



Technical Memorandum

To: Joe Broadhead, Principal Water Resources Specialist

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

Date: May 12, 2020

Re: Air Quality/Greenhouse Gas Analysis for the Belle Terre Water Storage Tank, Located Within Belle Terre Specific Plan No. 382, Unincorporated Riverside County Community of French Valley

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 proposed Project includes construction of a 1.79 million-gallon (MG) potable water storage tank and associated infrastructure that will provide potable water service to the Belle Terre community as planned by the Belle Terre Specific Plan No. 382 (SP382). The Project site is approximately 4.7 acres located on a knoll north of Fields Drive, east of the San Diego Canal, and west of Glen Gibson Court within Planning Area 24 of SP382 in unincorporated Riverside County. The nominal tank diameter is 86-feet and the nominal height is 40-feet. An 18-inch diameter water pipeline will be constructed to connect the proposed tank to the nearest point of connection in Fields Drive for a length of approximately 1,100-feet. An 18-inch diameter overflow pipeline will also be provided to drain overflow tank water to a proposed detention basin located at the entrance of the proposed access road.

Regional Significance Thresholds

The thresholds contained in the *SCAQMD CEQA Air Quality Handbook*¹ (SCAQMD 1993) 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 additional facilities constructed are not anticipated to increase the frequency of ongoing maintenance activities. Operational emissions would primarily be from infrequent visits by vehicles driven by maintenance personnel and are considered negligible; therefore, only short-term impacts were quantified.

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 the application of water or chemical stabilizers to disturbed soils, reducing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, 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 disturbance area (4.7 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 twelve months, beginning no sooner than November 2020. The default parameters within CalEEMod were used, except as identified below, and these default values generally reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated emissions. In addition to the default values used, assumptions for each component of the Project relevant to model inputs for short-term construction emission estimates used are:

- Construction is anticipated to begin November 2020 with Grading and end with Paving:

Construction Activity	Start Date	End Date	Total Working Days
Soil Hauling	November 01, 2020	November 20, 2020	15 days
Grading	November 01, 2020	January 01, 2021	45 days
Tank Construction	January 04, 2021	June 18, 2021	120 days
Tank Coating	June 21, 2021	August 20, 2021	45 days
Pipe Work (Trenching)	August 23, 2021	October 01, 2021	30 days
Paving	October 04, 2021	October 08, 2021	5 days

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

- The off-road equipment to be used for each activity is shown below and is based on engineering estimates and CalEEMod defaults:

Construction Activity	Off-Road Equipment	Unit Amount	Hours/Day
Grading/Soil Hauling ¹	Crushing/Proc equipment	1	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	2	8
Tank Construction	Crane ²	1	8
	Forklift	1	8
	Tractors/Loaders/Backhoes	1	8
	Welder	1	8
Tank Coating	Air Compressor	1	8
	Pumps (Dehumidifier) ³	1	24
Pipe work (Trenching)	Tractors/Loaders/Backhoe	1	8
Paving	Pavers	1	8
	Rollers	1	8
	Tractors/Loaders/Backhoes	1	8

¹ No off-road equipment was modeled during Soil Hauling. Soil hauling will occur during site grading operations and was set as a separate phase to isolate the daily truck trip frequency.

² The Crane is only required for a single day during Tank Construction. For modeling purposes, this equipment was assumed to operate the entire duration of each activity, which provides a worst-case scenario.

³ The CalEEMod equipment list does not include a dehumidifier. The Pump was used as a proxy for the dehumidifier because it most closely resembles the dehumidifier. While the precise specifications for the dehumidifier are currently unknown, it is anticipated to be an industrial sized piece of equipment that is diesel fueled. The dehumidifier will only be required for a single day, but will run for 24 hours. For modeling purposes, this equipment was assumed to operate the entire duration of this activity, which provides a worst-case scenario.

- 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. Two (2) one-way vendor truck trips per day were added to the grading and paving activities to account for water truck trips.
- Four (4) vendor truck trips per day were added for material delivery and removal during tank construction, tank coating, and pipe work activities.
- Approximately 53,778 cubic yards (cy) of soil will be exported during the soil hauling phase that is concurrent with grading operations. It is anticipated that up to 3,500 cy could be exported per day. Thus, the soil hauling could be completed in approximately 15 days. Truck capacity in CalEEMod is assumed to be 16 cubic yards, resulting in approximately 3,361 truckloads of export over the 15-day soil hauling period, or approximately 224 truckloads per day. The soil will be stockpiled in Planning Areas 9 and 28 of SP382. Planning Area 9 is adjacent to Planning Area 28, but is located farther from the tank site and was used to present a conservative analysis. The stockpile site in Planning Area 9 is located approximately one mile away. Therefore, the hauling trip length of one mile per trip was assumed.
- Architectural coating includes the interior and exterior of the new 1.79 MG tank being constructed. The surface area to be coated for both the interior and exterior tank surfaces was calculated and entered into CalEEMod to estimate the emissions from these activities.

The results of this analysis are summarized below. The results are provided for each phase of the Project.

Table 2 – 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
Soil Hauling	1.08	51.73	6.70	0.08	0.62	0.17
Grading 2020	2.11	19.58	13.41	0.02	3.57	2.33
Grading 2021	1.99	18.47	13.30	0.02	3.48	2.23
Tank Construction	1.53	13.18	10.94	0.03	1.68	0.77
Tank Coating	6.81	12.08	14.34	0.03	0.88	0.72
Pipe Work (Trenching)	0.22	2.46	2.47	0.00	0.19	0.12
Paving	1.03	6.62	7.37	0.01	0.46	0.35
Maximum¹	6.81	71.31	20.11	0.10	4.19	2.50
Exceeds Threshold?	No	No	No	No	No	No

Note: ¹ Maximum emissions are the greater of either the sum of soil hauling and grading 2020 since these phases overlap, or grading 2021, tank construction, tank coating, pipe work, or paving alone since these activities do not overlap. Maximum emissions are shown in bold.

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

Long-Term Analysis

Long-term air quality impacts occur once the Project is in operation.

Operational emissions related to the tank and appurtenances would be primarily from the infrequent visits by vehicles driven by maintenance personnel and are considered negligible. Operation of the Project requires the limited use of electricity for control panels and mechanical demands, therefore electricity use will be nominal. The proposed tank will be served by an existing pump station that does not require modifications or expansions.

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) methodology² 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 26.

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 tables³ to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. The LST

² 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 May 2020.)

³ <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

tables can be used as a screening tool to determine if dispersion modeling would be necessary. If project-related emissions are below the LST table emissions, no further analysis is necessary. The Project site is approximately 4.7 acres. According to the CalEEMod Guidance⁴, the Project will disturb approximately 0.5 acres per day. The LST for one-acre site was utilized because it is the nearest LST presented in the LST lookup tables.

The LST 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 Project site are existing residential uses along Glen Gibson Ct approximately 67 feet (20 meters) east of the tank site. 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 (82 feet) was used to ensure a conservative analysis.

Table 3 – 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	162	750	4	3
Soil Hauling	0.00	0.00	0.18	0.03
Grading 2020	19.34	13.04	3.45	2.29
Grading 2021	18.26	12.90	3.35	2.20
Tank Construction	9.43	7.13	0.47	0.44
Tank Coating	11.67	13.65	0.66	0.66
Pipe Work (Trenching)	1.90	2.26	0.11	0.10
Paving	6.42	7.05	0.35	0.33
Maximum¹	19.34	13.65	3.63	2.32
Exceeds Threshold?	No	No	No	No

Note: ¹ Maximum emissions are the greater of either the sum of soil hauling and grading 2020 since these phases overlap, or grading 2021, tank construction, tank coating, pipe work, or paving alone since these activities do not overlap. Maximum emissions are shown in bold.

