

Technical Memorandum

To: Amanda Cooker, Associate Engineer, City of Chino, Public Works Department

From: Eliza Laws, Senior Environmental Analyst
Monica Tobias, Assistant Environmental Analyst

Date: August 23, 2019

Re: Air Quality/Greenhouse Gas Analysis for the Eastside Water Treatment Facility Expansion and Brine Pipeline, City of Chino

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 the South Coast Air Quality Management District's (SCAQMD) thresholds for air quality in the Project area. The greenhouse gas (GHG) assessment was prepared to evaluate whether the expected criteria GHG emissions generated as a result of construction and operation of the proposed Project would exceed the SCAQMD draft screening significance thresholds. 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 *CEQA Air Quality Handbook* prepared by the SCAQMD for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD staff, the **California Emissions Estimator Model**[®] version 2016.3.2 (CalEEMod) was used to quantify Project-related emissions.

The Eastside Water Treatment Facility ("EWTF") Expansion and Brine Pipeline Project ("Project") encompasses the disturbance of approximately 10.2 acres. The Project includes two components: the expansion of the EWTF site, owned by the City of Chino, located at 7537 Schaefer Avenue; and the construction of the brine pipeline on mostly paved right of way, which will run from the EWTF site to a connection point near the intersection of Euclid Avenue and Kimball Avenue.

Component 1: EWTF Expansion

The EWTF component proposes to expand the capacity of the existing treatment facilities from 3,500 gallons per minute (gpm) to 7,000 gpm. The Project will add a new Calgon ISEP[™] ion exchange system and a new Model -10 Granular Activated Carbon (GAC) treatment system and associated appurtenances. The existing buildings where the Calgon ISEP[™] system and the GAC) system are housed will be expanded. Site expansion construction will occur at the EWTF site and would disturb approximately 1.6 acres.

Component 2: Brine Pipeline Construction

The second component of the Project proposes the construction of up to 18,650-linear feet of dual six-inch diameter pipelines to convey brine waste from the EWTF to the Chino I Desalter Treatment Facility at 6905 Kimball Avenue, Chino, CA where it will connect to the Inland Empire Brine Line. Two alternatives are considered; the Preferred Alignment and the Alternative Alignment. The Preferred Alignment of the brine pipeline follows, but will not be constructed under existing pavement, approximately 3.5 miles of paved road rights-of-way that are adjacent to vacant lots, existing agricultural lands and residential, industrial, and commercial uses.

The Alternative Alignment is identical to the Preferred Alternative with the exception of an approximately 1,455-foot segment located within northerly extension of unpaved Campus Avenue between the southern portion of the EWTF site and Edison Avenue and an approximately 1,355-foot segment in the Edison Avenue right-of-way between Campus/Edison Avenue and Edison Avenue/Bon View Avenue. The longest pipeline route analyze the worst case scenario, which results in a construction footprint of approximately 8.6 acres.

▪ **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 and are shown in **Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**, below. These regional thresholds were developed based on the SCAQMD’s treatment of a major stationary source.

Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds

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

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 an expansion at the EWTF site and brine pipeline. Operational emissions from the EWTF site upgrades consist primarily of new equipment for the EWTF that will be electric. EWTF worker commuting would be about the same as existing conditions. Thus, there would be no quantifiable change in mobile source emissions and only short-term impacts were evaluated for the EWTF. Operational emissions related to the brine 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 for the pipeline.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing 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, projects that disturb 50 or more acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of this Project’s total disturbance area (10.2 acres), a Fugitive Dust Control Plan or a Large Operation Notification Form would not be required.

Short-Term Analysis

Short-term emissions from Project construction were evaluated using the CalEEMod version 2016.3.2 program. The estimated construction period for the proposed Project is approximately 13 months, beginning no sooner than March 2020. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that Project emissions are expected to be

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

² <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

equal to or less than the estimated emissions. In addition to the default values used, assumptions relevant to model inputs for short-term construction emission estimates used are:

- Construction of the EWTF site will begin with facilities construction no sooner than March 2020, and will overlap soil hauling and architectural coatings. Facilities construction will end in July 2021. The brine pipeline construction is anticipated to begin no sooner than March 2020 with grading and concurrent paving and end in August 2020. The modeled construction schedule for each Project component is shown below:

EWTF Expansion

Construction Activity	Start Date	End Date	Total Working Days
Grading	March 6, 2020	July 30, 2020	105 days
Soil Hauling ¹	March 13, 2020	March 13, 2020	1 day
Facilities Construction	June 6, 2020	July 16, 2021	290 days
Architectural Coatings	April 1, 2021	April 14, 2021	10 days

Note: ¹ This Soil Hauling activity is included to accurately capture emissions related to imported soil hauling a total of 4 truckloads that will occur on a single day during site grading.

Brine Pipeline

Construction Activity	Start Date	End Date	Total Working Days
Grading	March 6, 2020	August 27, 2020	125 days
Paving	March 6, 2020	August 27, 2020	125 days

- The equipment to be used for each Project component and activity is shown below and is based on engineering estimates. Each piece of equipment is assumed to operate 8 hours per day:

EWTF Expansion

Construction Activity	Off-Road Equipment	Unit Amount
Grading	Excavators	1
	Concrete/Industrial Saws	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	2
Soil Hauling ¹	None Required	--
Facilities Construction	Cranes	1
	Forklifts	2
	Tractors/Loaders/Backhoes	2
	Welders	2
Architectural Coatings	Air Compressors	1

Note: ¹ This Soil Hauling activity is included to accurately capture emissions related to imported soil hauling that will occur during site grading. No additional off-road equipment is required.

EWTF Expansion-Specific Assumptions

- To evaluate Project compliance with SCAQMD Rule 403 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.
- Four (4) one-way vendor trips were added to the grading activities to account for water truck trips and/or material delivery trips.

- Approximately 60 cubic yards of soil will be imported during grading activities. Truck capacity is assumed to be 16 cubic yards, resulting in approximately eight (8) one-way hauling trips (four total truckloads). Soil hauling activity is conservatively assumed to occur in one day. The import site is currently unknown. Therefore, the CalEEMod default was utilized which assumes a hauling trip length of 20 miles per one-way trip.
- Architectural coatings for the 2,900 square-foot ISEP building was modeled using CalEEMod default assumptions (CalEEMod User’s Guide, Appendix A, pp. 16-17).
- The disturbance area for the proposed expansion activities at the EWTF site is approximately 1.6 acres.

Brine Pipeline

Construction Activity	Off-Road Equipment	Unit Amount
Grading	Excavators	2
	Generator Sets (Fusing Machine) ¹	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	2
Paving	Pavers	1
	Paving Equipment	1
	Rollers	1

Note:

¹ CalEEMod did not contain a fusing machine in its equipment list. The generator set was used as the fusing machine’s conservative proxy since the fusing machine is assumed to have an 18-horsepower engine, and the generator set has an 84-horsepower engine.

Brine Pipeline–Specific Assumptions

- To evaluate Project compliance with SCAQMD Rule 403 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.
- Four (4) one-way vendor trips were added per day to the grading activities to account for water truck trips, material delivery trips, and soil import/export, and/or concrete mixing trucks trips.
- Brine pipeline will be constructed in Schaefer Avenue or in Campus Drive to Edison Avenue, along Bon View Avenue, Merrill Avenue, Euclid Avenue, and Kimball Avenue to its ultimate connections at an existing brine line connection point near the intersection of Euclid and Kimball Avenue. Estimated construction progress is approximately 150 feet per day.
- The construction of the brine pipeline will disturb approximately 8.6 acres, which assumes the disturbance area is 20 feet wide for the length of the brine pipeline (18,650 linear feet); the longest of the two alignments. The trench width is approximately 3.5 feet wide. The majority of brine pipeline will be constructed within unpaved road shoulder. Asphalt paving restoration is anticipated at street intersections and along Merrill Avenue. Conservatively, 2.9 acres of asphalt paving was assumed.

