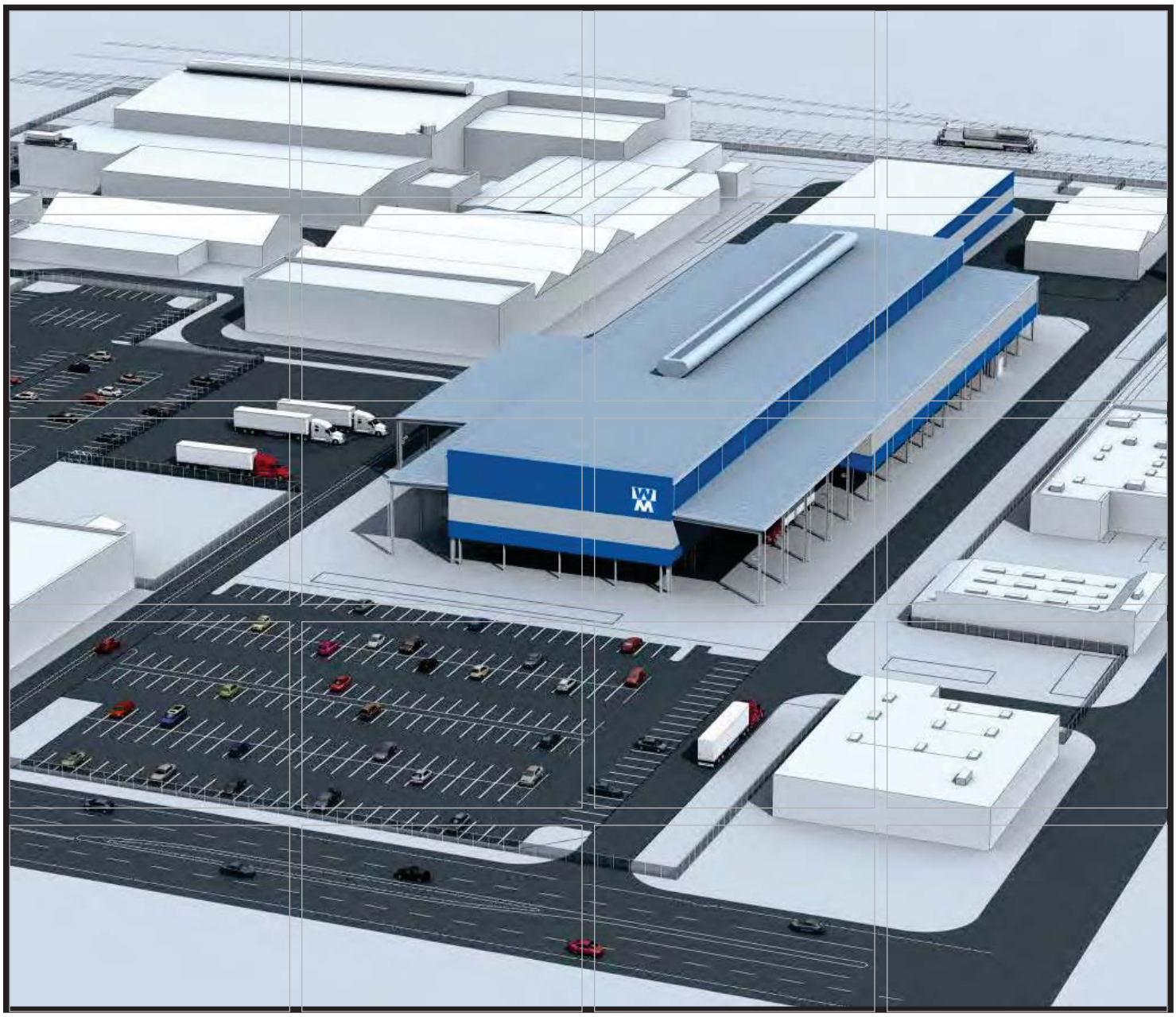
Appendix B

Air Quality/Greenhouse Gas Emissions Modeling Results



Air Quality and Greenhouse Gas Technical Supplement Large Press Expansion Project

Prepared for:
City of Long Beach
Planning Department

Weber Metals Facility

Long Beach and Paramount, California

April 2015

www.erm.com

WEBER METALS, INC.

ERM

TABLE OF CONTENTS

LIST OF TABLES ..... ***iv***

LIST OF FIGURES ..... ***iv***

LIST OF ACRONYMS ..... ***v***

1.0 INTRODUCTION ***1***

2.0 CONSTRUCTION EMISSIONS ***5***

2.1 CONSTRUCTION EMISSION SOURCES ***6***

2.1.1 Site Preparation *7*
2.1.2 Excavation and Dewatering *7*
2.1.3 Press Facility Construction *7*
2.1.4 Paving *7*
2.1.5 Equipment Installation *8*
2.1.6 Utility/Electrical Connections *8*
2.1.7 Substation *8*

2.2 SUMMARY OF CONSTRUCTION IMPACTS ***8***

3.0 OPERATIONAL EMISSIONS ***10***

4.0 CRITERIA OPERATION EMISSIONS ***12***

4.1 EXISTING EMISSION SOURCES ***12***

4.1.1 Existing Furnaces *12*
4.1.2 Existing Dryer *13*
4.1.3 Existing Open Process Tanks *13*
4.1.4 Existing Boilers *13*
4.1.5 Existing Ovens *14*
4.1.6 Existing Cooling Towers Operations *14*
4.1.7 Existing Grinding and Sawing Operations *14*

4.2 PROPOSED NEW SOURCES ***14***

4.2.1 Proposed Furnaces *14*
4.2.2 Proposed Abrasive Blasting Room *15*
4.2.3 Proposed Hydraulic Forging Press *15*
4.2.4 Proposed Cooling Towers *16*
4.2.5 Proposed Diesel Manipulators *16*