Therefore, as shown in **Table 3**, emissions from construction of the Project will be below the LST established by SCAQMD for the Project.

Long-Term Analysis

The Project involves the construction of a potable water tank and appurtenances. The long-term emissions from the tank, as discussed previously, are primarily in the form of mobile source emissions from maintenance vehicles, with no stationary sources of emissions present. Operation of the Project requires the limited use of electricity for control panels and mechanical demands, therefore electricity use will be nominal. The proposed tank will be served by an existing pump station that does not require modifications or expansions. According to the LST methodology, LSTs only apply to the operational phase if a project includes stationary sources or on-site mobile equipment generating on-site emissions. The proposed Project does not include such uses. Therefore, no long-term LST analysis is needed.

Greenhouse Gas Analysis

Greenhouse gases (GHG) are not presented in lbs/day like criteria pollutants; they are typically evaluated on an annual basis using the metric system. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. SCAQMD has been working on GHG thresholds for development projects. In December 2008, the SCAQMD adopted a threshold of 10,000 metric tonnes per year of carbon dioxide equivalents (MTCO₂E/yr) for stationary source projects where

⁴ <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

SCAQMD is the lead agency. The most recent draft proposal was in September 2010⁵ and included screening significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 MTCO₂E/yr, respectively. Alternatively, a lead agency has the option to use 3,000 MTCO₂E/yr as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. The SCAQMD significance thresholds also evaluate construction emissions by amortizing them over an expected project life of 30 years. If emissions are above the screening level threshold, additional analysis may be required. The analysis herein uses the threshold of 3,000 MTCO₂E/yr.

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 provide for CO₂, methane (CH₄), nitrous oxide (N₂O), and CO₂E⁶ as shown on **Table 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	99.91	0.02	0.00	100.44
2021	229.34	0.03	0.00	230.08
Total	329.25	0.05	0.00	330.52
			Amortized¹	11.02

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

Results indicate that an estimated 330.52 MTCO₂E will occur from Project construction equipment over the course of the estimated approximately 12-month construction period. The draft SCAQMD GHG threshold guidance document released in October 2008⁷ recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies.

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

⁵ [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)

⁶ 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).

⁷ [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)

- **Recommended Mitigation Measures**

All construction emissions were below thresholds; therefore, no mitigation measures are required.

- **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. In addition, the Project's GHG emissions will not exceed the SCAQMD interim threshold of 3,000 MTCO₂E/yr.

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

CALEEMOD OUTPUT FILES

EMWD Water Tank - Belle Terre - Riverside-South Coast County, Summer

**EMWD Water Tank - Belle Terre
Riverside-South Coast County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.70	Acre	0.70	30,492.00	0
Other Non-Asphalt Surfaces	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
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 Grading Plan
- Construction Phase - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - No equipment required/modeled
- Off-road Equipment - Per Engineer

Off-road Equipment - Per Engineers

Trips and VMT - 2 water truck trips/day added to grading and paving phases. 4 vendor trips added to tank construction, coating and pipewor for material delivery and removal. 1 mile truck trip length for soild hauling.

Grading - Per Grading Plans

Architectural Coating - Per Site Plan

Construction Off-road Equipment Mitigation - Per Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	16,607.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	22,413.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	8.00	45.00
tblConstructionPhase	NumDays	230.00	120.00
tblConstructionPhase	NumDays	18.00	45.00
tblConstructionPhase	NumDays	18.00	5.00
tblGrading	AcresOfGrading	0.00	4.00
tblGrading	MaterialExported	0.00	53,777.52
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00

tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	34.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Soil Hauling	Grading	11/1/2020	11/20/2020	5	15	
2	Grading	Grading	11/1/2020	1/1/2021	5	45	
3	Tank Construction	Building Construction	1/4/2021	6/18/2021	5	120	
4	Tank Coating	Architectural Coating	6/21/2021	8/20/2021	5	45	
5	Pipe Work (Trenching)	Trenching	8/23/2021	10/1/2021	5	30	
6	Paving	Paving	10/4/2021	10/8/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 4.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,413; Non-Residential Outdoor: 16,607; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Soil Hauling	Excavators	0	8.00	158	0.38
Soil Hauling	Graders	0	8.00	187	0.41
Soil Hauling	Rubber Tired Dozers	0	8.00	247	0.40
Soil Hauling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Excavators	0	8.00	158	0.38
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
Tank Construction	Cranes	1	8.00	231	0.29
Tank Construction	Forklifts	1	8.00	89	0.20

Tank Construction	Generator Sets	0	8.00	84	0.74
Tank Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tank Construction	Welders	1	8.00	46	0.45
Tank Coating	Air Compressors	1	8.00	78	0.48
Tank Coating	Pumps	1	24.00	84	0.74
Pipe Work (Trenching)	Cement and Mortar Mixers	0	6.00	9	0.56
Pipe Work (Trenching)	Pavers	0	8.00	130	0.42
Pipe Work (Trenching)	Paving Equipment	0	6.00	132	0.36
Pipe Work (Trenching)	Rollers	0	6.00	80	0.38
Pipe Work (Trenching)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	6.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Soil Hauling	0	0.00	0.00	6,722.00	14.70	6.90	1.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tank Construction	4	86.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tank Coating	2	17.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Work (Trenching)	1	3.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					0.4540	0.0000	0.4540	0.0688	0.0000	0.0688			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	0.4540	0.0000	0.4540	0.0688	0.0000	0.0688		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	0.9635	51.7275	4.4145	0.0800	0.4010	0.0330	0.4341	0.1107	0.0316	0.1423		8,467.0240	8,467.0240	1.5439		8,505.6226
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	0.9635	51.7275	4.4145	0.0800	0.4010	0.0330	0.4341	0.1107	0.0316	0.1423		8,467.0240	8,467.0240	1.5439		8,505.6226

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					0.1771	0.0000	0.1771	0.0268	0.0000	0.0268			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	0.1771	0.0000	0.1771	0.0268	0.0000	0.0268	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	0.9635	51.7275	4.4145	0.0800	0.4010	0.0330	0.4341	0.1107	0.0316	0.1423		8,467.0240	8,467.0240	1.5439		8,505.6226
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	0.9635	51.7275	4.4145	0.0800	0.4010	0.0330	0.4341	0.1107	0.0316	0.1423		8,467.0240	8,467.0240	1.5439		8,505.6226

3.3 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					6.1164	0.0000	6.1164	3.3204	0.0000	3.3204			0.0000			0.0000
Off-Road	2.0516	19.3417	13.0433	0.0218		1.0621	1.0621		0.9964	0.9964		2,093.4096	2,093.4096	0.5112		2,106.1907
Total	2.0516	19.3417	13.0433	0.0218	6.1164	1.0621	7.1785	3.3204	0.9964	4.3168		2,093.4096	2,093.4096	0.5112		2,106.1907

