necessary. Although the Project alignment disturbs an area greater than five acres per day, the Project alignment is linear, and its construction will progress in a linear fashion disturbing a smaller area per day. To be conservative, the one-acre LST lookup tables were utilized. In addition, the equipment list for the Pipeline Trenching/ Installation is for two crews. However, only one crew will be operating in a given location and only one crew will be located within SCAQMD's boundary. As such, a conservative analysis is presented below.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The receptor distances provided in the LST lookup tables are 25, 50, 100, 200, and 500 meters. There are no sensitive receptors within 500 meters of the portion of the Project alignment within SCAQMD jurisdiction. The closest sensitive receptor is a residence that is approximately 1,634 meters (1.02 miles) north of the alignment, near the intersection of Johnson Street and 82nd Avenue. To provide a conservative analysis, a receptor distance of 500 meters (1,640 feet) was utilized. The results are summarized in **Table 3**.

⁴ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, Revised July 2008. (Available at <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>, accessed January 2024.)

⁵ <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

Table 3 –Unmitigated LST Results for Daily Construction Emissions

Pollutant	Peak Daily Emissions (lb/day)			
	NO _x	CO	PM-10	PM-2.5
LST for 1-acre at 500 meters	733	24,417	214	105
Pipeline Trenching/ Installation 2023	11.34	18.29	0.56	0.54
Pipeline Trenching/ Installation 2024	10.53	18.30	0.49	0.47
Maximum	11.34	18.30	0.56	0.54
Exceeds Threshold?	No	No	No	No

Note: Maximum emissions are shown in bold. Emissions reported represent the emissions for two pipeline trenching crews operating at one time; however, only one crew would be working within SCAQMD jurisdiction.

As shown in **Table 3**, emissions from construction of the Project alignment within SCAQMD’s jurisdiction are below the LST established by SCAQMD.

Long-Term Analysis

The Project involves construction of a water transmission pipeline. The long-term emissions from the pipeline, as discussed previously, are primarily in the form of mobile source emissions, with no stationary sources of emissions present. According to the LST methodology, LSTs only apply to the operational phase if a project includes stationary sources or on-site mobile equipment generating on-site emissions. The proposed Project does not include such uses. Therefore, no long-term LST analysis is needed.

Greenhouse Gas Analysis

Greenhouse gases (GHG) are not presented in lbs/day like criteria pollutants; they are typically evaluated on an annual basis using the metric system. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. SCAQMD has been working on GHG thresholds for development projects. In December 2008, the SCAQMD adopted a threshold of 10,000 metric tonnes per year of carbon dioxide equivalents (MTCO₂E/yr) for stationary source projects where SCAQMD is the lead agency. The most recent draft proposal was in September 2010⁶ and included screening significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 MTCO₂E/yr, respectively. Alternatively, a lead agency has the option to use 3,000 MTCO₂E/yr as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. The ICAPCD has not adopted a GHG significance threshold; therefore, the SCAQMD significance threshold of 3,000 MTCO₂E/yr is utilized for evaluation of the entire Project alignment. SCAQMD significance thresholds also evaluate construction emissions by amortizing them over an expected project life of 30 years. If emissions are above the screening level threshold, additional analysis may be required.

Short-Term Analysis

Construction-Related Emissions

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the Project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. The CalEEMod

⁶ [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2)

output results for construction-related GHG emissions provide for CO₂, methane (CH₄), nitrous oxide (N₂O), and CO₂E⁷ as shown on **Table 4**.

Table 4 – Project Construction Equipment GHG Emissions

Year	Metric Tons per year (MT/yr)			
	Total CO ₂	Total CH ₄	Total N ₂ O	Total CO ₂ E
2023	161.25	0.02	0.01	164.02
2024	545.36	0.08	0.02	554.37
2025	39.71	0.01	0.00	40.44
Total	746.32	0.11	0.03	758.83
			Amortized¹	25.29

Note: ¹Construction emissions were amortized over a 30-year period, as recommended by SCAQMD.

Results indicate that an estimated 758.83 MTCO₂E will occur from Project construction equipment over the course of the estimated approximately 17-month construction period. The draft SCAQMD GHG threshold guidance document released in October 2008⁸ recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies.

The proposed Project does not fit into the categories provided (industrial, commercial, and residential) in the draft thresholds from SCAQMD. The Project’s emissions were compared to whichever threshold is more conservative. Since the draft SCAQMD GHG threshold Guidance document released in October 2008 (SCAQMD 2008b, p. 3-8) recommends that construction emissions be amortized for a project lifetime of 30 years, the total GHG emissions from Project construction were amortized and are below the SCAQMD recommended screening level of 3,000 MTCO₂E/yr. Due to the lack of adopted emissions thresholds, the estimated amount of emissions from Project construction and negligible operational emissions from infrequent maintenance vehicles related to the pipeline, the proposed Project will not generate GHG emissions that exceed the screening threshold.

▪ Conclusion

The conclusion of this analysis indicates that construction of the proposed Project will not exceed criteria pollutant thresholds established by SCAQMD or ICAPCD on a regional level. The Project’s localized construction emissions within SCAQMD’s jurisdiction will also not exceed the SCAQMD established LST. The Project will not generate GHG emissions that exceed the SCAQMD screening threshold. No mitigation is required.

Should you have any questions, please contact me at (951) 686-1070.

⁷ CO₂E is the sum of CO₂ emissions estimated plus the sum of CH₄ and N₂O emissions estimated multiplied by their respective global warming potential (GWP).

⁸ [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2)

CalEEMod Output Files

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Highway 86 Water Transmission Main
Salton Sea Air Basin, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	180.00	1000sqft	4.13	180,000.00	0
Other Non-Asphalt Surfaces	1,801.68	1000sqft	41.36	1,801,684.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2025
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MW hr)	189.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per alignment, includes paved and unpaved portions of pipeline construction.
- Construction Phase - Per engineering estimates
- Off-road Equipment - Per Engineers
- Off-road Equipment - Per Engineers
- Off-road Equipment - Per Engineers, modeling equipment for 2 trenching crews.
- On-road Fugitive Dust - 95% Paved Roads assumed
- Construction Off-road Equipment Mitigation - Water 3x daily, 15mph speed limit assumed

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	75.00	30.00
tblConstructionPhase	NumDays	55.00	22.00
tblLandUse	LandUseSquareFeet	1,801,680.00	1,801,684.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	5,760.00
tblTripsAndVMT	HaulingTripNumber	0.00	240.00
tblTripsAndVMT	HaulingTripNumber	0.00	176.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00

2.0 Emissions Summary

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2023	1.4872	13.4541	19.7273	0.0420	47.4796	0.5840	48.0636	4.8287	0.5587	5.3874	0.0000	4,146.2525	4,146.2525	0.5893	0.1883	4,217.0956
2024	2.8659	25.6794	39.3286	0.0845	82.6112	1.0715	83.6828	8.3983	1.0136	9.4119	0.0000	8,311.4451	8,311.4451	1.5371	0.2799	8,433.2925
2025	1.3174	11.7531	19.6024	0.0415	47.4795	0.4373	47.9168	4.8287	0.4180	5.2467	0.0000	4,092.8869	4,092.8869	0.5831	0.1805	4,161.2401
Maximum	2.8659	25.6794	39.3286	0.0845	82.6112	1.0715	83.6828	8.3983	1.0136	9.4119	0.0000	8,311.4451	8,311.4451	1.5371	0.2799	8,433.2925