4.2.6 Proposed Fork Trucks 16

4.3 ESTIMATED PROJECT CRITERIA POLLUTANT EMISSIONS AND SUMMARY OF IMPACTS.....16

5.0 AMBIENT AIR QUALITY MODELING 20

6.0 TAC OPERATION EMISSIONS 21

6.1 EXISTING EQUIPMENT 21
6.1.1 Existing Furnaces.....21
6.1.2 Existing Boilers.....21
6.1.3 Existing Ovens 22
6.1.4 Existing Dryer.....22
6.1.5 Existing Grinding and Sawing Operations 22

6.2 PROPOSED EQUIPMENT.....22
6.2.1 Furnaces.....22
6.2.2 Proposed Abrasive Blasting Room.....23
6.2.3 Proposed Manipulators.....23
6.2.4 Proposed Fork Trucks 23

6.3 PROJECT TAC EMISSIONS.....24

7.0 HEALTH RISK ASSESSMENT.....25

7.1 TOXICS CHARACTERIZATION.....25

7.2 EMISSIONS.....26

7.3 AIR DISPERSION MODELING 27
7.3.1 Receptors.....28
7.3.2 Source Data.....29
7.3.3 Building Downwash 31

7.4 RISK CHARACTERIZATION 32

7.5 ESTIMATED HEALTH EFFECTS.....32

8.0 GREENHOUSE GAS EMISSIONS.....35

8.1 GHG CONSTRUCTION EMISSIONS.....35

8.2 GHG OPERATION EMISSIONS.....35

8.2.1 Existing Furnaces 35
8.2.2 Existing Boilers 36
8.2.3 Existing Ovens 36
8.2.4 Existing Dryer 36
8.2.5 Proposed Furnaces 36
8.2.6 Proposed Manipulators 37
8.2.7 Proposed Fork Trucks 37
8.2.8 Indirect GHG Emissions 37
8.2.9 GHG Emissions Summary 38

9.0 CO HOT SPOTS ANALYSIS 41

APPENDIX A – Construction Emission Calculations

APPENDIX B – Operation Emission Calculations

APPENDIX C – Greenhouse Gas Emission Calculations

APPENDIX D – CalEEMod Model Input and Output

APPENDIX E – Health Risk Assessment Files

APPENDIX F – Ambient Modeling Files

LIST OF TABLES

Table 1 *SCAQMD Significance Thresholds* 3

Table 2 *Construction Phase Schedule* 6

Table 3 *Summary of Construction Emissions* 9

Table 4 *Estimated Peak Daily Operational Emissions* 17

Table 5 *Estimated Annual Potential to Emit for Proposed Project* 17

Table 6 *Ambient Air Quality Modeling Results for* NO_x 20

Table 7 *Toxic Air Contaminants and Associated Toxic Effects* 25

Table 8 *Receptor Grid Spacing* 28

Table 9 *Sensitive Receptors* 28

Table 10 *Point Source Data* 30

Table 11 *Area Source Data* 31

Table 12 *Volume Source Data* 31

Table 13 *Cancer Risk, Chronic and Acute Hazard Indices for Residential and Worker Receptors* 33

Table 14 *Cancer Risk and Chronic and Acute Hazard Index at Sensitive Receptors* 33

Table 15 *Summary of Annual GHG Emissions from Proposed Project* ..... *Error! Bookmark not defined.*

LIST OF FIGURES

Figure 1 *MEIR and MEIW Locations Map*

Figure 2 *Zone of Impact Map*

LIST OF ACRONYMS

$\mu g/m^3$	Micrograms per cubic meter
AER	Annual Emission Report
AERMOD	Environmental Protection Agency Regulatory Model
AQMP	Air Quality Management Plan
BACT	Best Available Control Technology
BACT/LAER	Best Available Control technology/Lowest Achievable Emission Rate
BHP	brake horsepower
BPIPPRM	Building Profile Input Program with Plume Rise Model Enhancements
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CH_4	methane
City	City of Long Beach
CO	Carbon monoxide
CO_2e	Carbon Dioxide equivalent
DPM	diesel particulate matter
ERC	Emission Reduction Credits
GHG	Greenhouse Gas
GWP	global warming potential
HARP	Hotspots Analysis Reporting Program
HRA	Health Risk Assessment
lbs/day	Pounds per day
LOS	Level of Service
LSI	Large Spark Ignition
m	meters
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed individual worker
MMBtu/hr	million British thermal units per hour
MT	Metric Tonnes

N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NED	National Elevation Dataset
NMHC	NO_x + nonmethane hydrocarbons
NO_2	Nitrogen dioxide
NO_x	Oxides of nitrogen
NSCR	Non Selective Catalytic Reduction
OEHHA	Office of Environmental Health Hazard Assessment
PM_{10}	Particulate matter up to 10 micrometers in size
$PM_{2.5}$	Particulate matter up to 2.5 micrometers in size
ppm	Parts per million
ppmv	parts per million by volume
RECLAIM	Regional Clean Air Incentives Market
SCAQMD	South Coast Air Quality Management District
SCR	Selective Catalytic Reduction
SOPs	Standard Operating Procedures
SO_x	Sulfur oxide
TACs	Toxic Air Contaminants
USEPA	United State Environmental Protection Agency

1.0 *INTRODUCTION*

This air quality technical report serves as a supplement to the Conceptual Site Plan Review application submitted by Weber Metals to the City of Long Beach (City) for Weber's proposed Large Press Expansion Project.

The Facility is subject to the local air district, state, and federal air quality regulations. Specifically, the facility is a Title V permitted facility and is subject to South Coast Air Quality Management District (SCAQMD) Regulation XXX.

The proposed project will be required to comply with applicable SCAQMD requirements for new stationary sources. Compliance with established rules supports the integrity of the emission inventories in the 2012 Air Quality Management Plan (AQMP). For example, new and modified emission sources associated with the proposed project would be subject to the SCAQMD Regulation XIII - New Source Review, will be required to be equipped with Best Available Control Technology (BACT), and will be required to provide emission offsets for emission increases greater than one pound per day. The proposed project will also be required to comply with prohibitory rules, such as SCAQMD Rule 403 - Fugitive Dust, and stationary source rules, such as Rule 1146.2 – Emission of Oxides of Nitrogen from Large Water Heaters and Small Boiler and Process Heaters and Rule 1147 – NO_x Reductions from Miscellaneous Sources. The proposed project will also be subject to Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil and Rule 1401 – New Source Review of Toxic Air Contaminants (TACs).