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	5.5700e-003	0.2058	0.0377	5.2000e-004	0.0128	1.1700e-003	0.0140	3.6900e-003	1.1200e-003	4.8100e-003		55.0782	55.0782	4.1300e-003		55.1815
Worker	0.0509	0.0301	0.4032	1.1100e-003	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		110.1595	110.1595	2.8200e-003		110.2301
Total	0.0565	0.2359	0.4409	1.6300e-003	0.1246	1.8500e-003	0.1264	0.0333	1.7400e-003	0.0351		165.2376	165.2376	6.9500e-003		165.4115

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					2.3854	0.0000	2.3854	1.2950	0.0000	1.2950			0.0000			0.0000
Off-Road	2.0516	19.3417	13.0433	0.0218		1.0621	1.0621		0.9964	0.9964	0.0000	2,093.4096	2,093.4096	0.5112		2,106.1907
Total	2.0516	19.3417	13.0433	0.0218	2.3854	1.0621	3.4475	1.2950	0.9964	2.2914	0.0000	2,093.4096	2,093.4096	0.5112		2,106.1907

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.5700e-003	0.2058	0.0377	5.2000e-004	0.0128	1.1700e-003	0.0140	3.6900e-003	1.1200e-003	4.8100e-003		55.0782	55.0782	4.1300e-003		55.1815
Worker	0.0509	0.0301	0.4032	1.1100e-003	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		110.1595	110.1595	2.8200e-003		110.2301
Total	0.0565	0.2359	0.4409	1.6300e-003	0.1246	1.8500e-003	0.1264	0.0333	1.7400e-003	0.0351		165.2376	165.2376	6.9500e-003		165.4115

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1164	0.0000	6.1164	3.3204	0.0000	3.3204			0.0000			0.0000
Off-Road	1.9331	18.2580	12.8976	0.0218		0.9641	0.9641		0.9037	0.9037		2,093.6825	2,093.6825	0.5078		2,106.3780
Total	1.9331	18.2580	12.8976	0.0218	6.1164	0.9641	7.0805	3.3204	0.9037	4.2241		2,093.6825	2,093.6825	0.5078		2,106.3780

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	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003		54.6502	54.6502	3.9100e-003		54.7480
Worker	0.0474	0.0270	0.3697	1.0700e-003	0.1118	6.6000e-004	0.1124	0.0296	6.1000e-004	0.0303		106.4751	106.4751	2.5400e-003		106.5386
Total	0.0521	0.2121	0.4027	1.5900e-003	0.1246	1.0100e-003	0.1256	0.0333	9.5000e-004	0.0343		161.1253	161.1253	6.4500e-003		161.2865

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					2.3854	0.0000	2.3854	1.2950	0.0000	1.2950			0.0000			0.0000
Off-Road	1.9331	18.2580	12.8976	0.0218		0.9641	0.9641		0.9037	0.9037	0.0000	2,093.6825	2,093.6825	0.5078		2,106.3780
Total	1.9331	18.2580	12.8976	0.0218	2.3854	0.9641	3.3495	1.2950	0.9037	2.1986	0.0000	2,093.6825	2,093.6825	0.5078		2,106.3780

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	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003		54.6502	54.6502	3.9100e-003		54.7480
Worker	0.0474	0.0270	0.3697	1.0700e-003	0.1118	6.6000e-004	0.1124	0.0296	6.1000e-004	0.0303		106.4751	106.4751	2.5400e-003		106.5386
Total	0.0521	0.2121	0.4027	1.5900e-003	0.1246	1.0100e-003	0.1256	0.0333	9.5000e-004	0.0343		161.1253	161.1253	6.4500e-003		161.2865

3.4 Tank 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	1.0322	9.4332	7.1298	0.0130		0.4665	0.4665		0.4351	0.4351		1,215.1474	1,215.1474	0.3529			1,223.9703
Total	1.0322	9.4332	7.1298	0.0130		0.4665	0.4665		0.4351	0.4351		1,215.1474	1,215.1474	0.3529			1,223.9703

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	0.0887	3.5165	0.6274	9.8500e-003	0.2433	6.6900e-003	0.2500	0.0701	6.4000e-003	0.0765		1,038.3539	1,038.3539	0.0743			1,040.2110
Worker	0.4077	0.2323	3.1795	9.1900e-003	0.9613	5.6600e-003	0.9669	0.2549	5.2200e-003	0.2602		915.6858	915.6858	0.0218			916.2316
Total	0.4964	3.7488	3.8069	0.0190	1.2046	0.0124	1.2170	0.3250	0.0116	0.3366		1,954.0397	1,954.0397	0.0961			1,956.4426

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	1.0322	9.4332	7.1298	0.0130		0.4665	0.4665		0.4351	0.4351	0.0000	1,215.1474	1,215.1474	0.3529			1,223.9703
Total	1.0322	9.4332	7.1298	0.0130		0.4665	0.4665		0.4351	0.4351	0.0000	1,215.1474	1,215.1474	0.3529			1,223.9703

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	0.0887	3.5165	0.6274	9.8500e-003	0.2433	6.6900e-003	0.2500	0.0701	6.4000e-003	0.0765		1,038.3539	1,038.3539	0.0743			1,040.2110
Worker	0.4077	0.2323	3.1795	9.1900e-003	0.9613	5.6600e-003	0.9669	0.2549	5.2200e-003	0.2602		915.6858	915.6858	0.0218			916.2316
Total	0.4964	3.7488	3.8069	0.0190	1.2046	0.0124	1.2170	0.3250	0.0116	0.3366		1,954.0397	1,954.0397	0.0961			1,956.4426

3.5 Tank 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	5.2843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4331	11.6658	13.6453	0.0237		0.6583	0.6583		0.6583	0.6583		2,244.3711	2,244.3711	0.1277		2,247.5638
Total	6.7174	11.6658	13.6453	0.0237		0.6583	0.6583		0.6583	0.6583		2,244.3711	2,244.3711	0.1277		2,247.5638

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	9.3400e-003	0.3702	0.0660	1.0400e-003	0.0256	7.0000e-004	0.0263	7.3700e-003	6.7000e-004	8.0500e-003		109.3004	109.3004	7.8200e-003		109.4959
Worker	0.0806	0.0459	0.6285	1.8200e-003	0.1900	1.1200e-003	0.1911	0.0504	1.0300e-003	0.0514		181.0077	181.0077	4.3200e-003		181.1156
Total	0.0899	0.4161	0.6946	2.8600e-003	0.2156	1.8200e-003	0.2175	0.0578	1.7000e-003	0.0595		290.3081	290.3081	0.0121		290.6114

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	5.2843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4331	11.6658	13.6453	0.0237		0.6583	0.6583		0.6583	0.6583	0.0000	2,244.3711	2,244.3711	0.1277		2,247.5638
Total	6.7174	11.6658	13.6453	0.0237		0.6583	0.6583		0.6583	0.6583	0.0000	2,244.3711	2,244.3711	0.1277		2,247.5638

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	9.3400e-003	0.3702	0.0660	1.0400e-003	0.0256	7.0000e-004	0.0263	7.3700e-003	6.7000e-004	8.0500e-003		109.3004	109.3004	7.8200e-003		109.4959
Worker	0.0806	0.0459	0.6285	1.8200e-003	0.1900	1.1200e-003	0.1911	0.0504	1.0300e-003	0.0514		181.0077	181.0077	4.3200e-003		181.1156
Total	0.0899	0.4161	0.6946	2.8600e-003	0.2156	1.8200e-003	0.2175	0.0578	1.7000e-003	0.0595		290.3081	290.3081	0.0121		290.6114