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					
2023	1.4872	13.4541	19.7273	0.0420	29.2703	0.5840	29.8543	3.0078	0.5587	3.5665	0.0000	4,146.2525	4,146.2525	0.5893	0.1883	4,217.0956
2024	2.8659	25.6794	39.3286	0.0845	50.9233	1.0715	51.9948	5.2295	1.0136	6.2432	0.0000	8,311.4451	8,311.4451	1.5371	0.2799	8,433.2925
2025	1.3174	11.7531	19.6024	0.0415	29.2702	0.4373	29.7075	3.0078	0.4180	3.4257	0.0000	4,092.8869	4,092.8869	0.5831	0.1805	4,161.2401
Maximum	2.8659	25.6794	39.3286	0.0845	50.9233	1.0715	51.9948	5.2295	1.0136	6.2432	0.0000	8,311.4451	8,311.4451	1.5371	0.2799	8,433.2925

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619
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	0.9470	1.8300e-003	0.2018	2.0000e-005	0.0000	7.2000e-004	7.2000e-004	0.0000	7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003	0.0000	0.4619

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	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619
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	0.9470	1.8300e-003	0.2018	2.0000e-005	0.0000	7.2000e-004	7.2000e-004	0.0000	7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003	0.0000	0.4619

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	Trenching	Trenching	9/1/2023	1/16/2025	5	360	
2	Jack and Bore	Grading	10/4/2024	11/14/2024	5	30	
3	Paving	Paving	1/17/2025	2/17/2025	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 45.49

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
Trenching	Concrete/Industrial Saws	2	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	0	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Jack and Bore	Bore/Drill Rigs	1	8.00	221	0.50
Jack and Bore	Concrete/Industrial Saws	1	8.00	81	0.73
Jack and Bore	Excavators	1	8.00	158	0.38
Jack and Bore	Graders	0	8.00	187	0.41

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Jack and Bore	Pavers	1	8.00	130	0.42
Jack and Bore	Paving Equipment	1	8.00	132	0.36
Jack and Bore	Rollers	1	8.00	80	0.38
Jack and Bore	Rubber Tired Dozers	0	8.00	247	0.40
Jack and Bore	Scrapers	0	8.00	367	0.48
Jack and Bore	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	6	15.00	16.00	5,760.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Jack and Bore	7	18.00	8.00	240.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	8.00	176.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3475	11.3371	18.2929	0.0291		0.5598	0.5598		0.5355	0.5355		2,788.6956	2,788.6956	0.5770		2,803.1197
Total	1.3475	11.3371	18.2929	0.0291		0.5598	0.5598		0.5355	0.5355		2,788.6956	2,788.6956	0.5770		2,803.1197

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	0.0393	1.5769	0.4778	8.7000e-003	23.8169	0.0194	23.8363	2.4241	0.0185	2.4426		923.4890	923.4890	6.3700e-003	0.1453	966.9421
Vendor	0.0248	0.4979	0.2735	2.6500e-003	7.3885	4.0900e-003	7.3926	0.7542	3.9200e-003	0.7581		279.2073	279.2073	2.0600e-003	0.0390	290.8878
Worker	0.0757	0.0422	0.6831	1.5300e-003	16.2742	8.0000e-004	16.2750	1.6505	7.3000e-004	1.6512		154.8605	154.8605	3.9100e-003	3.9900e-003	156.1460
Total	0.1397	2.1170	1.4344	0.0129	47.4796	0.0243	47.5038	4.8287	0.0232	4.8519		1,357.5569	1,357.5569	0.0123	0.1883	1,413.9759

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3475	11.3371	18.2929	0.0291		0.5598	0.5598		0.5355	0.5355	0.0000	2,788.6956	2,788.6956	0.5770		2,803.1197
Total	1.3475	11.3371	18.2929	0.0291		0.5598	0.5598		0.5355	0.5355	0.0000	2,788.6956	2,788.6956	0.5770		2,803.1197

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	0.0393	1.5769	0.4778	8.7000e-003	14.6866	0.0194	14.7060	1.5110	0.0185	1.5296		923.4890	923.4890	6.3700e-003	0.1453	966.9421
Vendor	0.0248	0.4979	0.2735	2.6500e-003	4.5581	4.0900e-003	4.5622	0.4711	3.9200e-003	0.4750		279.2073	279.2073	2.0600e-003	0.0390	290.8878
Worker	0.0757	0.0422	0.6831	1.5300e-003	10.0256	8.0000e-004	10.0264	1.0256	7.3000e-004	1.0263		154.8605	154.8605	3.9100e-003	3.9900e-003	156.1460
Total	0.1397	2.1170	1.4344	0.0129	29.2703	0.0243	29.2945	3.0078	0.0232	3.0309		1,357.5569	1,357.5569	0.0123	0.1883	1,413.9759

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2024

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	1.2741	10.5307	18.3014	0.0291		0.4922	0.4922		0.4705	0.4705		2,789.3935	2,789.3935	0.5751		2,803.7711
Total	1.2741	10.5307	18.3014	0.0291		0.4922	0.4922		0.4705	0.4705		2,789.3935	2,789.3935	0.5751		2,803.7711

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	0.0393	1.5919	0.4823	8.5500e-003	23.8169	0.0191	23.8360	2.4241	0.0182	2.4423		908.0954	908.0954	6.5600e-003	0.1429	950.8331
Vendor	0.0242	0.4997	0.2681	2.6100e-003	7.3885	4.0300e-003	7.3925	0.7542	3.8500e-003	0.7580		275.4274	275.4274	2.0500e-003	0.0383	286.9049
Worker	0.0704	0.0376	0.6362	1.4900e-003	16.2742	7.7000e-004	16.2749	1.6505	7.1000e-004	1.6512		150.4244	150.4244	3.5500e-003	3.6900e-003	151.6136
Total	0.1339	2.1291	1.3866	0.0127	47.4796	0.0239	47.5034	4.8287	0.0228	4.8515		1,333.9472	1,333.9472	0.0122	0.1849	1,389.3517

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2024

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	1.2741	10.5307	18.3014	0.0291		0.4922	0.4922		0.4705	0.4705	0.0000	2,789.3935	2,789.3935	0.5751		2,803.7711
Total	1.2741	10.5307	18.3014	0.0291		0.4922	0.4922		0.4705	0.4705	0.0000	2,789.3935	2,789.3935	0.5751		2,803.7711

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	0.0393	1.5919	0.4823	8.5500e-003	14.6866	0.0191	14.7056	1.5110	0.0182	1.5293		908.0954	908.0954	6.5600e-003	0.1429	950.8331
Vendor	0.0242	0.4997	0.2681	2.6100e-003	4.5581	4.0300e-003	4.5621	0.4711	3.8500e-003	0.4750		275.4274	275.4274	2.0500e-003	0.0383	286.9049
Worker	0.0704	0.0376	0.6362	1.4900e-003	10.0256	7.7000e-004	10.0264	1.0256	7.1000e-004	1.0263		150.4244	150.4244	3.5500e-003	3.6900e-003	151.6136
Total	0.1339	2.1291	1.3866	0.0127	29.2703	0.0239	29.2941	3.0078	0.0228	3.0305		1,333.9472	1,333.9472	0.0122	0.1849	1,389.3517

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2025

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	1.1888	9.6521	18.2678	0.0291		0.4136	0.4136		0.3954	0.3954		2,790.1188	2,790.1188	0.5712		2,804.3980
Total	1.1888	9.6521	18.2678	0.0291		0.4136	0.4136		0.3954	0.3954		2,790.1188	2,790.1188	0.5712		2,804.3980

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	0.0392	1.5731	0.4840	8.3500e-003	23.8169	0.0189	23.8358	2.4241	0.0181	2.4422		887.0912	887.0912	6.7500e-003	0.1396	928.8512
Vendor	0.0238	0.4943	0.2629	2.5700e-003	7.3885	4.0100e-003	7.3925	0.7542	3.8300e-003	0.7580		270.4467	270.4467	2.0400e-003	0.0375	281.6590
Worker	0.0656	0.0336	0.5877	1.4400e-003	16.2742	7.3000e-004	16.2749	1.6505	6.7000e-004	1.6511		145.2302	145.2302	3.1800e-003	3.4300e-003	146.3319
Total	0.1286	2.1010	1.3346	0.0124	47.4795	0.0237	47.5032	4.8287	0.0226	4.8513		1,302.7680	1,302.7680	0.0120	0.1805	1,356.8421