The results of this analysis are summarized below. The results are provided for each Project component. The EWTF Expansion emissions results are shown in **Table 2** and the Brine Pipeline emission results are shown in **Table 3**. Since the construction schedule of each Project component indicates the possibility that multiple activities from each Project component will overlap, the maximum daily emissions from these overlapping construction schedules are provided in **Table 4**.

Table 2 – EWTF Expansion Unmitigated Estimated Maximum Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
Grading-2020	2.25	21.72	16.31	0.03	3.66	2.40
Soil Hauling 2020	0.05	1.98	0.33	0.01	0.56	0.09
Facilities Construction-2020	1.97	15.95	13.51	0.03	1.21	0.87
Facilities Construction-2021	1.76	14.58	13.09	0.03	1.09	0.76
Architectural Coatings-2021	4.95	2.06	2.67	0.00	0.19	0.14
Maximum¹	6.71	37.67	29.82	0.06	4.87	3.27
Exceeds Threshold?	No	No	No	No	No	No

Note: ¹ Maximum emissions are the greater of either the sum of grading and soil hauling or grading and facilities construction in 2020, or the sum of facilities construction and architectural coatings in 2021 since these activities overlap. Maximum emissions are shown in bold.

Table 3 – Brine Pipeline Unmitigated Estimated Maximum Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
Grading-2020	2.48	24.32	19.69	0.03	3.83	2.52
Paving-2020	0.78	7.06	7.69	0.01	0.47	0.37
Maximum¹	3.26	31.38	27.38	0.04	4.30	2.89
Exceeds Threshold?	No	No	No	No	No	No

Note: ¹ Maximum emissions are the sum of grading and paving since these activities overlap.

Table 4 – Project’s Unmitigated Estimated Maximum Daily Construction Emissions by Year

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
2020						
EWTF Expansion - Grading	2.25	21.72	16.31	0.03	3.66	2.40
EWTF Expansion – Soil Hauling	0.05	1.98	0.33	0.01	0.56	0.09
EWTF Expansion – Facilities Construction	1.97	15.95	13.51	0.03	1.21	0.87
Brine Pipeline - Grading	2.48	24.32	19.69	0.03	3.83	2.52
Brine Pipeline - Paving	0.78	7.06	7.69	0.01	0.47	0.37
Maximum¹	7.48	69.05	57.20	0.10	9.17	6.16
Exceeds Threshold?	No	No	No	No	No	No

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
2021						
EWTF Expansion- Facilities Construction	1.76	14.58	13.09	0.03	1.09	0.76
EWTF Expansion - Architectural Coatings	4.95	2.06	2.67	0.00	0.19	0.14
Maximum²	6.71	16.64	15.76	0.03	1.28	0.90
Exceeds Threshold?	No	No	No	No	No	No

Note: ¹ Maximum emissions are either the greater of the sum of EWTF Expansion grading and soil hauling, plus Brine Pipeline grading and paving, or the sum of EWTF Expansion grading and facilities construction plus Brine Pipeline grading and paving. Maximum emissions are shown in bold.

² Maximum emissions are the sum of EWTF Expansion facilities construction and architectural coating.

As shown in the table above, the emissions from construction of the Project are below the SCAQMD daily construction thresholds for all criteria pollutants.

▪ Localized Significance Threshold Analysis

Background

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology³ 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 Project is located in SRA 33.

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 tables⁴ 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. For the EWTF Expansion, although this component disturbs approximately 1.5 acres, it is anticipated that an area of approximately one acre would be disturbed per day during construction.⁵ Therefore, the LST for the one-acre site was utilized. The equipment used for the Brine Pipeline component would result in a daily disturbance area of 1.5 acres, consistent with SCAQMD guidance, the LST for a one-acre site was used.

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 closest sensitive receptors to the EWTF Expansion component are the existing adjacent scattered residential properties on Schaffer Avenue. The closest sensitive receptors to the Brine Pipeline component are the existing adjacent scattered residential properties on Bon View Avenue, Edison Avenue, and Euclid Avenue. The closest receptor

³ 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 March 2019.)

⁴ <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

⁵ <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

distance in the LST look-up tables is 25 meters. According to LST methodology, projects with boundaries closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, a receptor distance of 25 meters (85 feet) was used to ensure a conservative analysis for both Project components. The results are summarized below.

Table 5 – EWTF Expansion Unmitigated LST Results for Daily Construction Emissions

Pollutant	Peak Daily Emissions (lb/day)			
	NO _x	CO	PM-10	PM-2.5
LST Threshold for 1-acre at 25 meters	118	863	5	4
Grading-2020	21.25	15.65	3.49	2.35
Soil Hauling	0.00	0.00	0.41	0.04
Facilities Construction-2020	14.69	11.98	0.81	0.76
Facilities Construction-2021	13.43	11.69	0.69	0.65
Architectural Coatings-2020	2.04	2.42	0.13	0.13
Maximum¹	35.94	27.63	4.30	3.11
Exceeds Threshold?	No	No	No	No

Note: ¹Maximum emissions are the greater of either the sum of grading soil hauling or grading and facilities construction in 2020 since these activities overlap, or facilities construction and architectural coating in 2021 since these activities overlap. Maximum emission are shown in bold

Table 6 – Brine Pipeline Unmitigated LST Results for Daily Construction Emissions

Pollutant	Peak Daily Emissions (lb/day)			
	NO _x	CO	PM-10	PM-2.5
LST Threshold for 1-acre at 25 meters	118	863	5	4
Grading-2020	23.85	18.93	3.63	2.46
Paving-2020	7.03	7.33	0.38	0.35
Maximum¹	30.88	26.26	4.01	2.81
Exceeds Threshold?	No	No	No	No

Note: ¹ Maximum emissions are the sum of grading and paving since these activities overlap. Maximum emission are shown in bold

As shown in **Table 5** and **Table 6** emissions from construction for each component will be below the LST established by SCAQMD for the Project.

Long-Term Analysis

According to the LST methodology, LSTs only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site, such as warehouse/transfer facilities. Since the Projects is an infrastructure project and it involves the expansion of a treatment plant and water line facilities, the long term emissions as discussed previously, are primarily in the form of mobile source emissions, with no stationary sources of emissions present. The new equipment for the EWTF will be electric and the existing diesel-powered emergency generator does not require modification. 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. Additionally, unlike the criteria pollutants, GHG do not have adopted significance thresholds associated with them at this time. 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. The most recent draft proposal was in September

2010⁶ and included significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 metric tonnes per year of carbon dioxide equivalents (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. In December 2008, the SCAQMD adopted a threshold of 10,000 MTCO₂E/yr for stationary source projects where SCAQMD is the lead agency. The analysis herein uses the threshold of 3,000 MTCO₂E/yr. The SCAQMD significance thresholds also evaluate construction emissions by amortizing them over an expected project life of 30 years.

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 output results for construction-related GHG emissions present the GHG emissions estimates for the Project for CO₂, methane (CH₄), nitrous oxide (N₂O), and CO₂E.⁷

Table 7 – 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
2020 – EWTF Expansion	294.88	0.07	0.00	296.59
2021 – EWTF Expansion	155.24	0.03	0.00	156.09
2020 – Brine Pipeline	255.53	0.07	0.00	257.23
Total	705.65	0.17	0.00	709.91
			Amortized	23.66

Evaluation of the table above indicates that an estimated 709.91 MTCO₂E will occur from Project construction equipment over the course of the estimated 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. Therefore, the total GHG emissions from Project construction were amortized and are included in **Table 9**, below.