3.6 Pipe Work (Trenching) - 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	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330

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	0.0140	0.5552	0.0991	1.5500e-003	0.0384	1.0600e-003	0.0395	0.0111	1.0100e-003	0.0121		163.9506	163.9506	0.0117		164.2438
Worker	0.0142	8.1000e-003	0.1109	3.2000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		31.9425	31.9425	7.6000e-004		31.9616
Total	0.0282	0.5633	0.2100	1.8700e-003	0.0720	1.2600e-003	0.0732	0.0200	1.1900e-003	0.0212		195.8931	195.8931	0.0125		196.2054

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	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028	0.0000	300.9001	300.9001	0.0973		303.3330
Total	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028	0.0000	300.9001	300.9001	0.0973		303.3330

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	0.0140	0.5552	0.0991	1.5500e-003	0.0384	1.0600e-003	0.0395	0.0111	1.0100e-003	0.0121		163.9506	163.9506	0.0117		164.2438
Worker	0.0142	8.1000e-003	0.1109	3.2000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		31.9425	31.9425	7.6000e-004		31.9616
Total	0.0282	0.5633	0.2100	1.8700e-003	0.0720	1.2600e-003	0.0732	0.0200	1.1900e-003	0.0212		195.8931	195.8931	0.0125		196.2054

3.7 Paving - 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	0.6230	6.4151	7.0455	0.0104		0.3548	0.3548		0.3264	0.3264		1,010.0498	1,010.0498	0.3267		1,018.2166
Paving	0.3668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9898	6.4151	7.0455	0.0104		0.3548	0.3548		0.3264	0.3264		1,010.0498	1,010.0498	0.3267		1,018.2166

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	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003		54.6502	54.6502	3.9100e-003		54.7480
Worker	0.0379	0.0216	0.2958	8.5000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		85.1801	85.1801	2.0300e-003		85.2309
Total	0.0426	0.2067	0.3288	1.3700e-003	0.1022	8.8000e-004	0.1031	0.0274	8.3000e-004	0.0282		139.8303	139.8303	5.9400e-003		139.9788

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	0.6230	6.4151	7.0455	0.0104		0.3548	0.3548		0.3264	0.3264	0.0000	1,010.0498	1,010.0498	0.3267		1,018.2166
Paving	0.3668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9898	6.4151	7.0455	0.0104		0.3548	0.3548		0.3264	0.3264	0.0000	1,010.0498	1,010.0498	0.3267		1,018.2166

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	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003		54.6502	54.6502	3.9100e-003		54.7480
Worker	0.0379	0.0216	0.2958	8.5000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		85.1801	85.1801	2.0300e-003		85.2309
Total	0.0426	0.2067	0.3288	1.3700e-003	0.1022	8.8000e-004	0.1031	0.0274	8.3000e-004	0.0282		139.8303	139.8303	5.9400e-003		139.9788

EMWD Water Tank - Belle Terre - Riverside-South Coast County, Winter

**EMWD Water Tank - Belle Terre
Riverside-South Coast County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.70	Acre	0.70	30,492.00	0
Other Non-Asphalt Surfaces	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
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 Grading Plan
- Construction Phase - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - No equipment required/modeled
- Off-road Equipment - Per Engineer

Off-road Equipment - Per Engineers

Trips and VMT - 2 water truck trips/day added to grading and paving phases. 4 vendor trips added to tank construction, coating and pipewor for material delivery and removal. 1 mile truck trip length for soild hauling.

Grading - Per Grading Plans

Architectural Coating - Per Site Plan

Construction Off-road Equipment Mitigation - Per Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	16,607.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	22,413.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	8.00	45.00
tblConstructionPhase	NumDays	230.00	120.00
tblConstructionPhase	NumDays	18.00	45.00
tblConstructionPhase	NumDays	18.00	5.00
tblGrading	AcresOfGrading	0.00	4.00
tblGrading	MaterialExported	0.00	53,777.52
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	34.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Soil Hauling	Grading	11/1/2020	11/20/2020	5	15	
2	Grading	Grading	11/1/2020	1/1/2021	5	45	
3	Tank Construction	Building Construction	1/4/2021	6/18/2021	5	120	
4	Tank Coating	Architectural Coating	6/21/2021	8/20/2021	5	45	
5	Pipe Work (Trenching)	Trenching	8/23/2021	10/1/2021	5	30	
6	Paving	Paving	10/4/2021	10/8/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 4.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,413; Non-Residential Outdoor: 16,607; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Soil Hauling	Excavators	0	8.00	158	0.38
Soil Hauling	Graders	0	8.00	187	0.41
Soil Hauling	Rubber Tired Dozers	0	8.00	247	0.40
Soil Hauling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Excavators	0	8.00	158	0.38
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
Tank Construction	Cranes	1	8.00	231	0.29
Tank Construction	Forklifts	1	8.00	89	0.20
Tank Construction	Generator Sets	0	8.00	84	0.74

Tank Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tank Construction	Welders	1	8.00	46	0.45
Tank Coating	Air Compressors	1	8.00	78	0.48
Tank Coating	Pumps	1	24.00	84	0.74
Pipe Work (Trenching)	Cement and Mortar Mixers	0	6.00	9	0.56
Pipe Work (Trenching)	Pavers	0	8.00	130	0.42
Pipe Work (Trenching)	Paving Equipment	0	6.00	132	0.36
Pipe Work (Trenching)	Rollers	0	6.00	80	0.38
Pipe Work (Trenching)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	6.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Soil Hauling	0	0.00	0.00	6,722.00	14.70	6.90	1.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tank Construction	4	86.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tank Coating	2	17.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Work (Trenching)	1	3.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					0.4540	0.0000	0.4540	0.0688	0.0000	0.0688			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	0.4540	0.0000	0.4540	0.0688	0.0000	0.0688		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	1.0836	49.8118	6.6966	0.0715	0.4010	0.0378	0.4389	0.1107	0.0362	0.1469		7,561.371 2	7,561.3712	1.7482		7,605.077 1
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	1.0836	49.8118	6.6966	0.0715	0.4010	0.0378	0.4389	0.1107	0.0362	0.1469		7,561.371 2	7,561.3712	1.7482		7,605.077 1

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					0.1771	0.0000	0.1771	0.0268	0.0000	0.0268			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	0.1771	0.0000	0.1771	0.0268	0.0000	0.0268	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	1.0836	49.8118	6.6966	0.0715	0.4010	0.0378	0.4389	0.1107	0.0362	0.1469		7,561.3712	7,561.3712	1.7482		7,605.0771
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	1.0836	49.8118	6.6966	0.0715	0.4010	0.0378	0.4389	0.1107	0.0362	0.1469		7,561.3712	7,561.3712	1.7482		7,605.0771

3.3 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					6.1164	0.0000	6.1164	3.3204	0.0000	3.3204			0.0000			0.0000
Off-Road	2.0516	19.3417	13.0433	0.0218		1.0621	1.0621		0.9964	0.9964		2,093.4096	2,093.4096	0.5112		2,106.1907
Total	2.0516	19.3417	13.0433	0.0218	6.1164	1.0621	7.1785	3.3204	0.9964	4.3168		2,093.4096	2,093.4096	0.5112		2,106.1907