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2025

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	1.1888	9.6521	18.2678	0.0291		0.4136	0.4136		0.3954	0.3954	0.0000	2,790.1188	2,790.1188	0.5712		2,804.3980
Total	1.1888	9.6521	18.2678	0.0291		0.4136	0.4136		0.3954	0.3954	0.0000	2,790.1188	2,790.1188	0.5712		2,804.3980

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	0.0392	1.5731	0.4840	8.3500e-003	14.6866	0.0189	14.7055	1.5110	0.0181	1.5292		887.0912	887.0912	6.7500e-003	0.1396	928.8512
Vendor	0.0238	0.4943	0.2629	2.5700e-003	4.5581	4.0100e-003	4.5621	0.4711	3.8300e-003	0.4750		270.4467	270.4467	2.0400e-003	0.0375	281.6590
Worker	0.0656	0.0336	0.5877	1.4400e-003	10.0256	7.3000e-004	10.0263	1.0256	6.7000e-004	1.0263		145.2302	145.2302	3.1800e-003	3.4300e-003	146.3319
Total	0.1286	2.1010	1.3346	0.0124	29.2702	0.0237	29.2939	3.0078	0.0226	3.0304		1,302.7680	1,302.7680	0.0120	0.1805	1,356.8421

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Jack and Bore - 2024

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.3416	11.9286	18.5020	0.0354		0.5430	0.5430		0.5084	0.5084		3,415.8337	3,415.8337	0.9412		3,439.3644
Total	1.3416	11.9286	18.5020	0.0354	0.0000	0.5430	0.5430	0.0000	0.5084	0.5084		3,415.8337	3,415.8337	0.9412		3,439.3644

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	0.0196	0.7959	0.2412	4.2700e-003	11.9085	9.5300e-003	11.9180	1.2120	9.1200e-003	1.2212		454.0477	454.0477	3.2800e-003	0.0714	475.4166
Vendor	0.0121	0.2498	0.1341	1.3100e-003	3.6942	2.0100e-003	3.6963	0.3771	1.9300e-003	0.3790		137.7137	137.7137	1.0200e-003	0.0192	143.4525
Worker	0.0845	0.0451	0.7634	1.7900e-003	19.5290	9.2000e-004	19.5299	1.9805	8.5000e-004	1.9814		180.5093	180.5093	4.2600e-003	4.4300e-003	181.9364
Total	0.1163	1.0909	1.1386	7.3700e-003	35.1317	0.0125	35.1442	3.5697	0.0119	3.5815		772.2707	772.2707	8.5600e-003	0.0950	800.8054

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Jack and Bore - 2024

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.3416	11.9286	18.5020	0.0354		0.5430	0.5430		0.5084	0.5084	0.0000	3,415.8337	3,415.8337	0.9412		3,439.3644
Total	1.3416	11.9286	18.5020	0.0354	0.0000	0.5430	0.5430	0.0000	0.5084	0.5084	0.0000	3,415.8337	3,415.8337	0.9412		3,439.3644

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	0.0196	0.7959	0.2412	4.2700e-003	7.3433	9.5300e-003	7.3528	0.7555	9.1200e-003	0.7646		454.0477	454.0477	3.2800e-003	0.0714	475.4166
Vendor	0.0121	0.2498	0.1341	1.3100e-003	2.2790	2.0100e-003	2.2811	0.2356	1.9300e-003	0.2375		137.7137	137.7137	1.0200e-003	0.0192	143.4525
Worker	0.0845	0.0451	0.7634	1.7900e-003	12.0307	9.2000e-004	12.0316	1.2307	8.5000e-004	1.2316		180.5093	180.5093	4.2600e-003	4.4300e-003	181.9364
Total	0.1163	1.0909	1.1386	7.3700e-003	21.6530	0.0125	21.6655	2.2218	0.0119	2.2337		772.2707	772.2707	8.5600e-003	0.0950	800.8054

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2025

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	0.4576	4.2908	7.2890	0.0114		0.2093	0.2093		0.1925	0.1925		1,103.3726	1,103.3726	0.3569		1,112.2939
Paving	0.4919					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9494	4.2908	7.2890	0.0114		0.2093	0.2093		0.1925	0.1925		1,103.3726	1,103.3726	0.3569		1,112.2939

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	0.0196	0.7866	0.2420	4.1700e-003	11.9085	9.4700e-003	11.9179	1.2120	9.0600e-003	1.2211		443.5456	443.5456	3.3700e-003	0.0698	464.4256
Vendor	0.0119	0.2472	0.1315	1.2800e-003	3.6942	2.0000e-003	3.6962	0.3771	1.9200e-003	0.3790		135.2233	135.2233	1.0200e-003	0.0187	140.8295
Worker	0.0350	0.0179	0.3134	7.7000e-004	8.6796	3.9000e-004	8.6799	0.8802	3.6000e-004	0.8806		77.4561	77.4561	1.7000e-003	1.8300e-003	78.0437
Total	0.0665	1.0516	0.6869	6.2200e-003	24.2822	0.0119	24.2941	2.4694	0.0113	2.4807		656.2250	656.2250	6.0900e-003	0.0903	683.2988

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2025

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	0.4576	4.2908	7.2890	0.0114		0.2093	0.2093		0.1925	0.1925	0.0000	1,103.3726	1,103.3726	0.3569		1,112.2939
Paving	0.4919					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9494	4.2908	7.2890	0.0114		0.2093	0.2093		0.1925	0.1925	0.0000	1,103.3726	1,103.3726	0.3569		1,112.2939

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	0.0196	0.7866	0.2420	4.1700e-003	7.3433	9.4700e-003	7.3528	0.7555	9.0600e-003	0.7646		443.5456	443.5456	3.3700e-003	0.0698	464.4256
Vendor	0.0119	0.2472	0.1315	1.2800e-003	2.2790	2.0000e-003	2.2810	0.2356	1.9200e-003	0.2375		135.2233	135.2233	1.0200e-003	0.0187	140.8295
Worker	0.0350	0.0179	0.3134	7.7000e-004	5.3470	3.9000e-004	5.3474	0.5470	3.6000e-004	0.5473		77.4561	77.4561	1.7000e-003	1.8300e-003	78.0437
Total	0.0665	1.0516	0.6869	6.2200e-003	14.9693	0.0119	14.9812	1.5381	0.0113	1.5494		656.2250	656.2250	6.0900e-003	0.0903	683.2988

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

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
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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	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
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.519370	0.060618	0.186312	0.143152	0.024585	0.006910	0.010773	0.020267	0.000881	0.000230	0.022128	0.000902	0.003872
Other Non-Asphalt Surfaces	0.519370	0.060618	0.186312	0.143152	0.024585	0.006910	0.010773	0.020267	0.000881	0.000230	0.022128	0.000902	0.003872

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	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
lb/day											lb/day					
NaturalGas 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
NaturalGas 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

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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	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					
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	lb/day										lb/day					
Mitigated	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619
Unmitigated	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619

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	0.2265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0186	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619
Total	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.2265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0186	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004			0.4337	0.4337	1.1300e-003	0.4619
Total	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004			0.4337	0.4337	1.1300e-003	0.4619

7.0 Water Detail

7.1 Mitigation Measures Water

Highway 86 Water Transmission Main - Salton Sea Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

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

11.0 Vegetation

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Highway 86 Water Transmission Main
Salton Sea Air Basin, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	180.00	1000sqft	4.13	180,000.00	0
Other Non-Asphalt Surfaces	1,801.68	1000sqft	41.36	1,801,684.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2025
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MW hr)	189.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per alignment, includes paved and unpaved portions of pipeline construction.
- Construction Phase - Per engineering estimates
- Off-road Equipment - Per Engineers
- Off-road Equipment - Per Engineers
- Off-road Equipment - Per Engineers, modeling equipment for 2 trenching crews.
- On-road Fugitive Dust - 95% Paved Roads assumed
- Construction Off-road Equipment Mitigation - Water 3x daily, 15mph speed limit assumed