With the passage of Assembly Bill 32, California is required to reduce its greenhouse gas (GHG) emissions to 1990 levels by 2020. The Weber facility will need to comply with the California Air Resources Board's Mandatory Reporting Regulation, which includes annual GHG reporting, verification, and maintaining applicable Standard Operating Procedures (SOPs), plans, and training of personnel.

This technical report is intended for use by the City as part of its review under the California Environmental Quality Act (CEQA), and provides information that pertains to potential air quality and GHG impacts of the proposed Project. The information contained

in this report is intended to be used to address the following CEQA study questions typically included in a CEQA analysis as suggested in the Guidelines (California Natural Resources Agency 2009):

For Air Quality:

Would the project:
a. Conflict with or obstruct implementation of the applicable air quality plan?
b. Violate any air quality standard or contribute to an existing or projected air quality violation?
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?
d. Expose sensitive receptors to substantial pollutant concentrations?
e. Create objectionable odors affecting a substantial number of people?

For GHG:

Would the project:
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

This technical report includes an evaluation of the construction and operational emissions of criteria pollutants, TACs and GHG. Potential health risks associated with TAC emissions from the operation of the proposed project were also evaluated. Additionally, the potential impact of the proposed project on the ambient air quality was assessed. Finally, the estimated criteria, TAC, and GHG emissions, as well as health and ambient air quality impacts, are compared to applicable significance thresholds from the SCAQMD. The SCAQMD significance thresholds are shown in Table 1 below.

Table 1 SCAQMD Significance Thresholds

Significance Thresholds		
Mass Daily Thresholds [a]		
Pollutant	**Construction[b]**	**Operation[c]**
NO_x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
TACs, Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 metric tonnes per year (MT/yr) carbon dioxide equivalent (CO_2e) for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants [d]		
NO_2 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state)	
PM_{10} 24-hour average	10.4 μg/m³ (construction)[e] & 2.5 μg/m³ (operation) 1.0 μg/m³	
$PM_{2.5}$ 24-hour average	10.4 μg/m³ (construction)[e] & 2.5 μg/m³ (operation)	
SO_2 1-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 μg/m³ (state)	

	Significance Thresholds
	Mass Daily Thresholds [a]
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal)
Lead 30-day Average Rolling 3-month average	1.5 μg/m^3 (state) 0.15 μg/m^3 (federal) 1.5 μg/m^3 (federal)

[a] Source: SCAQMD CEQA Handbook (SCAQMD 1993)

[b] Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

[c] For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

[d] Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

[e] Ambient air quality threshold based on SCAQMD Rule 403.

≥ = Greater than or equal to
μg/m^3 = Micrograms per cubic meter
CO = Carbon monoxide
lbs/day = Pounds per day
NO_2 = Nitrogen dioxide
NO_x = Oxides of nitrogen
Ppm = Parts per million
$PM_{2.5}$ = Particulate matter up to 2.5 micrometers in size
PM_{10} = Particulate matter up to 10 micrometers in size
SO_x = Sulfur oxide

2.0 *CONSTRUCTION EMISSIONS*

This section addresses criteria emissions from each construction phase. Peak daily construction phase emission estimates require equipment-specific details for each phase of the project, including equipment type and quantity of each equipment type. Total project construction emissions are based on the expected number of operation days for each type of equipment. The following types of emissions are expected during construction.

- On-site construction equipment combustion emissions (i.e., dump trucks, cranes, excavator);
- On-site and off-site vehicle emissions, including delivery trucks and worker vehicles;
- On-site fugitive dust associated with site construction activities; and
- On-site and off-site fugitive dust associated with travel on unpaved and paved roads.

Emissions from construction activities were estimated using CalEEMod v.2013.2.2. CalEEMod is a statewide land use emissions computer model developed by the air districts in California which is used to calculate emissions of criteria pollutants and GHG. CalEEMod utilizes emission factors from EMFAC2011 to estimate emissions from various off-road and on-road equipment. For this project, default values were used in CalEEMod unless more representative site specific data was available.

Construction activities on this project will be limited to Monday through Friday between the hours of 7 am to 7 pm, per City of Long Beach regulations. Equipment used during construction may operate less than 12 hours per day. The duration of each construction phase is based on the construction schedule provided as Figure 3 in the Project Description and is summarized in Table 2 below. Operating hours for each type of equipment was estimated in CalEEMod. The equipment used in each phase and the quantity of each equipment was provided in the Project Description in Tables 3 through 7. Values for the horsepower rating of each equipment from CalEEMod, which is based on the weighted average horsepower and load factors from 2011 OFFROAD, were used. Construction activities will need to comply with SCAQMD

Rule 403 "Fugitive Dust" requirements, which is applicable to any activity or man-made condition capable of generating fugitive dust.

Table 2 ***Construction Phase Schedule***

Phase	Phase Description	Schedule
1	Site Preparation	5/1/2015-6/30/2015
2	Excavation/Dewatering	5/1/2015-7/31/2015
3A	Press Facility Construction	8/1/2015-5/31/2016
3B	Paving	6/1/2016-6/14/2016
4A	Equipment Installation	6/1/2016-10/31/2016
4B	Final Equipment Installation	6/1/2016 - 6/30/2016
5	Utility/Electrical Connections	5/1/2016-10/31/2016
6A	Substation Site Preparation	9/1/2015-9/30/2015
6B	Substation Construction	10/1/2015-6/30/2016
6C	Substation Demolition	7/1/2016-7/31/2016

CalEEMod also provides estimated daily emissions for winter and summer seasons. The summer season spans from May through October and the winter season spans from November through April. Maximum daily emissions for phases that overlap were calculated as the sum of the maximum daily emission from each individual phase. For instance, as shown in Table 2, Phase 1 overlaps with Phase 2. Therefore, daily emissions from Phase 1 were added to daily emissions from Phase 2 to estimate the maximum daily emissions. The total peak daily emissions were then compared to the applicable SCAQMD significance thresholds presented in Table 1. Inputs and outputs from CalEEMod are provided for reference in Appendix D.