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	5.8800e-003	0.2047	0.0441	5.0000e-004	0.0128	1.1800e-003	0.0140	3.6900e-003	1.1300e-003	4.8200e-003		53.0086	53.0086	4.6000e-003		53.1235
Worker	0.0498	0.0311	0.3262	9.9000e-004	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		98.8236	98.8236	2.4500e-003		98.8849
Total	0.0557	0.2358	0.3703	1.4900e-003	0.1246	1.8600e-003	0.1264	0.0333	1.7500e-003	0.0351		151.8321	151.8321	7.0500e-003		152.0084

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					2.3854	0.0000	2.3854	1.2950	0.0000	1.2950			0.0000			0.0000
Off-Road	2.0516	19.3417	13.0433	0.0218		1.0621	1.0621		0.9964	0.9964	0.0000	2,093.4096	2,093.4096	0.5112		2,106.1907
Total	2.0516	19.3417	13.0433	0.0218	2.3854	1.0621	3.4475	1.2950	0.9964	2.2914	0.0000	2,093.4096	2,093.4096	0.5112		2,106.1907

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8800e-003	0.2047	0.0441	5.0000e-004	0.0128	1.1800e-003	0.0140	3.6900e-003	1.1300e-003	4.8200e-003		53.0086	53.0086	4.6000e-003		53.1235
Worker	0.0498	0.0311	0.3262	9.9000e-004	0.1118	6.8000e-004	0.1125	0.0296	6.2000e-004	0.0303		98.8236	98.8236	2.4500e-003		98.8849
Total	0.0557	0.2358	0.3703	1.4900e-003	0.1246	1.8600e-003	0.1264	0.0333	1.7500e-003	0.0351		151.8321	151.8321	7.0500e-003		152.0084

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.1164	0.0000	6.1164	3.3204	0.0000	3.3204			0.0000			0.0000
Off-Road	1.9331	18.2580	12.8976	0.0218		0.9641	0.9641		0.9037	0.9037		2,093.6825	2,093.6825	0.5078		2,106.3780
Total	1.9331	18.2580	12.8976	0.0218	6.1164	0.9641	7.0805	3.3204	0.9037	4.2241		2,093.6825	2,093.6825	0.5078		2,106.3780

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	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003		52.5946	52.5946	4.3600e-003		52.7036
Worker	0.0465	0.0279	0.2984	9.6000e-004	0.1118	6.6000e-004	0.1124	0.0296	6.1000e-004	0.0303		95.5194	95.5194	2.2100e-003		95.5745
Total	0.0515	0.2114	0.3375	1.4600e-003	0.1246	1.0200e-003	0.1256	0.0333	9.6000e-004	0.0343		148.1140	148.1140	6.5700e-003		148.2781

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					2.3854	0.0000	2.3854	1.2950	0.0000	1.2950			0.0000			0.0000
Off-Road	1.9331	18.2580	12.8976	0.0218		0.9641	0.9641		0.9037	0.9037	0.0000	2,093.6825	2,093.6825	0.5078		2,106.3780
Total	1.9331	18.2580	12.8976	0.0218	2.3854	0.9641	3.3495	1.2950	0.9037	2.1986	0.0000	2,093.6825	2,093.6825	0.5078		2,106.3780

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	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003		52.5946	52.5946	4.3600e-003		52.7036
Worker	0.0465	0.0279	0.2984	9.6000e-004	0.1118	6.6000e-004	0.1124	0.0296	6.1000e-004	0.0303		95.5194	95.5194	2.2100e-003		95.5745
Total	0.0515	0.2114	0.3375	1.4600e-003	0.1246	1.0200e-003	0.1256	0.0333	9.6000e-004	0.0343		148.1140	148.1140	6.5700e-003		148.2781

3.4 Tank 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	1.0322	9.4332	7.1298	0.0130		0.4665	0.4665		0.4351	0.4351		1,215.1474	1,215.1474	0.3529		1,223.9703
Total	1.0322	9.4332	7.1298	0.0130		0.4665	0.4665		0.4351	0.4351		1,215.1474	1,215.1474	0.3529		1,223.9703

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	0.0942	3.4862	0.7422	9.4800e-003	0.2433	6.8900e-003	0.2502	0.0701	6.5900e-003	0.0767		999.2982	999.2982	0.0828		1,001.3675
Worker	0.4001	0.2402	2.5665	8.2400e-003	0.9613	5.6600e-003	0.9669	0.2549	5.2200e-003	0.2602		821.4665	821.4665	0.0190		821.9410
Total	0.4943	3.7264	3.3087	0.0177	1.2046	0.0126	1.2172	0.3250	0.0118	0.3368		1,820.7647	1,820.7647	0.1018		1,823.3085

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	1.0322	9.4332	7.1298	0.0130		0.4665	0.4665		0.4351	0.4351	0.0000	1,215.1474	1,215.1474	0.3529		1,223.9703
Total	1.0322	9.4332	7.1298	0.0130		0.4665	0.4665		0.4351	0.4351	0.0000	1,215.1474	1,215.1474	0.3529		1,223.9703

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	0.0942	3.4862	0.7422	9.4800e-003	0.2433	6.8900e-003	0.2502	0.0701	6.5900e-003	0.0767		999.2982	999.2982	0.0828		1,001.3675
Worker	0.4001	0.2402	2.5665	8.2400e-003	0.9613	5.6600e-003	0.9669	0.2549	5.2200e-003	0.2602		821.4665	821.4665	0.0190		821.9410
Total	0.4943	3.7264	3.3087	0.0177	1.2046	0.0126	1.2172	0.3250	0.0118	0.3368		1,820.7647	1,820.7647	0.1018		1,823.3085

3.5 Tank 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	5.2843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4331	11.6658	13.6453	0.0237		0.6583	0.6583		0.6583	0.6583		2,244.3711	2,244.3711	0.1277		2,247.5638
Total	6.7174	11.6658	13.6453	0.0237		0.6583	0.6583		0.6583	0.6583		2,244.3711	2,244.3711	0.1277		2,247.5638

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	9.9200e-003	0.3670	0.0781	1.0000e-003	0.0256	7.3000e-004	0.0263	7.3700e-003	6.9000e-004	8.0700e-003		105.1893	105.1893	8.7100e-003		105.4071
Worker	0.0791	0.0475	0.5073	1.6300e-003	0.1900	1.1200e-003	0.1911	0.0504	1.0300e-003	0.0514		162.3829	162.3829	3.7500e-003		162.4767
Total	0.0890	0.4145	0.5855	2.6300e-003	0.2156	1.8500e-003	0.2175	0.0578	1.7200e-003	0.0595		267.5722	267.5722	0.0125		267.8838

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	5.2843					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	1.4331	11.6658	13.6453	0.0237		0.6583	0.6583		0.6583	0.6583	0.0000	2,244.3711	2,244.3711	0.1277		2,247.5638
Total	6.7174	11.6658	13.6453	0.0237		0.6583	0.6583		0.6583	0.6583	0.0000	2,244.3711	2,244.3711	0.1277		2,247.5638

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	9.9200e-003	0.3670	0.0781	1.0000e-003	0.0256	7.3000e-004	0.0263	7.3700e-003	6.9000e-004	8.0700e-003		105.1893	105.1893	8.7100e-003		105.4071
Worker	0.0791	0.0475	0.5073	1.6300e-003	0.1900	1.1200e-003	0.1911	0.0504	1.0300e-003	0.0514		162.3829	162.3829	3.7500e-003		162.4767
Total	0.0890	0.4145	0.5855	2.6300e-003	0.2156	1.8500e-003	0.2175	0.0578	1.7200e-003	0.0595		267.5722	267.5722	0.0125		267.8838