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	75.00	30.00
tblConstructionPhase	NumDays	55.00	22.00
tblLandUse	LandUseSquareFeet	1,801,680.00	1,801,684.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	5,760.00
tblTripsAndVMT	HaulingTripNumber	0.00	240.00
tblTripsAndVMT	HaulingTripNumber	0.00	176.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00

2.0 Emissions Summary

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2023	1.4662	13.6371	19.5432	0.0418	47.4796	0.5841	48.0636	4.8287	0.5588	5.3874	0.0000	4,126.0060	4,126.0060	0.5890	0.1889	4,197.0088
2024	2.8265	25.9563	38.9406	0.0841	82.6112	1.0716	83.6829	8.3983	1.0137	9.4120	0.0000	8,266.5275	8,266.5275	1.5365	0.2808	8,388.6149
2025	1.2989	11.9350	19.4482	0.0413	47.4795	0.4373	47.9169	4.8287	0.4180	5.2467	0.0000	4,074.1150	4,074.1150	0.5828	0.1810	4,142.6191
Maximum	2.8265	25.9563	38.9406	0.0841	82.6112	1.0716	83.6829	8.3983	1.0137	9.4120	0.0000	8,266.5275	8,266.5275	1.5365	0.2808	8,388.6149

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					
2023	1.4662	13.6371	19.5432	0.0418	29.2703	0.5841	29.8543	3.0078	0.5588	3.5665	0.0000	4,126.0060	4,126.0060	0.5890	0.1889	4,197.0088
2024	2.8265	25.9563	38.9406	0.0841	50.9233	1.0716	51.9949	5.2295	1.0137	6.2432	0.0000	8,266.5275	8,266.5275	1.5365	0.2808	8,388.6149
2025	1.2989	11.9350	19.4482	0.0413	29.2702	0.4373	29.7076	3.0078	0.4180	3.4258	0.0000	4,074.1150	4,074.1150	0.5828	0.1810	4,142.6190
Maximum	2.8265	25.9563	38.9406	0.0841	50.9233	1.0716	51.9949	5.2295	1.0137	6.2432	0.0000	8,266.5275	8,266.5275	1.5365	0.2808	8,388.6149

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619
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	0.9470	1.8300e-003	0.2018	2.0000e-005	0.0000	7.2000e-004	7.2000e-004	0.0000	7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003	0.0000	0.4619

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	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619
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	0.9470	1.8300e-003	0.2018	2.0000e-005	0.0000	7.2000e-004	7.2000e-004	0.0000	7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003	0.0000	0.4619

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	Trenching	Trenching	9/1/2023	1/16/2025	5	360	
2	Jack and Bore	Grading	10/4/2024	11/14/2024	5	30	
3	Paving	Paving	1/17/2025	2/17/2025	5	22	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 45.49

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
Trenching	Concrete/Industrial Saws	2	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	0	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Jack and Bore	Bore/Drill Rigs	1	8.00	221	0.50
Jack and Bore	Concrete/Industrial Saws	1	8.00	81	0.73
Jack and Bore	Excavators	1	8.00	158	0.38
Jack and Bore	Graders	0	8.00	187	0.41

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Jack and Bore	Pavers	1	8.00	130	0.42
Jack and Bore	Paving Equipment	1	8.00	132	0.36
Jack and Bore	Rollers	1	8.00	80	0.38
Jack and Bore	Rubber Tired Dozers	0	8.00	247	0.40
Jack and Bore	Scrapers	0	8.00	367	0.48
Jack and Bore	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Trenching	6	15.00	16.00	5,760.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Jack and Bore	7	18.00	8.00	240.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	8.00	176.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3475	11.3371	18.2929	0.0291		0.5598	0.5598		0.5355	0.5355		2,788.6956	2,788.6956	0.5770		2,803.1197
Total	1.3475	11.3371	18.2929	0.0291		0.5598	0.5598		0.5355	0.5355		2,788.6956	2,788.6956	0.5770		2,803.1197

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	0.0358	1.7155	0.4891	8.7100e-003	23.8169	0.0194	23.8363	2.4241	0.0186	2.4426		925.3036	925.3036	6.2100e-003	0.1456	968.8385
Vendor	0.0228	0.5411	0.2837	2.6600e-003	7.3885	4.1100e-003	7.3926	0.7542	3.9300e-003	0.7581		280.1089	280.1089	2.0000e-003	0.0393	291.8548
Worker	0.0601	0.0434	0.4776	1.3000e-003	16.2742	8.0000e-004	16.2750	1.6505	7.3000e-004	1.6512		131.8979	131.8979	3.7800e-003	4.0400e-003	133.1958
Total	0.1187	2.3001	1.2503	0.0127	47.4796	0.0243	47.5039	4.8287	0.0232	4.8519		1,337.3104	1,337.3104	0.0120	0.1889	1,393.8892

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3475	11.3371	18.2929	0.0291		0.5598	0.5598		0.5355	0.5355	0.0000	2,788.6956	2,788.6956	0.5770		2,803.1197
Total	1.3475	11.3371	18.2929	0.0291		0.5598	0.5598		0.5355	0.5355	0.0000	2,788.6956	2,788.6956	0.5770		2,803.1197

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	0.0358	1.7155	0.4891	8.7100e-003	14.6866	0.0194	14.7060	1.5110	0.0186	1.5296		925.3036	925.3036	6.2100e-003	0.1456	968.8385
Vendor	0.0228	0.5411	0.2837	2.6600e-003	4.5581	4.1100e-003	4.5622	0.4711	3.9300e-003	0.4751		280.1089	280.1089	2.0000e-003	0.0393	291.8548
Worker	0.0601	0.0434	0.4776	1.3000e-003	10.0256	8.0000e-004	10.0264	1.0256	7.3000e-004	1.0263		131.8979	131.8979	3.7800e-003	4.0400e-003	133.1958
Total	0.1187	2.3001	1.2503	0.0127	29.2703	0.0243	29.2946	3.0078	0.0232	3.0310		1,337.3104	1,337.3104	0.0120	0.1889	1,393.8892

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2024

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	1.2741	10.5307	18.3014	0.0291		0.4922	0.4922		0.4705	0.4705		2,789.3935	2,789.3935	0.5751		2,803.7711
Total	1.2741	10.5307	18.3014	0.0291		0.4922	0.4922		0.4705	0.4705		2,789.3935	2,789.3935	0.5751		2,803.7711

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	0.0357	1.7318	0.4936	8.5700e-003	23.8169	0.0191	23.8360	2.4241	0.0183	2.4423		909.8913	909.8913	6.3900e-003	0.1432	952.7100
Vendor	0.0223	0.5429	0.2783	2.6200e-003	7.3885	4.0500e-003	7.3925	0.7542	3.8700e-003	0.7580		276.3240	276.3240	1.9800e-003	0.0386	287.8646
Worker	0.0562	0.0386	0.4451	1.2700e-003	16.2742	7.7000e-004	16.2749	1.6505	7.1000e-004	1.6512		128.1716	128.1716	3.4400e-003	3.7400e-003	129.3716
Total	0.1143	2.3133	1.2171	0.0125	47.4796	0.0239	47.5034	4.8287	0.0228	4.8515		1,314.3868	1,314.3868	0.0118	0.1855	1,369.9462

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2024

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	1.2741	10.5307	18.3014	0.0291		0.4922	0.4922		0.4705	0.4705	0.0000	2,789.3935	2,789.3935	0.5751		2,803.7711
Total	1.2741	10.5307	18.3014	0.0291		0.4922	0.4922		0.4705	0.4705	0.0000	2,789.3935	2,789.3935	0.5751		2,803.7711