Long-Term Analysis

Energy-Related Emissions

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings is typically generated at an off-site power plant which indirectly generates GHG emissions. The Project does not propose the use of natural gas. The new electrical equipment for the EWTF site is estimated to increase electricity by approximately 102 thousand kilowatt hours per year (kWH/yr). The following table summarizes the GHG emissions estimates reported by CalEEMod for the Project based on this information.

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)

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)

Table 8 – Total Project Energy-Related GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Electricity	32.42	0.00	0.00	32.54
Natural Gas	0.00	0.00	0.00	0.00
Total	32.42	0.00	0.00	32.54

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Total Project GHG Emissions

As shown on **Table 9 – Total Project-Related GHG Emissions**, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 56.20 MTCO₂E/yr which includes construction-related emissions amortized over a typical project life of 30 years.

Table 9 – Total Project-Related GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Amortized Construction	--	--	--	23.66
Energy	32.42	0.00	0.00	32.54
Total	32.42	0.00	0.00	56.20

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

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 2008, p. 3-8) recommends that construction emissions be amortized for a project lifetime of 30 years to, the total GHG emissions from Project construction were amortized and added to the energy-related GHG emissions; the total GHG emissions are below the SCAQMD recommended screening level of 3,000 MTCO₂E/yr. Due to the estimated amount of emissions from Project construction and negligible operational emissions from infrequent maintenance vehicles related to the brine pipeline and increased electrical usage at the EWTF, 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 on a regional or localized level and mitigation is not required. The Project's GHG emissions will not exceed the SCAQMD screening threshold of 3,000 MTCO₂E/yr.

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

CALEEMOD OUTPUT FILES

Site Expansion Component

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	1.60	Acre	1.60	69,696.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per Engineer
- Construction Phase - Per Engineer
- Off-road Equipment - 8 hours per day
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Trips and VMT - 4 trips per day for water truck and material delivery
- Grading - Per Engineer
- Architectural Coating - Per Engineer
- Energy Use - Per Engineer
- Construction Off-road Equipment Mitigation - Per Rule 403

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	1,450.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	4,350.00
tblConstructionPhase	NumDays	200.00	290.00
tblConstructionPhase	NumDays	4.00	105.00
tblConstructionPhase	NumDays	2.00	1.00
tblEnergyUse	NT24E	0.00	1.46
tblGrading	AcresOfGrading	0.00	1.50
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialImported	0.00	60.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	6.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	3/6/2020	7/30/2020	5	105	
2	Soil Hauling	Site Preparation	3/13/2020	3/13/2020	5	1	
3	Building Construction	Building Construction	6/6/2020	7/16/2021	5	290	
4	Architectural Coating	Architectural Coating	4/1/2021	4/14/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.6

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,350; Non-Residential Outdoor: 1,450; Striped Parking Area: 4,182

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	0	6.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Soil Hauling	Graders	0	8.00	187	0.41
Soil Hauling	Rubber Tired Dozers	0	7.00	247	0.40
Soil Hauling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	13.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Hauling	0	0.00	0.00	8.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	29.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0372	0.0000	6.0372	3.3119	0.0000	3.3119			0.0000			0.0000
Off-Road	2.1617	21.2538	15.6454	0.0262		1.1362	1.1362		1.0612	1.0612		2,521.662	2,521.6626	0.6614		2,538.1981
Total	2.1617	21.2538	15.6454	0.0262	6.0372	1.1362	7.1735	3.3119	1.0612	4.3730		2,521.662	2,521.6626	0.6614		2,538.1981

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-	0.0256	1.9400e-	0.0276	7.3800e-	1.8600e-	9.2300e-		114.4406	114.4406	7.4300e-		114.6264
Worker	0.0710	0.0455	0.5846	1.4800e-	0.1453	9.5000e-	0.1463	0.0385	8.8000e-	0.0394		146.9109	146.9109	4.4800e-		147.0231
Total	0.0831	0.4677	0.6669	2.5700e-	0.1709	2.8900e-	0.1738	0.0459	2.7400e-	0.0486		261.3515	261.3515	0.0119		261.6495

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3545	0.0000	2.3545	1.2916	0.0000	1.2916			0.0000			0.0000
Off-Road	2.1617	21.2538	15.6454	0.0262		1.1362	1.1362		1.0612	1.0612	0.0000	2,521.6626	2,521.6626	0.6614		2,538.1981
Total	2.1617	21.2538	15.6454	0.0262	2.3545	1.1362	3.4908	1.2916	1.0612	2.3528	0.0000	2,521.6626	2,521.6626	0.6614		2,538.1981

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0710	0.0455	0.5846	1.4800e-003	0.1453	9.5000e-004	0.1463	0.0385	8.8000e-004	0.0394		146.9109	146.9109	4.4800e-003		147.0231
Total	0.0831	0.4677	0.6669	2.5700e-003	0.1709	2.8900e-003	0.1738	0.0459	2.7400e-003	0.0486		261.3515	261.3515	0.0119		261.6495

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

3.3 Soil Hauling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	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	1.0605	0.0000	1.0605	0.1145	0.0000	0.1145		0.0000	0.0000	0.0000		0.0000

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	0.0497	1.9707	0.2908	6.2800e-003	0.1400	5.8700e-003	0.1459	0.0384	5.6200e-003	0.0440		666.1665	666.1665	0.0360		667.0652
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	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	0.0497	1.9707	0.2908	6.2800e-003	0.1400	5.8700e-003	0.1459	0.0384	5.6200e-003	0.0440		666.1665	666.1665	0.0360		667.0652

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

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					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	0.0000	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	0.4136	0.0000	0.4136	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000		0.0000

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	0.0497	1.9707	0.2908	6.2800e-003	0.1400	5.8700e-003	0.1459	0.0384	5.6200e-003	0.0440		666.1665	666.1665	0.0360		667.0652
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	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	0.0497	1.9707	0.2908	6.2800e-003	0.1400	5.8700e-003	0.1459	0.0384	5.6200e-003	0.0440		666.1665	666.1665	0.0360		667.0652

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.7726	14.6907	11.9792	0.0194		0.8073	0.8073		0.7566	0.7566		1,797.3284	1,797.3284	0.5084			1,810.0389
Total	1.7726	14.6907	11.9792	0.0194		0.8073	0.8073		0.7566	0.7566		1,797.3284	1,797.3284	0.5084			1,810.0389

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0334	1.1608	0.2262	2.9800e-003	0.0705	5.3400e-003	0.0758	0.0203	5.1100e-003	0.0254		314.7115	314.7115	0.0204			315.2226
Worker	0.1583	0.1016	1.3042	3.2900e-003	0.3242	2.1200e-003	0.3263	0.0860	1.9600e-003	0.0879		327.7244	327.7244	0.0100			327.9745
Total	0.1917	1.2624	1.5304	6.2700e-003	0.3946	7.4600e-003	0.4021	0.1063	7.0700e-003	0.1133		642.4359	642.4359	0.0304			643.1971

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

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	1.7726	14.6907	11.9792	0.0194		0.8073	0.8073		0.7566	0.7566	0.0000	1,797.3284	1,797.3284	0.5084		1,810.0389
Total	1.7726	14.6907	11.9792	0.0194		0.8073	0.8073		0.7566	0.7566	0.0000	1,797.3284	1,797.3284	0.5084		1,810.0389

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0334	1.1608	0.2262	2.9800e-003	0.0705	5.3400e-003	0.0758	0.0203	5.1100e-003	0.0254		314.7115	314.7115	0.0204		315.2226
Worker	0.1583	0.1016	1.3042	3.2900e-003	0.3242	2.1200e-003	0.3263	0.0860	1.9600e-003	0.0879		327.7244	327.7244	0.0100		327.9745
Total	0.1917	1.2624	1.5304	6.2700e-003	0.3946	7.4600e-003	0.4021	0.1063	7.0700e-003	0.1133		642.4359	642.4359	0.0304		643.1971