2.1 CONSTRUCTION EMISSION SOURCES

Construction emission sources and assumptions used in estimating construction emissions are described in this subsection.

2.1.1 *Site Preparation*

The site preparation phase will consist of grading and up to 120,000 square feet could be disturbed per day. Emissions of fugitive dust is expected from site grading. Emissions of criteria pollutants is expected from the operation of off-road equipment, on-road equipment, and worker trips.

2.1.2 *Excavation and Dewatering*

The excavation and dewatering phase will consist of excavating a 190 feet by 160 feet are to a depth of 85 feet. Approximately 75,000 cubic yards of soil will be excavated from the pit, with approximately 55,000 cubic yards expected to be hauled off-site, and the remaining 20,000 cubic yards used as backfill onsite. Criteria pollutant emissions are expected from off-road equipment, such as excavators, loaders, drill rigs, bulldozers, and rollers and on-road equipment, such as soil haul trucks. Emissions of fugitive dust are expected from soil excavation, soil hauling trucks, off-road equipment, and worker trips.

2.1.3 *Press Facility Construction*

Emissions of criteria pollutants are expected from off-road equipment, such as cranes, aerial lifts, welders, air compressors, rough terrain forklifts, and pumps and from on-road equipment, such as concrete delivery trucks. Emissions of fugitive dust are expected from off-road equipment, worker trips, and concrete delivery trucks.

2.1.4 *Paving*

Approximately 195,600 square feet of the project area will be paved as part of the project. Paving will occur during the end of the press facility construction phase. Therefore, paving activities is entered as its own phase in CalEEMod with an expected total duration of 10 days. Emissions of fugitive dust are expected from the use of off-road equipment, such as the paving machine, and on-road equipment, such as delivery trucks. Emissions of criteria pollutants are expected from off-road and on-road equipment exhaust.

2.1.5 *Equipment Installation*

Emissions of criteria pollutants are expected from off-road equipment, such as cranes, forklift, and aerial lifts, and from on-road equipment. Emissions of fugitive dust are expected from off-road equipment and worker trips.

2.1.6 *Utility/Electrical Connections*

Emissions of criteria pollutants are expected from off-road equipment, such as aerial lifts, air compressors, and rough terrain forklifts, and on-road equipment. Emissions of fugitive dust are expected from off-road equipment and worker trips.

2.1.7 *Substation*

Emissions related to site preparation, construction of the substation, and demolition of the existing substation have been estimated. Emissions of criteria pollutants are expected from off-road equipment, such as the cranes, aerial lifts, and welders, and from on-road equipment. Emissions of fugitive dust are expected from off-road equipment and worker trips.

2.2 *SUMMARY OF CONSTRUCTION IMPACTS*

Peak daily construction emissions are summarized in Table 3 and are compared to the SCAQMD Air Quality Significance Thresholds for construction emissions. Detailed construction emission calculations are provided in Appendix A. As shown in Table 3, estimated construction emissions do not exceed the SCAQMD significance thresholds for construction emissions.

Table 3 Summary of Construction Emissions

Pollutant	Peak Daily Emissions (lbs/day)	AQ Significance Threshold (lbs/day)	Exceeds Threshold? (Yes/No)
NO_x	97	100	No
VOC	12	75	No
PM_{10}	20	150	No
$PM_{2.5}$	9	55	No
SO_x	0.2	150	No
CO	95	550	No

CEQA Checklist III(a): Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Construction Emissions Impact: Less than Significant Impact

3.0 *OPERATIONAL EMISSIONS*

The proposed project includes the installation of the following new equipment: 60,000-ton press system, four pedestal die furnaces, two chain furnaces for aluminum, three rotating furnaces for titanium, two rail-bound mobile manipulators, two mobile manipulators, one quench tank, four propane fork trucks, two electric fork trucks, one abrasive blast room with baghouse, three freezers, and two cooling towers.

Equipment with potential air emissions that are quantified in this analysis include up to nine natural gas-fired furnaces and an abrasive blast room with baghouse, mobile manipulators (diesel engine powered), and fork trucks (propane or electric). Permitted equipment will be required to meet BACT emission performance standards under SCAQMD rules. For the proposed furnaces this will require the use of low-NO_x burner technology, and the abrasive blast room will be equipped for a high efficiency particulate filtering system (i.e., a baghouse).

Some new equipment would not generate emissions and are not discussed further in this document. The rail-bound mobile manipulators will be electric powered, and would not generate direct air emissions. There are also no anticipated emissions associated with the freezers or the quench tank, and therefore these are not discussed further.

The facility also includes grinding and sawing operations that are expected to increase under the proposed project. These operations are permit exempt under Rule 219 because such operations have been considered to emit small amounts of air contaminants.[1] Weber Metals collected site specific information to quantify baseline emissions and project emissions, which are presented herein. Additionally, the proposed hydraulic forging press and cooling towers are also permit exempt under SCAQMD Rule 219. This section addresses potential air quality impacts from operation of the proposed project, including emissions of criteria pollutants and TAC. The peak daily operational emissions increase associated with the proposed project were estimated based on the expected increase

---

[1] SCAQMD Rule 219, Purpose.

in emissions from current equipment and the emissions expected from the proposed equipment. Emission increases from existing equipment were estimated based on the expected increase in operations from the proposed project. Potential health risks associated with the increase in emissions of TACs are evaluated in the Health Risk Assessment (HRA) using SCAQMD guidelines. This analysis is presented in Section 4.0 of this supplemental document.

The current facility holds a Title V Permit to Operate issued by the SCAQMD and is subject to SCAQMD Rules and Regulations. The facility is also subject to a number of United States Environmental Protection Agency (USEPA) Clean Air Act regulations which are administered locally by the SCAQMD. The proposed Project, once operational, will become subject to the requirements of the Regional Clean Air Incentives Market (RECLAIM) program, Regulation XX, for NO_x emissions.