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	0.0357	1.7318	0.4936	8.5700e-003	14.6866	0.0191	14.7057	1.5110	0.0183	1.5293		909.8913	909.8913	6.3900e-003	0.1432	952.7100
Vendor	0.0223	0.5429	0.2783	2.6200e-003	4.5581	4.0500e-003	4.5621	0.4711	3.8700e-003	0.4750		276.3240	276.3240	1.9800e-003	0.0386	287.8646
Worker	0.0562	0.0386	0.4451	1.2700e-003	10.0256	7.7000e-004	10.0264	1.0256	7.1000e-004	1.0263		128.1716	128.1716	3.4400e-003	3.7400e-003	129.3716
Total	0.1143	2.3133	1.2171	0.0125	29.2703	0.0239	29.2942	3.0078	0.0228	3.0306		1,314.3868	1,314.3868	0.0118	0.1855	1,369.9462

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2025

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	1.1888	9.6521	18.2678	0.0291		0.4136	0.4136		0.3954	0.3954		2,790.1188	2,790.1188	0.5712		2,804.3980
Total	1.1888	9.6521	18.2678	0.0291		0.4136	0.4136		0.3954	0.3954		2,790.1188	2,790.1188	0.5712		2,804.3980

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	0.0357	1.7115	0.4953	8.3700e-003	23.8169	0.0190	23.8359	2.4241	0.0181	2.4422		888.8636	888.8636	6.5800e-003	0.1399	930.7034
Vendor	0.0219	0.5370	0.2732	2.5700e-003	7.3885	4.0300e-003	7.3925	0.7542	3.8500e-003	0.7580		271.3353	271.3353	1.9800e-003	0.0377	282.6087
Worker	0.0526	0.0344	0.4118	1.2200e-003	16.2742	7.3000e-004	16.2749	1.6505	6.7000e-004	1.6511		123.7974	123.7974	3.1000e-003	3.4700e-003	124.9090
Total	0.1102	2.2829	1.1804	0.0122	47.4795	0.0237	47.5033	4.8287	0.0227	4.8513		1,283.9962	1,283.9962	0.0117	0.1810	1,338.2211

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2025

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	1.1888	9.6521	18.2678	0.0291		0.4136	0.4136		0.3954	0.3954	0.0000	2,790.1188	2,790.1188	0.5712		2,804.3980
Total	1.1888	9.6521	18.2678	0.0291		0.4136	0.4136		0.3954	0.3954	0.0000	2,790.1188	2,790.1188	0.5712		2,804.3980

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	0.0357	1.7115	0.4953	8.3700e-003	14.6866	0.0190	14.7055	1.5110	0.0181	1.5292		888.8636	888.8636	6.5800e-003	0.1399	930.7034
Vendor	0.0219	0.5370	0.2732	2.5700e-003	4.5581	4.0300e-003	4.5621	0.4711	3.8500e-003	0.4750		271.3353	271.3353	1.9800e-003	0.0377	282.6087
Worker	0.0526	0.0344	0.4118	1.2200e-003	10.0256	7.3000e-004	10.0263	1.0256	6.7000e-004	1.0263		123.7974	123.7974	3.1000e-003	3.4700e-003	124.9090
Total	0.1102	2.2829	1.1804	0.0122	29.2702	0.0237	29.2940	3.0078	0.0227	3.0304		1,283.9962	1,283.9962	0.0117	0.1810	1,338.2211

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Jack and Bore - 2024

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.3416	11.9286	18.5020	0.0354		0.5430	0.5430		0.5084	0.5084		3,415.8337	3,415.8337	0.9412		3,439.3644
Total	1.3416	11.9286	18.5020	0.0354	0.0000	0.5430	0.5430	0.0000	0.5084	0.5084		3,415.8337	3,415.8337	0.9412		3,439.3644

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	0.0179	0.8659	0.2468	4.2800e-003	11.9085	9.5500e-003	11.9180	1.2120	9.1300e-003	1.2212		454.9456	454.9456	3.2000e-003	0.0716	476.3550
Vendor	0.0112	0.2715	0.1392	1.3100e-003	3.6942	2.0200e-003	3.6963	0.3771	1.9300e-003	0.3790		138.1620	138.1620	9.9000e-004	0.0193	143.9323
Worker	0.0675	0.0463	0.5342	1.5200e-003	19.5290	9.2000e-004	19.5299	1.9805	8.5000e-004	1.9814		153.8059	153.8059	4.1200e-003	4.4900e-003	155.2460
Total	0.0965	1.1837	0.9201	7.1100e-003	35.1317	0.0125	35.1442	3.5697	0.0119	3.5816		746.9135	746.9135	8.3100e-003	0.0954	775.5333

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Jack and Bore - 2024

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	1.3416	11.9286	18.5020	0.0354		0.5430	0.5430		0.5084	0.5084	0.0000	3,415.8337	3,415.8337	0.9412		3,439.3644
Total	1.3416	11.9286	18.5020	0.0354	0.0000	0.5430	0.5430	0.0000	0.5084	0.5084	0.0000	3,415.8337	3,415.8337	0.9412		3,439.3644

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	0.0179	0.8659	0.2468	4.2800e-003	7.3433	9.5500e-003	7.3528	0.7555	9.1300e-003	0.7647		454.9456	454.9456	3.2000e-003	0.0716	476.3550
Vendor	0.0112	0.2715	0.1392	1.3100e-003	2.2790	2.0200e-003	2.2811	0.2356	1.9300e-003	0.2375		138.1620	138.1620	9.9000e-004	0.0193	143.9323
Worker	0.0675	0.0463	0.5342	1.5200e-003	12.0307	9.2000e-004	12.0316	1.2307	8.5000e-004	1.2316		153.8059	153.8059	4.1200e-003	4.4900e-003	155.2460
Total	0.0965	1.1837	0.9201	7.1100e-003	21.6530	0.0125	21.6655	2.2218	0.0119	2.2337		746.9135	746.9135	8.3100e-003	0.0954	775.5333

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2025

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	0.4576	4.2908	7.2890	0.0114		0.2093	0.2093		0.1925	0.1925		1,103.3726	1,103.3726	0.3569		1,112.2939
Paving	0.4919					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9494	4.2908	7.2890	0.0114		0.2093	0.2093		0.1925	0.1925		1,103.3726	1,103.3726	0.3569		1,112.2939

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	0.0178	0.8557	0.2477	4.1800e-003	11.9085	9.4800e-003	11.9179	1.2120	9.0700e-003	1.2211		444.4318	444.4318	3.2900e-003	0.0699	465.3517
Vendor	0.0109	0.2685	0.1366	1.2900e-003	3.6942	2.0100e-003	3.6963	0.3771	1.9300e-003	0.3790		135.6676	135.6676	9.9000e-004	0.0188	141.3044
Worker	0.0281	0.0184	0.2197	6.5000e-004	8.6796	3.9000e-004	8.6799	0.8802	3.6000e-004	0.8806		66.0253	66.0253	1.6500e-003	1.8500e-003	66.6181
Total	0.0568	1.1426	0.6039	6.1200e-003	24.2822	0.0119	24.2941	2.4694	0.0114	2.4807		646.1247	646.1247	5.9300e-003	0.0906	673.2742

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2025

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	0.4576	4.2908	7.2890	0.0114		0.2093	0.2093		0.1925	0.1925	0.0000	1,103.3726	1,103.3726	0.3569		1,112.2939
Paving	0.4919					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9494	4.2908	7.2890	0.0114		0.2093	0.2093		0.1925	0.1925	0.0000	1,103.3726	1,103.3726	0.3569		1,112.2939