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.5868	13.4274	11.6927	0.0194		0.6942	0.6942		0.6505	0.6505		1,797.5406	1,797.5406	0.5012			1,810.0703
Total	1.5868	13.4274	11.6927	0.0194		0.6942	0.6942		0.6505	0.6505		1,797.5406	1,797.5406	0.5012			1,810.0703

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0285	1.0608	0.1996	2.9700e-003	0.0705	1.8200e-003	0.0723	0.0203	1.7400e-003	0.0220		313.0482	313.0482	0.0198			313.5428
Worker	0.1474	0.0911	1.2006	3.1900e-003	0.3242	2.0700e-003	0.3262	0.0860	1.9100e-003	0.0879		317.2834	317.2834	9.0300e-003			317.5091
Total	0.1758	1.1519	1.4002	6.1600e-003	0.3946	3.8900e-003	0.3985	0.1063	3.6500e-003	0.1099		630.3316	630.3316	0.0288			631.0519

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

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	1.5868	13.4274	11.6927	0.0194		0.6942	0.6942		0.6505	0.6505	0.0000	1,797.5406	1,797.5406	0.5012		1,810.0703
Total	1.5868	13.4274	11.6927	0.0194		0.6942	0.6942		0.6505	0.6505	0.0000	1,797.5406	1,797.5406	0.5012		1,810.0703

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0285	1.0608	0.1996	2.9700e-003	0.0705	1.8200e-003	0.0723	0.0203	1.7400e-003	0.0220		313.0482	313.0482	0.0198		313.5428
Worker	0.1474	0.0911	1.2006	3.1900e-003	0.3242	2.0700e-003	0.3262	0.0860	1.9100e-003	0.0879		317.2834	317.2834	9.0300e-003		317.5091
Total	0.1758	1.1519	1.4002	6.1600e-003	0.3946	3.8900e-003	0.3985	0.1063	3.6500e-003	0.1099		630.3316	630.3316	0.0288		631.0519

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	4.9185	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0305	0.0188	0.2484	6.6000e-004	0.0671	4.3000e-004	0.0675	0.0178	4.0000e-004	0.0182		65.6448	65.6448	1.8700e-003		65.6915
Total	0.0305	0.0188	0.2484	6.6000e-004	0.0671	4.3000e-004	0.0675	0.0178	4.0000e-004	0.0182		65.6448	65.6448	1.8700e-003		65.6915

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Summer

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Summer**

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					
Archit. Coating	4.6267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079
Total	4.9185	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0305	0.0188	0.2484	6.6000e-004	0.0671	4.3000e-004	0.0675	0.0178	4.0000e-004	0.0182		65.6448	65.6448	1.8700e-003		65.6915
Total	0.0305	0.0188	0.2484	6.6000e-004	0.0671	4.3000e-004	0.0675	0.0178	4.0000e-004	0.0182		65.6448	65.6448	1.8700e-003		65.6915

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	1.60	Acre	1.60	69,696.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per Engineer
- Construction Phase - Per Engineer
- Off-road Equipment - 8 hours per day
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Trips and VMT - 4 trips per day for water truck and material delivery
- Grading - Per Engineer
- Architectural Coating - Per Engineer
- Energy Use - Per Engineer
- Construction Off-road Equipment Mitigation - Per Rule 403

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	1,450.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	4,350.00
tblConstructionPhase	NumDays	200.00	290.00
tblConstructionPhase	NumDays	4.00	105.00
tblConstructionPhase	NumDays	2.00	1.00
tblEnergyUse	NT24E	0.00	1.46
tblGrading	AcresOfGrading	0.00	1.50
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialImported	0.00	60.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	6.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	3/6/2020	7/30/2020	5	105	
2	Soil Hauling	Site Preparation	3/13/2020	3/13/2020	5	1	
3	Building Construction	Building Construction	6/6/2020	7/16/2021	5	290	
4	Architectural Coating	Architectural Coating	4/1/2021	4/14/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.6

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,350; Non-Residential Outdoor: 1,450; Striped Parking Area: 4,182

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	0	6.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Soil Hauling	Graders	0	8.00	187	0.41
Soil Hauling	Rubber Tired Dozers	0	7.00	247	0.40
Soil Hauling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	76	0.48

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class	
Grading		5	13.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Hauling		0	0.00	0.00	8.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction		7	29.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating		1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.0372	0.0000	6.0372	3.3119	0.0000	3.3119			0.0000			0.0000
Off-Road	2.1617	21.2538	15.6454	0.0262		1.1362	1.1362		1.0612	1.0612		2,521.6626	2,521.6626	0.6614		2,538.1981
Total	2.1617	21.2538	15.6454	0.0262	6.0372	1.1362	7.1735	3.3119	1.0612	4.3730		2,521.6626	2,521.6626	0.6614		2,538.1981

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0710	0.0479	0.4805	1.3200e-003	0.1453	9.5000e-004	0.1463	0.0385	8.8000e-004	0.0394		131.7875	131.7875	3.9300e-003		131.8858
Total	0.0838	0.4666	0.5759	2.3600e-003	0.1709	2.9200e-003	0.1739	0.0459	2.7600e-003	0.0487		241.7875	241.7875	0.0122		242.0913

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3545	0.0000	2.3545	1.2916	0.0000	1.2916			0.0000			0.0000
Off-Road	2.1617	21.2538	15.6454	0.0262		1.1362	1.1362		1.0612	1.0612	0.0000	2,521.6626	2,521.6626	0.6614		2,538.1981
Total	2.1617	21.2538	15.6454	0.0262	2.3545	1.1362	3.4908	1.2916	1.0612	2.3528	0.0000	2,521.6626	2,521.6626	0.6614		2,538.1981

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0710	0.0479	0.4805	1.3200e-003	0.1453	9.5000e-004	0.1463	0.0385	8.8000e-004	0.0394		131.7875	131.7875	3.9300e-003		131.8858
Total	0.0838	0.4666	0.5759	2.3600e-003	0.1709	2.9200e-003	0.1739	0.0459	2.7600e-003	0.0487		241.7875	241.7875	0.0122		242.0913

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

3.3 Soil Hauling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.0605	0.0000	1.0605	0.1145	0.0000	0.1145			0.0000			0.0000
Off-Road	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	1.0605	0.0000	1.0605	0.1145	0.0000	0.1145		0.0000	0.0000	0.0000		0.0000

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	0.0520	1.9812	0.3327	6.1100e-003	0.1400	5.9500e-003	0.1460	0.0384	5.6900e-003	0.0441		648.7966	648.7966	0.0390		649.7719
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	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	0.0520	1.9812	0.3327	6.1100e-003	0.1400	5.9500e-003	0.1460	0.0384	5.6900e-003	0.0441		648.7966	648.7966	0.0390		649.7719

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

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					0.4136	0.0000	0.4136	0.0447	0.0000	0.0447			0.0000			0.0000
Off-Road	0.0000	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	0.4136	0.0000	0.4136	0.0447	0.0000	0.0447	0.0000	0.0000	0.0000	0.0000		0.0000

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	0.0520	1.9812	0.3327	6.1100e-003	0.1400	5.9500e-003	0.1460	0.0384	5.6900e-003	0.0441		648.7966	648.7966	0.0390		649.7719
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	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	0.0520	1.9812	0.3327	6.1100e-003	0.1400	5.9500e-003	0.1460	0.0384	5.6900e-003	0.0441		648.7966	648.7966	0.0390		649.7719

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7726	14.6907	11.9792	0.0194		0.8073	0.8073		0.7566	0.7566		1,797.3284	1,797.3284	0.5084		1,810.0389
Total	1.7726	14.6907	11.9792	0.0194		0.8073	0.8073		0.7566	0.7566		1,797.3284	1,797.3284	0.5084		1,810.0389