3.6 Pipe Work (Trenching) - 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	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330
Total	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028		300.9001	300.9001	0.0973		303.3330

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	0.0149	0.5505	0.1172	1.5000e-003	0.0384	1.0900e-003	0.0395	0.0111	1.0400e-003	0.0121		157.7839	157.7839	0.0131		158.1107
Worker	0.0140	8.3800e-003	0.0895	2.9000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		28.6558	28.6558	6.6000e-004		28.6724
Total	0.0288	0.5588	0.2067	1.7900e-003	0.0720	1.2900e-003	0.0732	0.0200	1.2200e-003	0.0212		186.4397	186.4397	0.0137		186.7830

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	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028	0.0000	300.9001	300.9001	0.0973		303.3330
Total	0.1873	1.8958	2.2602	3.1100e-003		0.1118	0.1118		0.1028	0.1028	0.0000	300.9001	300.9001	0.0973		303.3330

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	0.0149	0.5505	0.1172	1.5000e-003	0.0384	1.0900e-003	0.0395	0.0111	1.0400e-003	0.0121		157.7839	157.7839	0.0131		158.1107
Worker	0.0140	8.3800e-003	0.0895	2.9000e-004	0.0335	2.0000e-004	0.0337	8.8900e-003	1.8000e-004	9.0800e-003		28.6558	28.6558	6.6000e-004		28.6724
Total	0.0288	0.5588	0.2067	1.7900e-003	0.0720	1.2900e-003	0.0732	0.0200	1.2200e-003	0.0212		186.4397	186.4397	0.0137		186.7830

3.7 Paving - 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	0.6230	6.4151	7.0455	0.0104		0.3548	0.3548		0.3264	0.3264		1,010.0498	1,010.0498	0.3267			1,018.2166
Paving	0.3668					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Total	0.9898	6.4151	7.0455	0.0104		0.3548	0.3548		0.3264	0.3264		1,010.0498	1,010.0498	0.3267			1,018.2166

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	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003		52.5946	52.5946	4.3600e-003			52.7036
Worker	0.0372	0.0224	0.2387	7.7000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		76.4155	76.4155	1.7700e-003			76.4596
Total	0.0422	0.2058	0.2778	1.2700e-003	0.1022	8.9000e-004	0.1031	0.0274	8.4000e-004	0.0282		129.0101	129.0101	6.1300e-003			129.1632

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	0.6230	6.4151	7.0455	0.0104		0.3548	0.3548		0.3264	0.3264	0.0000	1,010.0498	1,010.0498	0.3267		1,018.2166
Paving	0.3668					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9898	6.4151	7.0455	0.0104		0.3548	0.3548		0.3264	0.3264	0.0000	1,010.0498	1,010.0498	0.3267		1,018.2166

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	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003		52.5946	52.5946	4.3600e-003		52.7036
Worker	0.0372	0.0224	0.2387	7.7000e-004	0.0894	5.3000e-004	0.0900	0.0237	4.9000e-004	0.0242		76.4155	76.4155	1.7700e-003		76.4596
Total	0.0422	0.2058	0.2778	1.2700e-003	0.1022	8.9000e-004	0.1031	0.0274	8.4000e-004	0.0282		129.0101	129.0101	6.1300e-003		129.1632

EMWD Water Tank - Belle Terre - Riverside-South Coast County, Annual

**EMWD Water Tank - Belle Terre
Riverside-South Coast County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	0.70	Acre	0.70	30,492.00	0
Other Non-Asphalt Surfaces	4.00	Acre	4.00	174,240.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
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 Grading Plan
- Construction Phase - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer
- Off-road Equipment - Per Engineer

Off-road Equipment - No equipment required/modeled

Off-road Equipment - Per Engineer

Off-road Equipment - Per Engineers

Trips and VMT - 2 water truck trips/day added to grading and paving phases. 4 vendor trips added to tank construction, coating and pipewor for material delivery and removal. 1 mile truck trip length for soild hauling.

Grading - Per Grading Plans

Architectural Coating - Per Site Plan

Construction Off-road Equipment Mitigation - Per Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	0.00	16,607.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	0.00	22,413.00
tblConstructionPhase	NumDays	8.00	15.00
tblConstructionPhase	NumDays	8.00	45.00
tblConstructionPhase	NumDays	230.00	120.00
tblConstructionPhase	NumDays	18.00	45.00
tblConstructionPhase	NumDays	18.00	5.00
tblGrading	AcresOfGrading	0.00	4.00
tblGrading	MaterialExported	0.00	53,777.52
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblTripsAndVMT	HaulingTripLength	20.00	1.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	34.00	38.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	6.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00

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	0.0539	0.8136	0.3360	1.0900e-003	0.1437	0.0237	0.1673	0.0751	0.0222	0.0973	0.0000	99.9061	99.9061	0.0214	0.0000	100.4421
2021	0.2493	1.1282	1.0137	2.5700e-003	0.0824	0.0467	0.1291	0.0228	0.0445	0.0673	0.0000	229.3384	229.3384	0.0299	0.0000	230.0850
Maximum	0.2493	1.1282	1.0137	2.5700e-003	0.1437	0.0467	0.1673	0.0751	0.0445	0.0973	0.0000	229.3384	229.3384	0.0299	0.0000	230.0850

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	0.0539	0.8136	0.3360	1.0900e-003	0.0595	0.0237	0.0832	0.0302	0.0222	0.0525	0.0000	99.9060	99.9060	0.0214	0.0000	100.4421

2021	0.2493	1.1282	1.0137	2.5700e-003	0.0793	0.0467	0.1259	0.0216	0.0445	0.0661	0.0000	229.3383	229.3383	0.0299	0.0000	230.0849
Maximum	0.2493	1.1282	1.0137	2.5700e-003	0.0793	0.0467	0.1259	0.0302	0.0445	0.0661	0.0000	229.3383	229.3383	0.0299	0.0000	230.0849

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	38.63	0.00	29.46	47.03	0.00	27.96	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	11-1-2020	1-31-2021	0.9901	0.9901
2	2-1-2021	4-30-2021	0.4671	0.4671
3	5-1-2021	7-31-2021	0.5340	0.5340
4	8-1-2021	9-30-2021	0.1722	0.1722
		Highest	0.9901	0.9901

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Soil Hauling	Grading	11/1/2020	11/20/2020	5	15	
2	Grading	Grading	11/1/2020	1/1/2021	5	45	
3	Tank Construction	Building Construction	1/4/2021	6/18/2021	5	120	
4	Tank Coating	Architectural Coating	6/21/2021	8/20/2021	5	45	
5	Pipe Work (Trenching)	Trenching	8/23/2021	10/1/2021	5	30	
6	Paving	Paving	10/4/2021	10/8/2021	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 4.7