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	0.0178	0.8557	0.2477	4.1800e-003	7.3433	9.4800e-003	7.3528	0.7555	9.0700e-003	0.7646		444.4318	444.4318	3.2900e-003	0.0699	465.3517
Vendor	0.0109	0.2685	0.1366	1.2900e-003	2.2790	2.0100e-003	2.2811	0.2356	1.9300e-003	0.2375		135.6676	135.6676	9.9000e-004	0.0188	141.3044
Worker	0.0281	0.0184	0.2197	6.5000e-004	5.3470	3.9000e-004	5.3474	0.5470	3.6000e-004	0.5473		66.0253	66.0253	1.6500e-003	1.8500e-003	66.6181
Total	0.0568	1.1426	0.6039	6.1200e-003	14.9693	0.0119	14.9812	1.5381	0.0114	1.5494		646.1247	646.1247	5.9300e-003	0.0906	673.2742

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

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
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

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	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
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.519370	0.060618	0.186312	0.143152	0.024585	0.006910	0.010773	0.020267	0.000881	0.000230	0.022128	0.000902	0.003872
Other Non-Asphalt Surfaces	0.519370	0.060618	0.186312	0.143152	0.024585	0.006910	0.010773	0.020267	0.000881	0.000230	0.022128	0.000902	0.003872

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	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
	lb/day										lb/day					
NaturalGas 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
NaturalGas 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

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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	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					
Other Asphalt Surfaces	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
Other Non-Asphalt Surfaces	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	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	lb/day										lb/day					
Mitigated	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619
Unmitigated	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619

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	0.2265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0186	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619
Total	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004		0.4337	0.4337	1.1300e-003		0.4619

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.2265					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.7019					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0186	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004			0.4337	0.4337	1.1300e-003	0.4619
Total	0.9470	1.8300e-003	0.2018	2.0000e-005		7.2000e-004	7.2000e-004		7.2000e-004	7.2000e-004			0.4337	0.4337	1.1300e-003	0.4619

7.0 Water Detail

7.1 Mitigation Measures Water

Highway 86 Water Transmission Main - Salton Sea Air Basin, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

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

11.0 Vegetation

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**Highway 86 Water Transmission Main
Salton Sea Air Basin, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	180.00	1000sqft	4.13	180,000.00	0
Other Non-Asphalt Surfaces	1,801.68	1000sqft	41.36	1,801,684.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	3.4	Precipitation Freq (Days)	20
Climate Zone	15			Operational Year	2025
Utility Company	Imperial Irrigation District				
CO2 Intensity (lb/MW hr)	189.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per alignment, includes paved and unpaved portions of pipeline construction.
- Construction Phase - Per engineering estimates
- Off-road Equipment - Per Engineers
- Off-road Equipment - Per Engineers
- Off-road Equipment - Per Engineers, modeling equipment for 2 trenching crews.
- On-road Fugitive Dust - 95% Paved Roads assumed
- Construction Off-road Equipment Mitigation - Water 3x daily, 15mph speed limit assumed

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	15

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblConstructionPhase	NumDays	75.00	30.00
tblConstructionPhase	NumDays	55.00	22.00
tblLandUse	LandUseSquareFeet	1,801,680.00	1,801,684.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	HaulingPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	VendorPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblOnRoadDust	WorkerPercentPave	50.00	95.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	0.00	5,760.00
tblTripsAndVMT	HaulingTripNumber	0.00	240.00
tblTripsAndVMT	HaulingTripNumber	0.00	176.00
tblTripsAndVMT	VendorTripNumber	0.00	16.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00

2.0 Emissions Summary

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2023	0.0633	0.5842	0.8426	1.8000e-003	1.9307	0.0251	1.9559	0.1965	0.0240	0.2206	0.0000	161.2501	161.2501	0.0230	7.3500e-003	164.0160
2024	0.2042	1.8720	2.8554	6.0900e-003	6.3804	0.0759	6.4563	0.6494	0.0724	0.7219	0.0000	545.3580	545.3580	0.0827	0.0233	554.3668
2025	0.0189	0.1308	0.2040	4.4000e-004	0.5220	5.0600e-003	0.5271	0.0531	4.7500e-003	0.0579	0.0000	39.7109	39.7109	6.7900e-003	1.8900e-003	40.4427
Maximum	0.2042	1.8720	2.8554	6.0900e-003	6.3804	0.0759	6.4563	0.6494	0.0724	0.7219	0.0000	545.3580	545.3580	0.0827	0.0233	554.3668

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					
2023	0.0633	0.5842	0.8426	1.8000e-003	1.1906	0.0251	1.2158	0.1225	0.0240	0.1466	0.0000	161.2500	161.2500	0.0230	7.3500e-003	164.0159
2024	0.2042	1.8720	2.8554	6.0900e-003	3.9345	0.0759	4.0105	0.4048	0.0724	0.4773	0.0000	545.3575	545.3575	0.0827	0.0233	554.3664
2025	0.0189	0.1308	0.2040	4.4000e-004	0.3219	5.0600e-003	0.3270	0.0331	4.7500e-003	0.0379	0.0000	39.7109	39.7109	6.7900e-003	1.8900e-003	40.4427
Maximum	0.2042	1.8720	2.8554	6.0900e-003	3.9345	0.0759	4.0105	0.4048	0.0724	0.4773	0.0000	545.3575	545.3575	0.0827	0.0233	554.3664

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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	38.33	0.00	37.88	37.66	0.00	33.85	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2023	11-30-2023	0.4891	0.4891
2	12-1-2023	2-29-2024	0.4722	0.4722
3	3-1-2024	5-31-2024	0.4640	0.4640
4	6-1-2024	8-31-2024	0.4622	0.4622
5	9-1-2024	11-30-2024	0.6790	0.6790
6	12-1-2024	2-28-2025	0.3068	0.3068
		Highest	0.6790	0.6790

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1711	1.6000e-004	0.0182	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377
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	0.1711	1.6000e-004	0.0182	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1711	1.6000e-004	0.0182	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377
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	0.1711	1.6000e-004	0.0182	0.0000	0.0000	6.0000e-005	6.0000e-005	0.0000	6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377

	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	Trenching	Trenching	9/1/2023	1/16/2025	5	360	
2	Jack and Bore	Grading	10/4/2024	11/14/2024	5	30	
3	Paving	Paving	1/17/2025	2/17/2025	5	22	

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 45.49

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
Trenching	Concrete/Industrial Saws	2	8.00	81	0.73
Trenching	Excavators	2	8.00	158	0.38
Trenching	Rubber Tired Dozers	0	8.00	247	0.40
Trenching	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Jack and Bore	Bore/Drill Rigs	1	8.00	221	0.50
Jack and Bore	Concrete/Industrial Saws	1	8.00	81	0.73
Jack and Bore	Excavators	1	8.00	158	0.38
Jack and Bore	Graders	0	8.00	187	0.41
Jack and Bore	Pavers	1	8.00	130	0.42
Jack and Bore	Paving Equipment	1	8.00	132	0.36
Jack and Bore	Rollers	1	8.00	80	0.38
Jack and Bore	Rubber Tired Dozers	0	8.00	247	0.40
Jack and Bore	Scrapers	0	8.00	367	0.48
Jack and Bore	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38

Trips and VMT

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
Trenching	6	15.00	16.00	5,760.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Jack and Bore	7	18.00	8.00	240.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	8.00	176.00	14.60	6.20	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Trenching - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0579	0.4875	0.7866	1.2500e-003		0.0241	0.0241		0.0230	0.0230	0.0000	108.7841	108.7841	0.0225	0.0000	109.3467
Total	0.0579	0.4875	0.7866	1.2500e-003		0.0241	0.0241		0.0230	0.0230	0.0000	108.7841	108.7841	0.0225	0.0000	109.3467