Emissions from the new equipment were estimated based on emission factors specified below and the anticipated operations. The facility has the capacity to operate up to 24 hours per day, 7 days per week, 52 weeks per year. Therefore, the potential to emit is conservatively evaluated based on an operating schedule of 24 hours per day, 7 days per week, 52 weeks per year.

4.0 CRITERIA OPERATION EMISSIONS

The project will result in increases of criteria pollutant emissions from the proposed new equipment, and operation of existing equipment affected by the proposed project.

Project emissions were calculated as the difference between post-project emissions and baseline emissions. Baseline emissions were based on the average actual emissions emitted from the facility during the 2 years prior to preparation of this analysis. In this case, the baseline emissions for combustion equipment were calculated based on fuel usage for 2013 and 2014 and emission factors reported on the 2013 SCAQMD Annual Emission Report (AER). Baseline emissions and post-project emissions are provided in Appendix B.

4.1 EXISTING EMISSION SOURCES

Existing emissions sources are described briefly below.

4.1.1 Existing Furnaces

There are eight existing permitted furnaces and four Rule 219 permit exempt furnaces. The permitted furnaces are: 1) No. 1 Furnace (G26775); 2) No. 2 Furnace (G26776); 3) Rotary Furnace (F26557); 4) A&A Furnace (G26559); 5) Lindberg Furnace (G26560); 6) Car Bottom Furnace (G26558); 7) AOV Furnace (F26561); and 8) Thorpe Furnace (G26779). Operation of the existing permitted furnaces, except the A&A Furnace, are expected to increase between 5 percent and 30 percent from current operations as a result of the proposed project. Operation of the A&A Furnace is not expected to change.

Emissions of CO, SO_x, PM, and VOC were calculated based on SCAQMD AER emission factors. Emissions of NO_x were calculated based on permit limits of 30 ppm for the A&A, Lindberg, Car Bottom, and AOV Furnaces, and 40 ppm for the Thorpe, No. 1 and No. 2 Furnaces.

Operations of the four Rule 219 exempt furnaces are expected to increase by 20 percent from current operations with the proposed project. The CO, SO_x, PM, and VOC emissions for these furnaces were estimated using SCAQMD AER emission factors for external

combustion equipment rated less than 10 million British thermal units per hour (MMBtu/hr). NO_x emissions were estimated using the emission factors reported on the 2013 AER.

4.1.2 *Existing Dryer*

There is an existing permitted sludge dryer (F73290). Operation of the existing sludge dryer is expected to increase by 25 percent with the proposed project. Emissions of criteria pollutants were calculated based on SCAQMD AER emission factors.

4.1.3 *Existing Open Process Tanks*

There are existing open process tanks associated with the Surface Prep Line (D79100) and Aqueous Solution Line (G26562). The surface prep line consists of twelve (12) open process tanks, two (2) of which contain nitric acid. The nitric acid tanks are a source of PM_{10} emissions. The nitric acid tanks are vented to a permitted scrubber (D60661).

The Aqueous Solution Line consists of eight (8) open process tanks, two of which are contain nitric acid. The nitric acid tanks are a source of PM_{10} emissions. The nitric acid tanks associated with the Aqueous Solution Line are also vented to a permitted scrubber (G26556).

Operation of the existing tanks is expected to increase by 20 percent under the proposed project. Emissions from open process tanks were estimated based on the SCAQMDs "Emissions from Open Process Tanks Due to Electrolysis and Evaporation" spreadsheets, which account for acid concentrations, tank temperatures, air pollution control device control efficiency, operating temperatures, and venting rates. Because these parameters are not expected to change, emissions from the open process tanks would not increase on a daily basis. However, emissions are estimated to increase on an annual basis, reflecting the expected change in number of shifts from 6 to 7 days per week.

4.1.4 *Existing Boilers*

There are two existing Rule 219 exempt boilers. Operation of these existing boilers is not expected to change for the proposed project. Therefore, emissions of criteria pollutants from the existing boilers would not increase under the proposed project.

4.1.5 *Existing Ovens*

There are fourteen (14) existing Rule 219 exempt ovens. Operation of the existing exempt ovens is expected to increase by a weighted average of 20 percent from current baseline operations. Emissions of criteria pollutants were calculated based on SCAQMD AER emission factors.

4.1.6 *Existing Cooling Towers Operations*

There are existing Rule 219 exempt cooling towers at the Weber facility. Operation of the existing cooling towers is not expected to change under the proposed project. For this reason, emissions of criteria pollutants from the cooling towers would not increase under the proposed project.

4.1.7 *Existing Grinding and Sawing Operations*

There are existing Rule 219-exempt grinding and sawing operations at the Weber facility where aluminum and titanium alloys are prepared and finished. This is conducted in four operations centers located in Building A1, Building H, Building M and Building P. The grinding and sawing operations in Building H, Building M and Building P are presently equipped with dust collection systems which exhaust to baghouse-type air pollution control equipment. For this analysis, baseline and future project emissions were estimated for the three baghouse point sources, as well as fugitive emissions from the four buildings noted. Operation of the existing Rule 219 exempt grinding and sawing operations is expected to increase by up to 50% from baseline levels. Baseline emissions were estimated based on site-specific emission measurements, which are summarized in Appendix B.

4.2 *PROPOSED NEW SOURCES*

4.2.1 *Proposed Furnaces*

As many as nine (9) new natural gas-fired furnaces will be installed as part of the proposed project. Initially, Weber expects to permit with the SCAQMD four (4) furnaces, with the other five (5) being installed in the future. Specifically, one large rotary furnace, one chain conveyor furnace, and two pedestal die heating furnaces. The size of the remaining furnaces will be determined by the product that needs to be produced by the press at that time. It has been

assumed that the remaining 5 furnaces will consist of two (2) medium rotary furnaces rated at up to 14 MMBtu/hr, one (1) chain conveyor furnace identical to the proposed chain conveyor furnace, and two (2) pedestal die heating furnaces identical to the proposed pedestal die heating furnaces.