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0352	1.1514	0.2622	2.8700e-003	0.0705	5.4100e-003	0.0759	0.0203	5.1700e-003	0.0255		302.5001	302.5001	0.0226		303.0651
Worker	0.1584	0.1069	1.0719	2.9500e-003	0.3242	2.1200e-003	0.3263	0.0860	1.9600e-003	0.0879		293.9874	293.9874	8.7800e-003		294.2069
Total	0.1936	1.2583	1.3341	5.8200e-003	0.3946	7.5300e-003	0.4021	0.1063	7.1300e-003	0.1134		596.4876	596.4876	0.0314		597.2720

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

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	1.7726	14.6907	11.9792	0.0194		0.8073	0.8073		0.7566	0.7566	0.0000	1,797.3284	1,797.3284	0.5084		1,810.0389
Total	1.7726	14.6907	11.9792	0.0194		0.8073	0.8073		0.7566	0.7566	0.0000	1,797.3284	1,797.3284	0.5084		1,810.0389

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0352	1.1514	0.2622	2.8700e-003	0.0705	5.4100e-003	0.0759	0.0203	5.1700e-003	0.0255		302.5001	302.5001	0.0226		303.0651
Worker	0.1584	0.1069	1.0719	2.9500e-003	0.3242	2.1200e-003	0.3263	0.0860	1.9600e-003	0.0879		293.9874	293.9874	8.7800e-003		294.2069
Total	0.1936	1.2583	1.3341	5.8200e-003	0.3946	7.5300e-003	0.4021	0.1063	7.1300e-003	0.1134		596.4876	596.4876	0.0314		597.2720

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5868	13.4274	11.6927	0.0194		0.6942	0.6942		0.6505	0.6505		1,797.5406	1,797.5406	0.5012		1,810.0703
Total	1.5868	13.4274	11.6927	0.0194		0.6942	0.6942		0.6505	0.6505		1,797.5406	1,797.5406	0.5012		1,810.0703

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0495	0.2335	2.8500e-003	0.0705	1.8700e-003	0.0723	0.0203	1.7900e-003	0.0221		300.8886	300.8886	0.0219		301.4368
Worker	0.1477	0.0958	0.9847	2.8600e-003	0.3242	2.0700e-003	0.3262	0.0860	1.9100e-003	0.0879		284.6343	284.6343	7.9200e-003		284.8324
Total	0.1779	1.1453	1.2182	5.7100e-003	0.3946	3.9400e-003	0.3986	0.1063	3.7000e-003	0.1100		585.5230	585.5230	0.0299		586.2692

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

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	1.5868	13.4274	11.6927	0.0194		0.6942	0.6942		0.6505	0.6505	0.0000	1,797.5406	1,797.5406	0.5012		1,810.0703
Total	1.5868	13.4274	11.6927	0.0194		0.6942	0.6942		0.6505	0.6505	0.0000	1,797.5406	1,797.5406	0.5012		1,810.0703

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0302	1.0495	0.2335	2.8500e-003	0.0705	1.8700e-003	0.0723	0.0203	1.7900e-003	0.0221		300.8886	300.8886	0.0219		301.4368
Worker	0.1477	0.0958	0.9847	2.8600e-003	0.3242	2.0700e-003	0.3262	0.0860	1.9100e-003	0.0879		284.6343	284.6343	7.9200e-003		284.8324
Total	0.1779	1.1453	1.2182	5.7100e-003	0.3946	3.9400e-003	0.3986	0.1063	3.7000e-003	0.1100		585.5230	585.5230	0.0299		586.2692

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	4.6267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	4.9185	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0306	0.0198	0.2037	5.9000e-004	0.0671	4.3000e-004	0.0675	0.0178	4.0000e-004	0.0182		58.8899	58.8899	1.6400e-003		58.9308
Total	0.0306	0.0198	0.2037	5.9000e-004	0.0671	4.3000e-004	0.0675	0.0178	4.0000e-004	0.0182		58.8899	58.8899	1.6400e-003		58.9308

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Winter

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Winter

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					
Archit. Coating	4.6267					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079
Total	4.9185	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0306	0.0198	0.2037	5.9000e-004	0.0671	4.3000e-004	0.0675	0.0178	4.0000e-004	0.0182		58.8899	58.8899	1.6400e-003		58.9308
Total	0.0306	0.0198	0.2037	5.9000e-004	0.0671	4.3000e-004	0.0675	0.0178	4.0000e-004	0.0182		58.8899	58.8899	1.6400e-003		58.9308

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	1.60	Acre	1.60	69,696.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Per Engineer
- Construction Phase - Per Engineer
- Off-road Equipment - 8 hours per day
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Trips and VMT - 4 trips per day for water truck and material delivery
- Grading - Per Engineer
- Architectural Coating - Per Engineer
- Energy Use - Per Engineer
- Construction Off-road Equipment Mitigation - Per Rule 403

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual**

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	1,450.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	4,350.00
tblConstructionPhase	NumDays	200.00	290.00
tblConstructionPhase	NumDays	4.00	105.00
tblConstructionPhase	NumDays	2.00	1.00
tblEnergyUse	NT24E	0.00	1.46
tblGrading	AcresOfGrading	0.00	1.50
tblGrading	AcresOfGrading	0.00	1.00
tblGrading	MaterialImported	0.00	60.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	6.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

2.0 Emissions Summary

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					
2020	0.2628	2.3322	1.8472	3.3900e-003	0.3552	0.1205	0.4757	0.1841	0.1128	0.2969	0.0000	294.8755	294.8755	0.0685	0.0000	296.5880
2021	0.1481	1.0395	0.9257	1.8000e-003	0.0276	0.0499	0.0775	7.4500e-003	0.0468	0.0542	0.0000	155.2374	155.2374	0.0340	0.0000	156.0880
Maximum	0.2628	2.3322	1.8472	3.3900e-003	0.3552	0.1205	0.4757	0.1841	0.1128	0.2969	0.0000	294.8755	294.8755	0.0685	0.0000	296.5880

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					
2020	0.2628	2.3322	1.8472	3.3900e-003	0.1616	0.1205	0.2821	0.0780	0.1128	0.1908	0.0000	294.8752	294.8752	0.0685	0.0000	296.5877
2021	0.1481	1.0395	0.9257	1.8000e-003	0.0276	0.0499	0.0775	7.4500e-003	0.0468	0.0542	0.0000	155.2372	155.2372	0.0340	0.0000	156.0879
Maximum	0.2628	2.3322	1.8472	3.3900e-003	0.1616	0.1205	0.2821	0.0780	0.1128	0.1908	0.0000	294.8752	294.8752	0.0685	0.0000	296.5877

	ROG	NOx	CO	SO2	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	50.59	0.00	35.01	55.39	0.00	30.22	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-6-2020	6-5-2020	0.7882	0.7882
2	6-6-2020	9-5-2020	1.0595	1.0595
3	9-6-2020	12-5-2020	0.5823	0.5823
4	12-6-2020	3-5-2021	0.5398	0.5398
5	3-6-2021	6-5-2021	0.5719	0.5719
6	6-6-2021	9-5-2021	0.2393	0.2393
		Highest	1.0595	1.0595

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	3/6/2020	7/30/2020	5	105	
2	Soil Hauling	Site Preparation	3/13/2020	3/13/2020	5	1	
3	Building Construction	Building Construction	6/6/2020	7/16/2021	5	290	
4	Architectural Coating	Architectural Coating	4/1/2021	4/14/2021	5	10	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.6

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 4,350; Non-Residential Outdoor: 1,450; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	0	6.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Soil Hauling	Graders	0	8.00	187	0.41
Soil Hauling	Rubber Tired Dozers	0	7.00	247	0.40
Soil Hauling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	5	13.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Soil Hauling	0	0.00	0.00	8.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	29.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3170	0.0000	0.3170	0.1739	0.0000	0.1739	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1135	1.1158	0.8214	1.3700e-003		0.0597	0.0597		0.0557	0.0557	0.0000	120.0997	120.0997	0.0315	0.0000	120.8873
Total	0.1135	1.1158	0.8214	1.3700e-003	0.3170	0.0597	0.3766	0.1739	0.0557	0.2296	0.0000	120.0997	120.0997	0.0315	0.0000	120.8873