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6200e-003	0.0722	0.0208	3.7000e-004	0.9685	8.3000e-004	0.9694	0.0987	8.0000e-004	0.0995	0.0000	36.0541	36.0541	2.5000e-004	5.6700e-003	37.7505
Vendor	1.0200e-003	0.0226	0.0119	1.1000e-004	0.3005	1.8000e-004	0.3006	0.0307	1.7000e-004	0.0309	0.0000	10.9063	10.9063	8.0000e-005	1.5300e-003	11.3633
Worker	2.6900e-003	1.8200e-003	0.0233	6.0000e-005	0.6617	3.0000e-005	0.6618	0.0672	3.0000e-005	0.0672	0.0000	5.5057	5.5057	1.5000e-004	1.6000e-004	5.5556
Total	5.3300e-003	0.0967	0.0560	5.4000e-004	1.9307	1.0400e-003	1.9318	0.1965	1.0000e-003	0.1975	0.0000	52.4661	52.4661	4.8000e-004	7.3600e-003	54.6693

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	0.0579	0.4875	0.7866	1.2500e-003		0.0241	0.0241		0.0230	0.0230	0.0000	108.7839	108.7839	0.0225	0.0000	109.3466
Total	0.0579	0.4875	0.7866	1.2500e-003		0.0241	0.0241		0.0230	0.0230	0.0000	108.7839	108.7839	0.0225	0.0000	109.3466

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.6200e-003	0.0722	0.0208	3.7000e-004	0.5974	8.3000e-004	0.5983	0.0616	8.0000e-004	0.0624	0.0000	36.0541	36.0541	2.5000e-004	5.6700e-003	37.7505
Vendor	1.0200e-003	0.0226	0.0119	1.1000e-004	0.1854	1.8000e-004	0.1856	0.0192	1.7000e-004	0.0194	0.0000	10.9063	10.9063	8.0000e-005	1.5300e-003	11.3633
Worker	2.6900e-003	1.8200e-003	0.0233	6.0000e-005	0.4078	3.0000e-005	0.4078	0.0418	3.0000e-005	0.0418	0.0000	5.5057	5.5057	1.5000e-004	1.6000e-004	5.5556
Total	5.3300e-003	0.0967	0.0560	5.4000e-004	1.1906	1.0400e-003	1.1917	0.1225	1.0000e-003	0.1235	0.0000	52.4661	52.4661	4.8000e-004	7.3600e-003	54.6693

3.2 Trenching - 2024

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	0.1669	1.3795	2.3975	3.8100e-003		0.0645	0.0645		0.0616	0.0616	0.0000	331.4949	331.4949	0.0684	0.0000	333.2035
Total	0.1669	1.3795	2.3975	3.8100e-003		0.0645	0.0645		0.0616	0.0616	0.0000	331.4949	331.4949	0.0684	0.0000	333.2035

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2024

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	4.9500e-003	0.2220	0.0638	1.1200e-003	2.9506	2.5000e-003	2.9531	0.3006	2.3900e-003	0.3030	0.0000	108.0088	108.0088	7.7000e-004	0.0170	113.0919
Vendor	3.0200e-003	0.0692	0.0357	3.4000e-004	0.9154	5.3000e-004	0.9159	0.0935	5.1000e-004	0.0940	0.0000	32.7768	32.7768	2.4000e-004	4.5700e-003	34.1446
Worker	7.6600e-003	4.9400e-003	0.0661	1.8000e-004	2.0160	1.0000e-004	2.0161	0.2046	9.0000e-005	0.2047	0.0000	16.2962	16.2962	4.0000e-004	4.4000e-004	16.4367
Total	0.0156	0.2962	0.1656	1.6400e-003	5.8820	3.1300e-003	5.8851	0.5988	2.9900e-003	0.6017	0.0000	157.0818	157.0818	1.4100e-003	0.0220	163.6732

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	0.1669	1.3795	2.3975	3.8100e-003		0.0645	0.0645		0.0616	0.0616	0.0000	331.4945	331.4945	0.0684	0.0000	333.2031
Total	0.1669	1.3795	2.3975	3.8100e-003		0.0645	0.0645		0.0616	0.0616	0.0000	331.4945	331.4945	0.0684	0.0000	333.2031

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2024

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	4.9500e-003	0.2220	0.0638	1.1200e-003	1.8201	2.5000e-003	1.8226	0.1876	2.3900e-003	0.1899	0.0000	108.0088	108.0088	7.7000e-004	0.0170	113.0919
Vendor	3.0200e-003	0.0692	0.0357	3.4000e-004	0.5649	5.3000e-004	0.5654	0.0585	5.1000e-004	0.0590	0.0000	32.7768	32.7768	2.4000e-004	4.5700e-003	34.1446
Worker	7.6600e-003	4.9400e-003	0.0661	1.8000e-004	1.2423	1.0000e-004	1.2424	0.1272	9.0000e-005	0.1273	0.0000	16.2962	16.2962	4.0000e-004	4.4000e-004	16.4367
Total	0.0156	0.2962	0.1656	1.6400e-003	3.6273	3.1300e-003	3.6304	0.3733	2.9900e-003	0.3763	0.0000	157.0818	157.0818	1.4100e-003	0.0220	163.6732

3.2 Trenching - 2025

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	7.1300e-003	0.0579	0.1096	1.7000e-004		2.4800e-003	2.4800e-003		2.3700e-003	2.3700e-003	0.0000	15.1869	15.1869	3.1100e-003	0.0000	15.2646
Total	7.1300e-003	0.0579	0.1096	1.7000e-004		2.4800e-003	2.4800e-003		2.3700e-003	2.3700e-003	0.0000	15.1869	15.1869	3.1100e-003	0.0000	15.2646

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2025

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	2.3000e-004	0.0101	2.9300e-003	5.0000e-005	0.1351	1.1000e-004	0.1353	0.0138	1.1000e-004	0.0139	0.0000	4.8326	4.8326	4.0000e-005	7.6000e-004	5.0601
Vendor	1.4000e-004	3.1400e-003	1.6000e-003	2.0000e-005	0.0419	2.0000e-005	0.0420	4.2800e-003	2.0000e-005	4.3100e-003	0.0000	1.4741	1.4741	1.0000e-005	2.0000e-004	1.5353
Worker	3.3000e-004	2.0000e-004	2.8000e-003	1.0000e-005	0.0923	0.0000	0.0923	9.3700e-003	0.0000	9.3800e-003	0.0000	0.7208	0.7208	2.0000e-005	2.0000e-005	0.7268
Total	7.0000e-004	0.0134	7.3300e-003	8.0000e-005	0.2694	1.3000e-004	0.2696	0.0274	1.3000e-004	0.0276	0.0000	7.0275	7.0275	7.0000e-005	9.8000e-004	7.3221

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	7.1300e-003	0.0579	0.1096	1.7000e-004		2.4800e-003	2.4800e-003		2.3700e-003	2.3700e-003	0.0000	15.1869	15.1869	3.1100e-003	0.0000	15.2646
Total	7.1300e-003	0.0579	0.1096	1.7000e-004		2.4800e-003	2.4800e-003		2.3700e-003	2.3700e-003	0.0000	15.1869	15.1869	3.1100e-003	0.0000	15.2646

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Trenching - 2025

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	2.3000e-004	0.0101	2.9300e-003	5.0000e-005	0.0834	1.1000e-004	0.0835	8.5900e-003	1.1000e-004	8.7000e-003	0.0000	4.8326	4.8326	4.0000e-005	7.6000e-004	5.0601
Vendor	1.4000e-004	3.1400e-003	1.6000e-003	2.0000e-005	0.0259	2.0000e-005	0.0259	2.6800e-003	2.0000e-005	2.7000e-003	0.0000	1.4741	1.4741	1.0000e-005	2.0000e-004	1.5353
Worker	3.3000e-004	2.0000e-004	2.8000e-003	1.0000e-005	0.0569	0.0000	0.0569	5.8300e-003	0.0000	5.8300e-003	0.0000	0.7208	0.7208	2.0000e-005	2.0000e-005	0.7268
Total	7.0000e-004	0.0134	7.3300e-003	8.0000e-005	0.1661	1.3000e-004	0.1663	0.0171	1.3000e-004	0.0172	0.0000	7.0275	7.0275	7.0000e-005	9.8000e-004	7.3221