Emissions of criteria pollutants were calculated by multiplying the maximum rated capacity of the furnaces by the appropriate emission factor. Emissions of SO_x, VOC, CO, and PM_{10} were calculated based on SCAQMD AER emission factors for natural gas-fired external combustion equipment. The permitted emission limits for these furnaces will be subject to Best Available Control Technology/Lowest Achievable Emission Rate (BACT/LAER) requirements under SCAQMD Regulation XIII New Source Review. The final BACT/LEAR limits are not yet known, but are expected to fall in within the range of 30 parts per million by volume (ppmv) and 60 ppmv depending on the furnace type and application. To be conservative in this analysis, emissions of NO_x were estimated based on an emission limit of 60 ppmv.

4.2.2 *Proposed Abrasive Blasting Room*

An abrasive blasting room will be installed in the proposed project. Abrasive blasting operations will result in emissions of PM_{10}. There will be two nozzles in the blasting room, but only one nozzle will be used at any given time. Emissions of PM_{10} were estimated based on the flow rate of the blasting machine nozzle and the number of nozzles, and the SCAQMD default emission factor for PM emissions from indoor blasting with a baghouse. The flow rate was estimated from Table 2-2 of USEPA's Emission Factor Documentation for AP-42, Section 13.2.6, Abrasive Blasting, for flow rate of abrasive through a ½-inch nozzle and pressure of 100 pounds per square inch.

4.2.3 *Proposed Hydraulic Forging Press*

The proposed hydraulic forging press is expected to use similar water-based lubricants as the current presses. VOC emissions have therefore been estimated using the maximum regulatory allowable VOC content of 50 grams per liter and the estimated annual quantity of lubricant in the new press of 70,000 gallons per year.

4.2.4 *Proposed Cooling Towers*

Two (2) new cooling towers will be installed in the proposed project. PM emissions from operating the new cooling towers was calculated based on the design water circulation rate, drift factor, and total dissolved solids concentration.

4.2.5 *Proposed Diesel Manipulators*

Two 60-brake horsepower (BHP) diesel-powered manipulators will be installed in the proposed project. Emissions of NO_x, CO, and PM were calculated using Tier 4 emission standards for off-road diesel engines. The Tier 4 emission factor is provided as NO_x+nonmethane hydrocarbons (NMHC) and assumed to be all NO_x to be conservative. Emissions of SO_x were calculated based on the SCAQMD AER emission factors for diesel combustion.

4.2.6 *Proposed Fork Trucks*

Two 100-BHP propane-powered fork trucks and two 60-BHP propane-powered fork trucks will be operated in the proposed project. Emissions of NO_x, VOC, and PM were calculated using the most recent large spark ignition (LSI) engine standards from the California Air Resources Board. The LSI emission factor is provided as NO_x+NMHC and assumed to be all NO_x to be conservative. Emissions of SO_x were calculated based on the SCAQMD AER emission factors for propane combustion.

4.3 *ESTIMATED PROJECT CRITERIA POLLUTANT EMISSIONS AND SUMMARY OF IMPACTS*

The proposed project would increase emissions of criteria pollutants from the new equipment and existing equipment. Increases in emissions were calculated based on emissions from new equipment in the proposed project and emission increases due to increased operation of existing equipment. Criteria pollutant operational baseline emissions were based on the average actual emissions emitted from the facility for the last 2 years for which data is available. In this case, the baseline emissions for existing combustion equipment were calculated based on natural gas usage from 2013 and 2014 and emission factors reported on the 2013 AER submitted to SCAQMD. Baseline emissions and project emissions are provided in Appendix B.

Peak daily emissions from operations of the proposed project is provided in Table 4 and compared to the SCAQMD Significance Thresholds. As shown in Table 4, emissions of VOC, PM_{10}, $PM_{2.5}$, SO_x, and CO would not exceed regional significance thresholds. As a conservative assumption, 100 percent of PM_{10} is assumed to be $PM_{2.5}$ as shown in Table 4. Estimated NO_x emissions would exceed regional significance thresholds.

Table 4 Estimated Peak Daily Operational Emissions

Pollutant	Peak Daily Emissions (lbs/day)	Air Quality Significance Threshold (lbs/day)	Exceeds Threshold? (Yes/No)
NO_x	220.7	55	**Yes**
VOC	53.4	55	No
PM_{10}	36.7	150	No
$PM_{2.5}$	36.7	55	No
SO_x	1.7	150	No
CO	154.9	550	No

The annual criteria pollutant potential to emit of the components of the proposed project requiring air permits from the SCAQMD is provided in Table 5.

Table 5 Estimated Annual Potential to Emit for Proposed Project

Pollutant	Potential to Emit (tpy)
NO_x	40.27
VOC	9.74
PM_{10}	5.79
$PM_{2.5}$	5.79
SO_x	0.31
CO	28.27

tpy = Tons per year

A project's incremental contribution to a cumulative effect is not considered to be cumulatively considerable if the project will

comply with the requirements in a previously approved plan, such as an AQMP, as specified in Section 15064 of the CEQA guidelines. The operational criteria pollutant emissions associated with the proposed project are fully covered under the SCAQMD AQMP. The AQMP represents a comprehensive regional strategy for addressing state and federal air quality planning requirements for attainment of the National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter ($PM_{2.5}$).

While the proposed project is expected to exceed the applicable significance threshold for NO_x, these emissions will be mitigated to a less than significant level. Facility-wide post-project permitted NO_x emissions will be subject to BACT and emission offset requirements under SCAQMD Regulation XIII New Source Review. With the application of BACT, permitted NO_x emissions will be reduced to the extent possible with applicable emission control technologies. Under the Regulation XIII offset provisions, the project's remaining permitted NO_x emissions will be fully offset with real emissions reductions known as Emission Reduction Credits (ERC). Furthermore, unpermitted NO_x emissions will be fully covered under the AQMD's regional attainment strategy. For these reasons, the proposed project's operational NO_x emissions will be mitigated to a less than significant level.