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5000e-004	0.0224	4.6900e-003	6.0000e-005	1.3200e-003	1.0000e-004	1.4300e-003	3.8000e-004	1.0000e-004	4.8000e-004	0.0000	5.3617	5.3617	3.7000e-004	0.0000	5.3709
Worker	3.3700e-003	2.6500e-003	0.0265	7.0000e-005	7.4800e-003	5.0000e-005	7.5300e-003	1.9900e-003	5.0000e-005	2.0300e-003	0.0000	6.4143	6.4143	1.9000e-004	0.0000	6.4191
Total	4.0200e-003	0.0251	0.0312	1.3000e-004	8.8000e-003	1.5000e-004	8.9600e-003	2.3700e-003	1.5000e-004	2.5100e-003	0.0000	11.7759	11.7759	5.6000e-004	0.0000	11.7900

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual**

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					0.1236	0.0000	0.1236	0.0678	0.0000	0.0678	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1135	1.1158	0.8214	1.3700e-003		0.0597	0.0597		0.0557	0.0557	0.0000	120.0996	120.0996	0.0315	0.0000	120.8871
Total	0.1135	1.1158	0.8214	1.3700e-003	0.1236	0.0597	0.1833	0.0678	0.0557	0.1235	0.0000	120.0996	120.0996	0.0315	0.0000	120.8871

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.5000e-004	0.0224	4.6900e-003	6.0000e-005	1.3200e-003	1.0000e-004	1.4300e-003	3.8000e-004	1.0000e-004	4.8000e-004	0.0000	5.3617	5.3617	3.7000e-004	0.0000	5.3709
Worker	3.3700e-003	2.6500e-003	0.0265	7.0000e-005	7.4800e-003	5.0000e-005	7.5300e-003	1.9900e-003	5.0000e-005	2.0300e-003	0.0000	6.4143	6.4143	1.9000e-004	0.0000	6.4191
Total	4.0200e-003	0.0251	0.0312	1.3000e-004	8.8000e-003	1.5000e-004	8.9600e-003	2.3700e-003	1.5000e-004	2.5100e-003	0.0000	11.7759	11.7759	5.6000e-004	0.0000	11.7900

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

3.3 Soil Hauling - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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	5.3000e-004	0.0000	5.3000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.0100e-003	1.5000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2989	0.2989	2.0000e-005	0.0000	0.2993
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.0000e-005	1.0100e-003	1.5000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2989	0.2989	2.0000e-005	0.0000	0.2993

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

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					2.1000e-004	0.0000	2.1000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	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	2.1000e-004	0.0000	2.1000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.0100e-003	1.5000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2989	0.2989	2.0000e-005	0.0000	0.2993
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.0000e-005	1.0100e-003	1.5000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2989	0.2989	2.0000e-005	0.0000	0.2993

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

3.4 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1321	1.0945	0.8925	1.4400e-003		0.0601	0.0601		0.0564	0.0564	0.0000	121.4729	121.4729	0.0344	0.0000	122.3320
Total	0.1321	1.0945	0.8925	1.4400e-003		0.0601	0.0601		0.0564	0.0564	0.0000	121.4729	121.4729	0.0344	0.0000	122.3320

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5400e-003	0.0875	0.0183	2.2000e-004	5.1700e-003	4.0000e-004	5.5700e-003	1.4900e-003	3.8000e-004	1.8700e-003	0.0000	20.9232	20.9232	1.4500e-003	0.0000	20.9594
Worker	0.0107	8.3900e-003	0.0838	2.2000e-004	0.0237	1.6000e-004	0.0239	6.2900e-003	1.5000e-004	6.4400e-003	0.0000	20.3048	20.3048	6.1000e-004	0.0000	20.3201
Total	0.0132	0.0959	0.1021	4.4000e-004	0.0289	5.6000e-004	0.0294	7.7800e-003	5.3000e-004	8.3100e-003	0.0000	41.2281	41.2281	2.0600e-003	0.0000	41.2795

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual**

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	0.1321	1.0945	0.8925	1.4400e-003		0.0601	0.0601		0.0564	0.0564	0.0000	121.4728	121.4728	0.0344	0.0000	122.3318
Total	0.1321	1.0945	0.8925	1.4400e-003		0.0601	0.0601		0.0564	0.0564	0.0000	121.4728	121.4728	0.0344	0.0000	122.3318

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.5400e-003	0.0875	0.0183	2.2000e-004	5.1700e-003	4.0000e-004	5.5700e-003	1.4900e-003	3.8000e-004	1.8700e-003	0.0000	20.9232	20.9232	1.4500e-003	0.0000	20.9594
Worker	0.0107	8.3900e-003	0.0838	2.2000e-004	0.0237	1.6000e-004	0.0239	6.2900e-003	1.5000e-004	6.4400e-003	0.0000	20.3048	20.3048	6.1000e-004	0.0000	20.3201
Total	0.0132	0.0959	0.1021	4.4000e-004	0.0289	5.6000e-004	0.0294	7.7800e-003	5.3000e-004	8.3100e-003	0.0000	41.2281	41.2281	2.0600e-003	0.0000	41.2795

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

3.4 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1119	0.9466	0.8243	1.3700e-003		0.0489	0.0489		0.0459	0.0459	0.0000	114.9645	114.9645	0.0321	0.0000	115.7658
Total	0.1119	0.9466	0.8243	1.3700e-003		0.0489	0.0489		0.0459	0.0459	0.0000	114.9645	114.9645	0.0321	0.0000	115.7658

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0600e-003	0.0755	0.0154	2.1000e-004	4.8900e-003	1.3000e-004	5.0200e-003	1.4100e-003	1.2000e-004	1.5400e-003	0.0000	19.6949	19.6949	1.3300e-003	0.0000	19.7280
Worker	9.4100e-003	7.1100e-003	0.0729	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9500e-003	1.3000e-004	6.0900e-003	0.0000	18.6029	18.6029	5.2000e-004	0.0000	18.6159
Total	0.0115	0.0826	0.0882	4.2000e-004	0.0273	2.8000e-004	0.0276	7.3600e-003	2.5000e-004	7.6300e-003	0.0000	38.2978	38.2978	1.8500e-003	0.0000	38.3440

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

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	0.1119	0.9466	0.8243	1.3700e-003		0.0489	0.0489		0.0459	0.0459	0.0000	114.9643	114.9643	0.0321	0.0000	115.7657
Total	0.1119	0.9466	0.8243	1.3700e-003		0.0489	0.0489		0.0459	0.0459	0.0000	114.9643	114.9643	0.0321	0.0000	115.7657

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0600e-003	0.0755	0.0154	2.1000e-004	4.8900e-003	1.3000e-004	5.0200e-003	1.4100e-003	1.2000e-004	1.5400e-003	0.0000	19.6949	19.6949	1.3300e-003	0.0000	19.7280
Worker	9.4100e-003	7.1100e-003	0.0729	2.1000e-004	0.0224	1.5000e-004	0.0226	5.9500e-003	1.3000e-004	6.0900e-003	0.0000	18.6029	18.6029	5.2000e-004	0.0000	18.6159
Total	0.0115	0.0826	0.0882	4.2000e-004	0.0273	2.8000e-004	0.0276	7.3600e-003	2.5000e-004	7.6300e-003	0.0000	38.2978	38.2978	1.8500e-003	0.0000	38.3440