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 22,413; Non-Residential Outdoor: 16,607; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Soil Hauling	Excavators	0	8.00	158	0.38
Soil Hauling	Graders	0	8.00	187	0.41
Soil Hauling	Rubber Tired Dozers	0	8.00	247	0.40
Soil Hauling	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crushing/Proc. Equipment	1	8.00	85	0.78
Grading	Excavators	0	8.00	158	0.38
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
Tank Construction	Cranes	1	8.00	231	0.29
Tank Construction	Forklifts	1	8.00	89	0.20
Tank Construction	Generator Sets	0	8.00	84	0.74
Tank Construction	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Tank Construction	Welders	1	8.00	46	0.45
Tank Coating	Air Compressors	1	8.00	78	0.48
Tank Coating	Pumps	1	24.00	84	0.74
Pipe Work (Trenching)	Cement and Mortar Mixers	0	6.00	9	0.56
Pipe Work (Trenching)	Pavers	0	8.00	130	0.42
Pipe Work (Trenching)	Paving Equipment	0	6.00	132	0.36
Pipe Work (Trenching)	Rollers	0	6.00	80	0.38
Pipe Work (Trenching)	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	0	6.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Soil Hauling	0	0.00	0.00	6,722.00	14.70	6.90	1.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tank Construction	4	86.00	38.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Tank Coating	2	17.00	4.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Pipe Work (Trenching)	1	3.00	6.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	3	8.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 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					3.4100e-003	0.0000	3.4100e-003	5.2000e-004	0.0000	5.2000e-004	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	3.4100e-003	0.0000	3.4100e-003	5.2000e-004	0.0000	5.2000e-004	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	7.6100e-003	0.3828	0.0406	5.7000e-004	2.9700e-003	2.6000e-004	3.2300e-003	8.2000e-004	2.5000e-004	1.0700e-003	0.0000	55.0206	55.0206	0.0111	0.0000	55.2982
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	7.6100e-003	0.3828	0.0406	5.7000e-004	2.9700e-003	2.6000e-004	3.2300e-003	8.2000e-004	2.5000e-004	1.0700e-003	0.0000	55.0206	55.0206	0.0111	0.0000	55.2982

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3300e-003	0.0000	1.3300e-003	2.0000e-004	0.0000	2.0000e-004	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	1.3300e-003	0.0000	1.3300e-003	2.0000e-004	0.0000	2.0000e-004	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	7.6100e-003	0.3828	0.0406	5.7000e-004	2.9700e-003	2.6000e-004	3.2300e-003	8.2000e-004	2.5000e-004	1.0700e-003	0.0000	55.0206	55.0206	0.0111	0.0000	55.2982
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	7.6100e-003	0.3828	0.0406	5.7000e-004	2.9700e-003	2.6000e-004	3.2300e-003	8.2000e-004	2.5000e-004	1.0700e-003	0.0000	55.0206	55.0206	0.0111	0.0000	55.2982

3.3 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					0.1346	0.0000	0.1346	0.0731	0.0000	0.0731	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0451	0.4255	0.2870	4.8000e-004		0.0234	0.0234		0.0219	0.0219	0.0000	41.7804	41.7804	0.0102	0.0000	42.0355
Total	0.0451	0.4255	0.2870	4.8000e-004	0.1346	0.0234	0.1580	0.0731	0.0219	0.0950	0.0000	41.7804	41.7804	0.0102	0.0000	42.0355

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.5800e-003	9.0000e-004	1.0000e-005	2.8000e-004	3.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0819	1.0819	9.0000e-005	0.0000	1.0841
Worker	1.0100e-003	7.1000e-004	7.5600e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4300e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	2.0231	2.0231	5.0000e-005	0.0000	2.0244
Total	1.1400e-003	5.2900e-003	8.4600e-003	3.0000e-005	2.7000e-003	4.0000e-005	2.7300e-003	7.2000e-004	3.0000e-005	7.6000e-004	0.0000	3.1050	3.1050	1.4000e-004	0.0000	3.1084

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					0.0525	0.0000	0.0525	0.0285	0.0000	0.0285	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0451	0.4255	0.2870	4.8000e-004		0.0234	0.0234		0.0219	0.0219	0.0000	41.7804	41.7804	0.0102	0.0000	42.0354
Total	0.0451	0.4255	0.2870	4.8000e-004	0.0525	0.0234	0.0759	0.0285	0.0219	0.0504	0.0000	41.7804	41.7804	0.0102	0.0000	42.0354

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3000e-004	4.5800e-003	9.0000e-004	1.0000e-005	2.8000e-004	3.0000e-005	3.0000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	1.0819	1.0819	9.0000e-005	0.0000	1.0841
Worker	1.0100e-003	7.1000e-004	7.5600e-003	2.0000e-005	2.4200e-003	1.0000e-005	2.4300e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	2.0231	2.0231	5.0000e-005	0.0000	2.0244
Total	1.1400e-003	5.2900e-003	8.4600e-003	3.0000e-005	2.7000e-003	4.0000e-005	2.7300e-003	7.2000e-004	3.0000e-005	7.6000e-004	0.0000	3.1050	3.1050	1.4000e-004	0.0000	3.1084

3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1300e-003	0.0000	5.1300e-003	1.8800e-003	0.0000	1.8800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	9.1300e-003	6.4500e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.5000e-004	4.5000e-004	0.0000	0.9497	0.9497	2.3000e-004	0.0000	0.9554
Total	9.7000e-004	9.1300e-003	6.4500e-003	1.0000e-005	5.1300e-003	4.8000e-004	5.6100e-003	1.8800e-003	4.5000e-004	2.3300e-003	0.0000	0.9497	0.9497	2.3000e-004	0.0000	0.9554

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	9.0000e-005	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0244	0.0244	0.0000	0.0000	0.0244
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0444	0.0444	0.0000	0.0000	0.0445
Total	2.0000e-005	1.0000e-004	1.8000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0688	0.0688	0.0000	0.0000	0.0689

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					2.0000e-003	0.0000	2.0000e-003	7.3000e-004	0.0000	7.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.7000e-004	9.1300e-003	6.4500e-003	1.0000e-005		4.8000e-004	4.8000e-004		4.5000e-004	4.5000e-004	0.0000	0.9497	0.9497	2.3000e-004	0.0000	0.9554
Total	9.7000e-004	9.1300e-003	6.4500e-003	1.0000e-005	2.0000e-003	4.8000e-004	2.4800e-003	7.3000e-004	4.5000e-004	1.1800e-003	0.0000	0.9497	0.9497	2.3000e-004	0.0000	0.9554

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	9.0000e-005	2.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0244	0.0244	0.0000	0.0000	0.0244
Worker	2.0000e-005	1.0000e-005	1.6000e-004	0.0000	5.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0444	0.0444	0.0000	0.0000	0.0445
Total	2.0000e-005	1.0000e-004	1.8000e-004	0.0000	6.0000e-005	0.0000	7.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0688	0.0688	0.0000	0.0000	0.0689

3.4 Tank 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	0.0619	0.5660	0.4278	7.8000e-004		0.0280	0.0280		0.0261	0.0261	0.0000	66.1418	66.1418	0.0192	0.0000	66.6220
Total	0.0619	0.5660	0.4278	7.8000e-004		0.0280	0.0280		0.0261	0.0261	0.0000	66.1418	66.1418	0.0192	0.0000	66.6220

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4400e-003	0.2126	0.0409	5.8000e-004	0.0144	4.1000e-004	0.0148	4.1500e-003	3.9000e-004	4.5400e-003	0.0000	55.6259	55.6259	4.2400e-003	0.0000	55.7320
Worker	0.0221	0.0149	0.1624	5.1000e-004	0.0567	3.4000e-004	0.0571	0.0151	3.1000e-004	0.0154	0.0000	45.8645	45.8645	1.0700e-003	0.0000	45.8912
Total	0.0276	0.2275	0.2033	1.0900e-003	0.0711	7.5000e-004	0.0719	0.0192	7.0000e-004	0.0199	0.0000	101.4904	101.4904	5.3100e-003	0.0000	101.6232