Mitigations: The proposed project will comply with SCAQMD Regulation XIII requirements for application of emission control technology (i.e., BACT) and use of creditable emission offsets for permitted emissions exceeding applicable thresholds. With these provisions, operational emissions of NO_x will be mitigated to a less than significant level.

CEQA Checklist III(a): Would the Project conflict with or obstruct implementation of the applicable air quality plan?

> ***Operations Emissions Impact: Less than Significant Impact with Mitigation Incorporated***

CEQA Checklist III(b): Would the Project violate any air quality standard or contribute to an existing or projected air quality violation?

> ***Operations Emissions Impact: Less than Significant Impact with Mitigation Incorporated***

CEQA Checklist III(c): Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Operations Emissions Impact: Less than Significant Impact with Mitigation Incorporated

5.0 *AMBIENT AIR QUALITY MODELING*

Rule 1303(b)(1) requires a demonstration through modeling that a new or modified facility will not result in a violation of an ambient air quality standard or make substantially worse an existing exceedance of an ambient air quality standard. Rule 1303 Appendix A exempts facilities from modeling emissions that are less than the values presented in Rule 1303 Table A-1. Because the NO_x emissions from the proposed large die furnace and from each of the pedestal die heating furnaces are estimated to exceed the applicable value in Table A-1, a modeling study was performed to assess the impacts of NO_x emissions. The modeling study included NO_x emissions from the 4 furnaces to be initially permitted and 5 additional furnaces reasonably expected to be installed in the future. This study also considered the associated increase in NO_x emissions from existing furnaces expected from the proposed project. Table 6 presents the modeling results along with the background NO_x data. Based on the air modeling results, estimated emissions from the proposed project would not exceed ambient air quality standards. Modeling files are provided in Appendix F.

Table 6 ***Ambient Air Quality Modeling Results for NO_x***

Averaging Time	Standard (μg/m³)	Background (μg/m³)	Modeled Maximum Concentration (μg/m³)	Total Concentration with Background (μg/m³)	Pass/Fail
1-hour	470	131.32	142.59	273.91	Pass
Annual	100	33.11	21.00	54.11	Pass

CEQA Checklist III(b): Would the Project violate any air quality standard or contribute to an existing or projected air quality violation?

Ambient Air Quality Impact: Less than Significant Impact

CEQA Checklist III(c): Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Ambient Air Quality Impact: Less than Significant Impact

6.0 TAC OPERATION EMISSIONS

TAC emissions from the proposed new equipment and increased operation of existing equipment emissions were calculated as the difference between post-project emissions and baseline emissions. Baseline emissions were based on the average actual emissions emitted from the facility during the two years prior to preparation of this analysis. In this case, the baseline emissions from combustion equipment were calculated based on fuel usage for 2013 and 2014 and emission factors reported on the 2013 SCAQMD AER. Baseline emissions and post project emissions are provided in Appendix B.

6.1 EXISTING EQUIPMENT

6.1.1 Existing Furnaces

There are eight (8) existing permitted furnaces and four Rule 219 permit exempt furnaces. The permitted furnaces include: 1) No. 1 Furnace (G26775); 2) No. 2 Furnace (G26776); 3) Rotary Furnace (F26557); 4) A&A Furnace (G26559); 5) Lindberg Furnace (G26560); 6) Car Bottom Furnace (G26558); 7) AOV Furnace (F26561); and 8) Thorpe Furnace (G26779).

Operation of the existing permitted furnaces is expected to increase up to 30 percent under the proposed project. Operation of the existing Rule 219 exempt furnaces is expected to increase by 20 percent. Emissions of TACs were calculated based on AB2588 emission factors. The ammonia emission factor is based on the SCAQMD AER emission factor for devices not equipped with Selective Catalytic Reduction (SCR) or Non Selective Catalytic Reduction (NSCR) control equipment.

6.1.2 Existing Boilers

There are two existing Rule 219 exempt boilers. Operation of the existing boilers is not expected to change under the proposed project. For this reason, the proposed project is not expected to cause an increase in TAC emissions.

6.1.3 *Existing Ovens*

There are fourteen (14) existing Rule 219 exempt ovens. Operation of the existing exempt ovens is expected to increase from the proposed project up to 20 percent from current baseline operations. Emissions of TACs were calculated based on SCAQMD AER emission factors. Emissions of TACs were calculated based on AB2588 emission factors. The ammonia emission factor is based on the SCAQMD AER emission factor for devices not equipped with SCR or NSCR control equipment.

6.1.4 *Existing Dryer*

There is an existing permitted sludge dryer (F73290). Operation of the existing sludge dryer is expected to increase by 25 percent. Emissions of TACs were calculated based on AB2588 emission factors. The ammonia emission factor is based on the SCAQMD AER emission factor for devices not equipped with SCR or NSCR control equipment.

6.1.5 *Existing Grinding and Sawing Operations*

Operating of the existing grinding and sawing operation centers is expected to increase by up to 50 percent as compared to the baseline. Baseline and future project TAC emissions were estimated for the three baghouse point sources, as well as fugitive emissions from the four buildings which house grinding/sawing operations. Operation of the existing Rule 219 exempt grinding and sawing operations is expected to increase by up to 50% from baseline levels. Baseline emissions were estimated based on site-specific emission measurements, which are summarized in Appendix B.

6.2 *PROPOSED EQUIPMENT*

6.2.1 *Furnaces*

Four (4) natural gas-fired furnaces will be installed as part of the proposed project. Specifically, one (1) large rotary furnace, one (1) chain conveyor furnace, and two (2) pedestal die heating furnaces, with the other 5 being installed in the future. The size will be determined by the product that needs to be produced by the press at that time. It has been assumed that the remaining 5 furnaces will consist of two (2) medium rotary furnaces rated at 14 MMBtu/hr,

one (1) chain conveyor furnace identical to the proposed chain conveyor furnace, and two (2) pedestal die heating furnaces identical to the proposed pedestal die heating furnaces.