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

3.5 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0231					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4600e-003	0.0102	0.0121	2.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	1.7022	1.7022	1.2000e-004	0.0000	1.7051
Total	0.0246	0.0102	0.0121	2.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	1.7022	1.7022	1.2000e-004	0.0000	1.7051

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.0000e-004	1.0700e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2730	0.2730	1.0000e-005	0.0000	0.2732
Total	1.4000e-004	1.0000e-004	1.0700e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2730	0.2730	1.0000e-005	0.0000	0.2732

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0231					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.4600e-003	0.0102	0.0121	2.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	1.7022	1.7022	1.2000e-004	0.0000	1.7051
Total	0.0246	0.0102	0.0121	2.0000e-005		6.3000e-004	6.3000e-004		6.3000e-004	6.3000e-004	0.0000	1.7022	1.7022	1.2000e-004	0.0000	1.7051

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.4000e-004	1.0000e-004	1.0700e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2730	0.2730	1.0000e-005	0.0000	0.2732
Total	1.4000e-004	1.0000e-004	1.0700e-003	0.0000	3.3000e-004	0.0000	3.3000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2730	0.2730	1.0000e-005	0.0000	0.2732

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual

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	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	16.60	8.40	6.90	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 Non-Asphalt Surfaces	0.549952	0.037123	0.179649	0.119457	0.017229	0.005267	0.017877	0.062669	0.001348	0.001607	0.006000	0.000812	0.001010

Chino EWTF - Site Expansion Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Site Expansion Component
San Bernardino-South Coast County, Annual**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	101756	32.4217	1.3400e-003	2.8000e-004	32.5377
Total		32.4217	1.3400e-003	2.8000e-004	32.5377

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	101756	32.4217	1.3400e-003	2.8000e-004	32.5377
Total		32.4217	1.3400e-003	2.8000e-004	32.5377

Brine Pipeline Component

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Summer

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	5.70	Acre	5.70	248,292.00	0
Other Asphalt Surfaces	2.90	Acre	2.90	126,324.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Engineer

Construction Phase - Per Engineer

Off-road Equipment - Per Engineer; Generator set represents a fusing machine

Off-road Equipment - Per Engineer

Trips and VMT - 4 trips per day for water truck, material delivery, soil import/export. and concrete mixing truck

Construction Off-road Equipment Mitigation - Per Rule 403

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Summer

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	125.00
tblConstructionPhase	NumDays	20.00	125.00
tblConstructionPhase	PhaseEndDate	4/2/2020	8/27/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	8/27/2020
tblConstructionPhase	PhaseStartDate	4/3/2020	3/6/2020
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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	3.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Summer

Chino EWTF - Brine Pipeline Component

San Bernardino-South Coast County, Summer

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	3/6/2020	8/27/2020	5	125	
2	Paving	Paving	3/6/2020	8/27/2020	5	125	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.6

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Generator Sets	1	8.00	84	0.74
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	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

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Summer

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Summer

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1069	0.0000	6.1069	3.3194	0.0000	3.3194			0.0000			0.0000
Off-Road	2.3875	23.8464	18.9322	0.0317		1.2512	1.2512		1.1668	1.1668		3,052.1509	3,052.1509	0.8207		3,072.6686
Total	2.3875	23.8464	18.9322	0.0317	6.1069	1.2512	7.3581	3.3194	1.1668	4.4862		3,052.1509	3,052.1509	0.8207		3,072.6686

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	0.0940	0.4747	0.7569	2.7900e-003	0.1933	3.0400e-003	0.1963	0.0519	2.8700e-003	0.0547		283.9532	283.9532	0.0126		284.2684

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Summer

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Summer

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3817	0.0000	2.3817	1.2946	0.0000	1.2946			0.0000			0.0000
Off-Road	2.3875	23.8464	18.9322	0.0317		1.2512	1.2512		1.1668	1.1668	0.0000	3,052.1509	3,052.1509	0.8207		3,072.6686
Total	2.3875	23.8464	18.9322	0.0317	2.3817	1.2512	3.6329	1.2946	1.1668	2.4614	0.0000	3,052.1509	3,052.1509	0.8207		3,072.6686

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0121	0.4221	0.0823	1.0900e-003	0.0256	1.9400e-003	0.0276	7.3800e-003	1.8600e-003	9.2300e-003		114.4406	114.4406	7.4300e-003		114.6264
Worker	0.0819	0.0525	0.6746	1.7000e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		169.5126	169.5126	5.1700e-003		169.6420
Total	0.0940	0.4747	0.7569	2.7900e-003	0.1933	3.0400e-003	0.1963	0.0519	2.8700e-003	0.0547		283.9532	283.9532	0.0126		284.2684

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Summer

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Summer

3.3 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0608					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7391	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0437	0.0280	0.3598	9.1000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		90.4067	90.4067	2.7600e-003		90.4757
Total	0.0437	0.0280	0.3598	9.1000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		90.4067	90.4067	2.7600e-003		90.4757

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Summer

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Summer

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	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0608					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7391	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0437	0.0280	0.3598	9.1000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		90.4067	90.4067	2.7600e-003		90.4757
Total	0.0437	0.0280	0.3598	9.1000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		90.4067	90.4067	2.7600e-003		90.4757

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Winter

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	5.70	Acre	5.70	248,292.00	0
Other Asphalt Surfaces	2.90	Acre	2.90	126,324.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Per Engineer
 Construction Phase - Per Engineer
 Off-road Equipment - Per Engineer; Generator set represents a fusing machine
 Off-road Equipment - Per Engineer
 Trips and VMT - 4 trips per day for water truck, material delivery, soil import/export. and concrete mixing truck
 Construction Off-road Equipment Mitigation - Per Rule 403

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Winter

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	125.00
tblConstructionPhase	NumDays	20.00	125.00
tblConstructionPhase	PhaseEndDate	4/2/2020	8/27/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	8/27/2020
tblConstructionPhase	PhaseStartDate	4/3/2020	3/6/2020
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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	3.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Winter

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Winter

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	3/6/2020	8/27/2020	5	125	
2	Paving	Paving	3/6/2020	8/27/2020	5	125	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.6

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Generator Sets	1	8.00	84	0.74
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	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

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Winter

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Winter

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1069	0.0000	6.1069	3.3194	0.0000	3.3194			0.0000			0.0000
Off-Road	2.3875	23.8464	18.9322	0.0317		1.2512	1.2512		1.1668	1.1668		3,052.1509	3,052.1509	0.8207		3,072.6686
Total	2.3875	23.8464	18.9322	0.0317	6.1069	1.2512	7.3581	3.3194	1.1668	4.4862		3,052.1509	3,052.1509	0.8207		3,072.6686

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	0.0947	0.4740	0.6498	2.5700e-003	0.1933	3.0700e-003	0.1964	0.0519	2.8900e-003	0.0547		262.0625	262.0625	0.0128		262.3815

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Winter

**Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Winter**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3817	0.0000	2.3817	1.2946	0.0000	1.2946			0.0000			0.0000
Off-Road	2.3875	23.8464	18.9322	0.0317		1.2512	1.2512		1.1668	1.1668	0.0000	3,052.1509	3,052.1509	0.8207		3,072.6686
Total	2.3875	23.8464	18.9322	0.0317	2.3817	1.2512	3.6329	1.2946	1.1668	2.4614	0.0000	3,052.1509	3,052.1509	0.8207		3,072.6686

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0128	0.4187	0.0954	1.0400e-003	0.0256	1.9700e-003	0.0276	7.3800e-003	1.8800e-003	9.2600e-003		110.0000	110.0000	8.2200e-003		110.2055
Worker	0.0819	0.0553	0.5544	1.5300e-003	0.1677	1.1000e-003	0.1688	0.0445	1.0100e-003	0.0455		152.0625	152.0625	4.5400e-003		152.1760
Total	0.0947	0.4740	0.6498	2.5700e-003	0.1933	3.0700e-003	0.1964	0.0519	2.8900e-003	0.0547		262.0625	262.0625	0.0128		262.3815