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	0.0619	0.5660	0.4278	7.8000e-004		0.0280	0.0280		0.0261	0.0261	0.0000	66.1417	66.1417	0.0192	0.0000	66.6220
Total	0.0619	0.5660	0.4278	7.8000e-004		0.0280	0.0280		0.0261	0.0261	0.0000	66.1417	66.1417	0.0192	0.0000	66.6220

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.4400e-003	0.2126	0.0409	5.8000e-004	0.0144	4.1000e-004	0.0148	4.1500e-003	3.9000e-004	4.5400e-003	0.0000	55.6259	55.6259	4.2400e-003	0.0000	55.7320
Worker	0.0221	0.0149	0.1624	5.1000e-004	0.0567	3.4000e-004	0.0571	0.0151	3.1000e-004	0.0154	0.0000	45.8645	45.8645	1.0700e-003	0.0000	45.8912
Total	0.0276	0.2275	0.2033	1.0900e-003	0.0711	7.5000e-004	0.0719	0.0192	7.0000e-004	0.0199	0.0000	101.4904	101.4904	5.3100e-003	0.0000	101.6232

3.5 Tank 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	0.1189					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0323	0.2625	0.3070	5.3000e-004		0.0148	0.0148		0.0148	0.0148	0.0000	45.8113	45.8113	2.6100e-003	0.0000	45.8765
Total	0.1512	0.2625	0.3070	5.3000e-004		0.0148	0.0148		0.0148	0.0148	0.0000	45.8113	45.8113	2.6100e-003	0.0000	45.8765

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	2.1000e-004	8.3900e-003	1.6100e-003	2.0000e-005	5.7000e-004	2.0000e-005	5.8000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.1958	2.1958	1.7000e-004	0.0000	2.2000
Worker	1.6400e-003	1.1100e-003	0.0120	4.0000e-005	4.2000e-003	3.0000e-005	4.2300e-003	1.1200e-003	2.0000e-005	1.1400e-003	0.0000	3.3998	3.3998	8.0000e-005	0.0000	3.4018
Total	1.8500e-003	9.5000e-003	0.0137	6.0000e-005	4.7700e-003	5.0000e-005	4.8100e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	5.5956	5.5956	2.5000e-004	0.0000	5.6018

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	0.1189					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0323	0.2625	0.3070	5.3000e-004		0.0148	0.0148		0.0148	0.0148	0.0000	45.8113	45.8113	2.6100e-003	0.0000	45.8765
Total	0.1512	0.2625	0.3070	5.3000e-004		0.0148	0.0148		0.0148	0.0148	0.0000	45.8113	45.8113	2.6100e-003	0.0000	45.8765

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	2.1000e-004	8.3900e-003	1.6100e-003	2.0000e-005	5.7000e-004	2.0000e-005	5.8000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.1958	2.1958	1.7000e-004	0.0000	2.2000
Worker	1.6400e-003	1.1100e-003	0.0120	4.0000e-005	4.2000e-003	3.0000e-005	4.2300e-003	1.1200e-003	2.0000e-005	1.1400e-003	0.0000	3.3998	3.3998	8.0000e-005	0.0000	3.4018
Total	1.8500e-003	9.5000e-003	0.0137	6.0000e-005	4.7700e-003	5.0000e-005	4.8100e-003	1.2800e-003	4.0000e-005	1.3200e-003	0.0000	5.5956	5.5956	2.5000e-004	0.0000	5.6018

3.6 Pipe Work (Trenching) - 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	2.8100e-003	0.0284	0.0339	5.0000e-005		1.6800e-003	1.6800e-003		1.5400e-003	1.5400e-003	0.0000	4.0946	4.0946	1.3200e-003	0.0000	4.1277
Total	2.8100e-003	0.0284	0.0339	5.0000e-005		1.6800e-003	1.6800e-003		1.5400e-003	1.5400e-003	0.0000	4.0946	4.0946	1.3200e-003	0.0000	4.1277

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	2.1000e-004	8.3900e-003	1.6100e-003	2.0000e-005	5.7000e-004	2.0000e-005	5.8000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.1958	2.1958	1.7000e-004	0.0000	2.2000
Worker	1.9000e-004	1.3000e-004	1.4200e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4000	0.4000	1.0000e-005	0.0000	0.4002
Total	4.0000e-004	8.5200e-003	3.0300e-003	2.0000e-005	1.0600e-003	2.0000e-005	1.0800e-003	2.9000e-004	2.0000e-005	3.1000e-004	0.0000	2.5957	2.5957	1.8000e-004	0.0000	2.6002

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.8100e-003	0.0284	0.0339	5.0000e-005		1.6800e-003	1.6800e-003		1.5400e-003	1.5400e-003	0.0000	4.0946	4.0946	1.3200e-003	0.0000	4.1277
Total	2.8100e-003	0.0284	0.0339	5.0000e-005		1.6800e-003	1.6800e-003		1.5400e-003	1.5400e-003	0.0000	4.0946	4.0946	1.3200e-003	0.0000	4.1277

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	2.1000e-004	8.3900e-003	1.6100e-003	2.0000e-005	5.7000e-004	2.0000e-005	5.8000e-004	1.6000e-004	2.0000e-005	1.8000e-004	0.0000	2.1958	2.1958	1.7000e-004	0.0000	2.2000
Worker	1.9000e-004	1.3000e-004	1.4200e-003	0.0000	4.9000e-004	0.0000	5.0000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4000	0.4000	1.0000e-005	0.0000	0.4002
Total	4.0000e-004	8.5200e-003	3.0300e-003	2.0000e-005	1.0600e-003	2.0000e-005	1.0800e-003	2.9000e-004	2.0000e-005	3.1000e-004	0.0000	2.5957	2.5957	1.8000e-004	0.0000	2.6002

3.7 Paving - 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	1.5600e-003	0.0160	0.0176	3.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	2.2908	2.2908	7.4000e-004	0.0000	2.3093
Paving	9.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.4800e-003	0.0160	0.0176	3.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	2.2908	2.2908	7.4000e-004	0.0000	2.3093

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.7000e-004	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1220	0.1220	1.0000e-005	0.0000	0.1222
Worker	9.0000e-005	6.0000e-005	6.3000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1778	0.1778	0.0000	0.0000	0.1779
Total	1.0000e-004	5.3000e-004	7.2000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2998	0.2998	1.0000e-005	0.0000	0.3001

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.5600e-003	0.0160	0.0176	3.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	2.2908	2.2908	7.4000e-004	0.0000	2.3093
Paving	9.2000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	2.4800e-003	0.0160	0.0176	3.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	2.2908	2.2908	7.4000e-004	0.0000	2.3093

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.0000e-005	4.7000e-004	9.0000e-005	0.0000	3.0000e-005	0.0000	3.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.1220	0.1220	1.0000e-005	0.0000	0.1222
Worker	9.0000e-005	6.0000e-005	6.3000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1778	0.1778	0.0000	0.0000	0.1779
Total	1.0000e-004	5.3000e-004	7.2000e-004	0.0000	2.5000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2998	0.2998	1.0000e-005	0.0000	0.3001