3.3 Jack and Bore - 2024

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0201	0.1789	0.2775	5.3000e-004		8.1500e-003	8.1500e-003		7.6300e-003	7.6300e-003	0.0000	46.4819	46.4819	0.0128	0.0000	46.8021
Total	0.0201	0.1789	0.2775	5.3000e-004	0.0000	8.1500e-003	8.1500e-003	0.0000	7.6300e-003	7.6300e-003	0.0000	46.4819	46.4819	0.0128	0.0000	46.8021

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Jack and Bore - 2024

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	2.8000e-004	0.0127	3.6500e-003	6.0000e-005	0.1689	1.4000e-004	0.1691	0.0172	1.4000e-004	0.0174	0.0000	6.1837	6.1837	4.0000e-005	9.7000e-004	6.4747
Vendor	1.7000e-004	3.9600e-003	2.0400e-003	2.0000e-005	0.0524	3.0000e-005	0.0524	5.3600e-003	3.0000e-005	5.3800e-003	0.0000	1.8765	1.8765	1.0000e-005	2.6000e-004	1.9548
Worker	1.0500e-003	6.8000e-004	9.0900e-003	2.0000e-005	0.2770	1.0000e-005	0.2770	0.0281	1.0000e-005	0.0281	0.0000	2.2392	2.2392	6.0000e-005	6.0000e-005	2.2585
Total	1.5000e-003	0.0174	0.0148	1.0000e-004	0.4984	1.8000e-004	0.4985	0.0507	1.8000e-004	0.0509	0.0000	10.2994	10.2994	1.1000e-004	1.2900e-003	10.6881

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0201	0.1789	0.2775	5.3000e-004		8.1500e-003	8.1500e-003		7.6300e-003	7.6300e-003	0.0000	46.4818	46.4818	0.0128	0.0000	46.8020
Total	0.0201	0.1789	0.2775	5.3000e-004	0.0000	8.1500e-003	8.1500e-003	0.0000	7.6300e-003	7.6300e-003	0.0000	46.4818	46.4818	0.0128	0.0000	46.8020

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Jack and Bore - 2024

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	2.8000e-004	0.0127	3.6500e-003	6.0000e-005	0.1042	1.4000e-004	0.1044	0.0107	1.4000e-004	0.0109	0.0000	6.1837	6.1837	4.0000e-005	9.7000e-004	6.4747
Vendor	1.7000e-004	3.9600e-003	2.0400e-003	2.0000e-005	0.0323	3.0000e-005	0.0324	3.3500e-003	3.0000e-005	3.3800e-003	0.0000	1.8765	1.8765	1.0000e-005	2.6000e-004	1.9548
Worker	1.0500e-003	6.8000e-004	9.0900e-003	2.0000e-005	0.1707	1.0000e-005	0.1707	0.0175	1.0000e-005	0.0175	0.0000	2.2392	2.2392	6.0000e-005	6.0000e-005	2.2585
Total	1.5000e-003	0.0174	0.0148	1.0000e-004	0.3072	1.8000e-004	0.3074	0.0316	1.8000e-004	0.0318	0.0000	10.2994	10.2994	1.1000e-004	1.2900e-003	10.6881

3.4 Paving - 2025

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	5.0300e-003	0.0472	0.0802	1.3000e-004		2.3000e-003	2.3000e-003		2.1200e-003	2.1200e-003	0.0000	11.0106	11.0106	3.5600e-003	0.0000	11.0996
Paving	5.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0104	0.0472	0.0802	1.3000e-004		2.3000e-003	2.3000e-003		2.1200e-003	2.1200e-003	0.0000	11.0106	11.0106	3.5600e-003	0.0000	11.0996

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2025

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	2.1000e-004	9.2100e-003	2.6900e-003	5.0000e-005	0.1239	1.0000e-004	0.1240	0.0126	1.0000e-004	0.0127	0.0000	4.4299	4.4299	3.0000e-005	7.0000e-004	4.6384
Vendor	1.2000e-004	2.8700e-003	1.4700e-003	1.0000e-005	0.0384	2.0000e-005	0.0385	3.9300e-003	2.0000e-005	3.9500e-003	0.0000	1.3513	1.3513	1.0000e-005	1.9000e-004	1.4074
Worker	3.2000e-004	2.0000e-004	2.7400e-003	1.0000e-005	0.0903	0.0000	0.0903	9.1600e-003	0.0000	9.1700e-003	0.0000	0.7048	0.7048	2.0000e-005	2.0000e-005	0.7106
Total	6.5000e-004	0.0123	6.9000e-003	7.0000e-005	0.2526	1.2000e-004	0.2527	0.0257	1.2000e-004	0.0258	0.0000	6.4859	6.4859	6.0000e-005	9.1000e-004	6.7564

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	5.0300e-003	0.0472	0.0802	1.3000e-004		2.3000e-003	2.3000e-003		2.1200e-003	2.1200e-003	0.0000	11.0106	11.0106	3.5600e-003	0.0000	11.0996
Paving	5.4100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0104	0.0472	0.0802	1.3000e-004		2.3000e-003	2.3000e-003		2.1200e-003	2.1200e-003	0.0000	11.0106	11.0106	3.5600e-003	0.0000	11.0996

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Paving - 2025

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	2.1000e-004	9.2100e-003	2.6900e-003	5.0000e-005	0.0764	1.0000e-004	0.0765	7.8700e-003	1.0000e-004	7.9700e-003	0.0000	4.4299	4.4299	3.0000e-005	7.0000e-004	4.6384
Vendor	1.2000e-004	2.8700e-003	1.4700e-003	1.0000e-005	0.0237	2.0000e-005	0.0237	2.4600e-003	2.0000e-005	2.4800e-003	0.0000	1.3513	1.3513	1.0000e-005	1.9000e-004	1.4074
Worker	3.2000e-004	2.0000e-004	2.7400e-003	1.0000e-005	0.0556	0.0000	0.0556	5.7000e-003	0.0000	5.7000e-003	0.0000	0.7048	0.7048	2.0000e-005	2.0000e-005	0.7106
Total	6.5000e-004	0.0123	6.9000e-003	7.0000e-005	0.1558	1.2000e-004	0.1559	0.0160	1.2000e-004	0.0162	0.0000	6.4859	6.4859	6.0000e-005	9.1000e-004	6.7564

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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 Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	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
Other Asphalt Surfaces	13.80	6.20	6.20	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	13.80	6.20	6.20	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
Other Asphalt Surfaces	0.519370	0.060618	0.186312	0.143152	0.024585	0.006910	0.010773	0.020267	0.000881	0.000230	0.022128	0.000902	0.003872
Other Non-Asphalt Surfaces	0.519370	0.060618	0.186312	0.143152	0.024585	0.006910	0.010773	0.020267	0.000881	0.000230	0.022128	0.000902	0.003872

5.0 Energy Detail

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas 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
NaturalGas 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

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1711	1.6000e-004	0.0182	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377
Unmitigated	0.1711	1.6000e-004	0.0182	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377

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	0.0413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6700e-003	1.6000e-004	0.0182	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377
Total	0.1711	1.6000e-004	0.0182	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0413					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.1281					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6700e-003	1.6000e-004	0.0182	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377
Total	0.1711	1.6000e-004	0.0182	0.0000		6.0000e-005	6.0000e-005		6.0000e-005	6.0000e-005	0.0000	0.0354	0.0354	9.0000e-005	0.0000	0.0377

7.0 Water Detail

7.1 Mitigation Measures Water

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	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/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	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

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	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			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Highway 86 Water Transmission Main - Salton Sea Air Basin, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

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

11.0 Vegetation