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Winter

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Winter

3.3 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0608					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7391	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463		1,103.8667	1,103.8667	0.3570		1,112.7920

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0437	0.0295	0.2957	8.1000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		81.1000	81.1000	2.4200e-003		81.1605
Total	0.0437	0.0295	0.2957	8.1000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		81.1000	81.1000	2.4200e-003		81.1605

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Winter

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Winter

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	0.6783	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920
Paving	0.0608					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.7391	7.0328	7.3260	0.0114		0.3764	0.3764		0.3463	0.3463	0.0000	1,103.8667	1,103.8667	0.3570		1,112.7920

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0437	0.0295	0.2957	8.1000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		81.1000	81.1000	2.4200e-003		81.1605
Total	0.0437	0.0295	0.2957	8.1000e-004	0.0894	5.9000e-004	0.0900	0.0237	5.4000e-004	0.0243		81.1000	81.1000	2.4200e-003		81.1605

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	5.70	Acre	5.70	248,292.00	0
Other Asphalt Surfaces	2.90	Acre	2.90	126,324.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	32
Climate Zone	10			Operational Year	2020
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per Engineer

Construction Phase - Per Engineer

Off-road Equipment - Per Engineer; Generator set represents a fusing machine

Off-road Equipment - Per Engineer

Trips and VMT - 4 trips per day for water truck, material delivery, soil import/export. and concrete mixing truck

Construction Off-road Equipment Mitigation - Per Rule 403

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Annual

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	125.00
tblConstructionPhase	NumDays	20.00	125.00
tblConstructionPhase	PhaseEndDate	4/2/2020	8/27/2020
tblConstructionPhase	PhaseEndDate	4/30/2020	8/27/2020
tblConstructionPhase	PhaseStartDate	4/3/2020	3/6/2020
tblGrading	AcresOfGrading	0.00	10.00
tblOffRoadEquipment	OffRoadEquipmentType		Generator Sets
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
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	3.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Annual

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Annual

2.0 Emissions Summary

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					
2020	0.2033	1.9622	1.7025	2.9100e-003	0.3990	0.1020	0.5010	0.2121	0.0948	0.3069	0.0000	255.5351	255.5351	0.0676	0.0000	257.2257
Maximum	0.2033	1.9622	1.7025	2.9100e-003	0.3990	0.1020	0.5010	0.2121	0.0948	0.3069	0.0000	255.5351	255.5351	0.0676	0.0000	257.2257

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					
2020	0.2033	1.9622	1.7025	2.9100e-003	0.1662	0.1020	0.2682	0.0856	0.0948	0.1803	0.0000	255.5348	255.5348	0.0676	0.0000	257.2254
Maximum	0.2033	1.9622	1.7025	2.9100e-003	0.1662	0.1020	0.2682	0.0856	0.0948	0.1803	0.0000	255.5348	255.5348	0.0676	0.0000	257.2254

	ROG	NOx	CO	SO2	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	58.35	0.00	46.47	59.67	0.00	41.24	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-6-2020	6-5-2020	1.1384	1.1384
2	6-6-2020	9-5-2020	1.0270	1.0270
		Highest	1.1384	1.1384

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Annual

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Annual

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	3/6/2020	8/27/2020	5	125	
2	Paving	Paving	3/6/2020	8/27/2020	5	125	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 8.6

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Generator Sets	1	8.00	84	0.74
Grading	Graders	0	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	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
Grading	6	15.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Annual

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Annual

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Grading - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.3817	0.0000	0.3817	0.2075	0.0000	0.2075	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1492	1.4904	1.1833	1.9800e-003		0.0782	0.0782		0.0729	0.0729	0.0000	173.0541	173.0541	0.0465	0.0000	174.2174
Total	0.1492	1.4904	1.1833	1.9800e-003	0.3817	0.0782	0.4599	0.2075	0.0729	0.2804	0.0000	173.0541	173.0541	0.0465	0.0000	174.2174

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8000e-004	0.0267	5.5800e-003	7.0000e-005	1.5800e-003	1.2000e-004	1.7000e-003	4.5000e-004	1.2000e-004	5.7000e-004	0.0000	6.3829	6.3829	4.4000e-004	0.0000	6.3940
Worker	4.6300e-003	3.6400e-003	0.0364	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7300e-003	6.0000e-005	2.7900e-003	0.0000	8.8108	8.8108	2.6000e-004	0.0000	8.8174
Total	5.4100e-003	0.0303	0.0419	1.7000e-004	0.0119	1.9000e-004	0.0121	3.1800e-003	1.8000e-004	3.3600e-003	0.0000	15.1937	15.1937	7.0000e-004	0.0000	15.2114

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Annual**

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					0.1489	0.0000	0.1489	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1492	1.4904	1.1833	1.9800e-003		0.0782	0.0782		0.0729	0.0729	0.0000	173.0538	173.0538	0.0465	0.0000	174.2172
Total	0.1492	1.4904	1.1833	1.9800e-003	0.1489	0.0782	0.2271	0.0809	0.0729	0.1538	0.0000	173.0538	173.0538	0.0465	0.0000	174.2172

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.8000e-004	0.0267	5.5800e-003	7.0000e-005	1.5800e-003	1.2000e-004	1.7000e-003	4.5000e-004	1.2000e-004	5.7000e-004	0.0000	6.3829	6.3829	4.4000e-004	0.0000	6.3940
Worker	4.6300e-003	3.6400e-003	0.0364	1.0000e-004	0.0103	7.0000e-005	0.0104	2.7300e-003	6.0000e-005	2.7900e-003	0.0000	8.8108	8.8108	2.6000e-004	0.0000	8.8174
Total	5.4100e-003	0.0303	0.0419	1.7000e-004	0.0119	1.9000e-004	0.0121	3.1800e-003	1.8000e-004	3.3600e-003	0.0000	15.1937	15.1937	7.0000e-004	0.0000	15.2114

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Annual

Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Annual

3.3 Paving - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0424	0.4396	0.4579	7.1000e-004		0.0235	0.0235		0.0216	0.0216	0.0000	62.5882	62.5882	0.0202	0.0000	63.0943
Paving	3.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0462	0.4396	0.4579	7.1000e-004		0.0235	0.0235		0.0216	0.0216	0.0000	62.5882	62.5882	0.0202	0.0000	63.0943

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4700e-003	1.9400e-003	0.0194	5.0000e-005	5.4800e-003	4.0000e-005	5.5200e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.6991	4.6991	1.4000e-004	0.0000	4.7026
Total	2.4700e-003	1.9400e-003	0.0194	5.0000e-005	5.4800e-003	4.0000e-005	5.5200e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.6991	4.6991	1.4000e-004	0.0000	4.7026

Chino EWTF - Brine Pipeline Component - San Bernardino-South Coast County, Annual

**Chino EWTF - Brine Pipeline Component
San Bernardino-South Coast County, Annual**

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	0.0424	0.4396	0.4579	7.1000e-004		0.0235	0.0235		0.0216	0.0216	0.0000	62.5881	62.5881	0.0202	0.0000	63.0942
Paving	3.8000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0462	0.4396	0.4579	7.1000e-004		0.0235	0.0235		0.0216	0.0216	0.0000	62.5881	62.5881	0.0202	0.0000	63.0942

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.4700e-003	1.9400e-003	0.0194	5.0000e-005	5.4800e-003	4.0000e-005	5.5200e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.6991	4.6991	1.4000e-004	0.0000	4.7026
Total	2.4700e-003	1.9400e-003	0.0194	5.0000e-005	5.4800e-003	4.0000e-005	5.5200e-003	1.4600e-003	3.0000e-005	1.4900e-003	0.0000	4.6991	4.6991	1.4000e-004	0.0000	4.7026