Emissions of TACs are expected as a result of natural gas combustion. Emissions of TACs were calculated by multiplying the maximum rated capacity of the furnaces by AB2588 emission factors for natural gas-fired external combustion equipment. The ammonia emission factor is based on the SCAQMD AER emission factor for devices not equipped with SCR or NSCR control equipment.

6.2.2 *Proposed Abrasive Blasting Room*

An abrasive blasting room will be installed in the proposed project. Abrasive blasting operations will result in emissions of TAC from the alloy used in abrasive blasting operations. Emissions of TAC were calculated based on the PM emission rate and weight percent of the TAC in the alloy.

6.2.3 *Proposed Manipulators*

Two (2) diesel-fueled manipulators will be installed in the proposed project. Emissions of diesel particulate matter (DPM) are expected as a result of diesel combustion. DPM was conservatively assumed to be equal to PM_{10}.

6.2.4 *Proposed Fork Trucks*

Four (4) propane-powered fork trucks will be operated in the proposed project. Emissions of TACs are expected as a result of propane combustion. Emissions of TACs were calculated based on the estimated fuel consumption rate and emission factors from SCAQMD Supplemental Instructions for Reporting Procedures of AB2588 Facilities (December 2014).

6.3 PROJECT TAC EMISSIONS

Project effects of TAC emission increases are determined by evaluating the potential cancer risk and chronic and acute hazard indices. An HRA was conducted in accordance with SCAQMD guidance to analyze the Maximum Incremental Cancer Risk, Cancer Burden, and Chronic and Acute Hazard Indices as a result of TAC emission increases. The HRA is presented in Section 7.0 of this Supplement.

7.0 HEALTH RISK ASSESSMENT

The HRA was performed to analyze the potential incremental health impacts associated with the TAC emissions related to the proposed project, and prepared in accordance with the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Risk Assessment Guidelines (OEHHA HRA Guidance 2003) and SCAQMD Supplemental Guidelines for Preparing Risk Assessments for Air Toxics "Hot Spots" Information and Assessment Act. The HRA estimates the incremental health risks at the maximally exposed individual resident (MEIR) and the maximally exposed individual worker (MEIW). Modeling files are provided in Appendix E.

7.1 TOXICS CHARACTERIZATION

The hazard identification involved an evaluation of potential TAC emissions associated with the combustion equipment to determine whether particular substances may cause health effects. Thirty-three TACs were identified and analyzed as part of this HRA. Table 7 presents a list of substances that may be emitted from operation of the five proposed furnaces, four proposed heaters, the abrasive blasting cabinet, and from operation of existing equipment, including seven furnaces, as well as their associated toxic effects.

Table 7 Toxic Air Contaminants and Associated Toxic Effects

TAC	CAS No.	Carcinogen	Chronic Health Effects	Acute Health Effects
Acetaldehyde	75070	X	X	X
Acrolein	107028		X	X
Ammonia	7664417		X	X
Arsenic	7440-38-2	X	X	X
Benzene	71432	X	X	X
Beryllium	7440-41-7	X	X	
Butadiene, 1,3-	106990	X	X	X
Cadmium	7440-43-9	X	X	
Carbon Tetrachloride	56235	X	X	X
Chloroform	67663	X	X	X
Copper	7440-50-8			X

TAC	CAS No.	Carcinogen	Chronic Health Effects	Acute Health Effects
Dichloroethane, 1,2-	107062	X	X	
Diesel Particulate Matter	9901	X		
Ethylbenzene	100414	X	X	
Ethylene dibromide	106934	X	X	
Formaldehyde	50000	X	X	X
Hexane	110543		X	
Hexavalent Chromium	18540299	X	X	
Lead	7439-92-1	X		
Manganese	7439965		X	
Methanol	67561	X		
Methylene chloride	75092	X	X	X
Naphthalene	91203	X	X	
Nickel	7440020	X	X	X
Polyaromatic hydrocarbon (excluding naphthalene)	1150	X		
Propylene	115071		X	
Selenium	7782-49-2		X	
Styrene	100425		X	X
Tetrachloroethane, 1,1,2,2-	79345	X		
Trichloroethane, 1,1,2-	79005	X		
Toluene	108883		X	X
Vinyl chloride	75014	X		X
Xylenes	1330207		X	X

Source: SCAQMD Risk Assessment Procedures for Rule 1401, Attachment L

7.2 *EMISSIONS*

Emissions of TACs are expected from the four furnaces to be initially permitted, five furnaces reasonably expected to be installed in the future, abrasive blasting cabinet, and TAC emissions increases are expected from the eight existing permitted furnaces, and existing Rule 219 exempt furnaces, ovens, and grinding and sawing operations. Detailed emission calculations are presented in Appendix B.

7.3 *AIR DISPERSION MODELING*

The dispersion modeling was performed using American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) Version 14134. This mathematical model estimates dilution of emissions by diffusion and turbulent mixing with clean air as they move away from a source. It can simulate the downwind transport and resulting cumulative concentrations from multiple point, area, volume, and open pit sources at numerous specific locations of interest or receptor locations. The land use surrounding the facility is mixed residential and commercial; therefore, urban dispersion coefficients were used.

The model also has the capability to account for building downwash. Building Profile Input Program with Plume Rise Model Enhancements (BPIPPRM) version 04274 was used.

Terrain files from the United States Geological Survey National Elevation Dataset (NED) were processed in AERMAP version 11103 to obtain elevations and hill height scaling factors for each receptor and base elevations for sources and buildings.

AERMOD compatible meteorological data is available from SCAQMD. The closest meteorological station to the facility is the Compton meteorological station. Meteorological data was processed in AERMET version 14134.

7.3.1 *Receptors*

The fenceline receptors have a spacing of 25 meters (m). The receptor grid was constructed based on the distance from the fence line and is presented in Table 8. Additionally, discrete receptors were included at sensitive receptor locations within 2,000 meters of the facility. Sensitive receptors are provided in Table 9.

Table 8 *Receptor Grid Spacing*

Spacing (m)	Distance from Fence Line (m)
25	< 200
50	200-500
100	500-2000

< = Less than

Table 9 *Sensitive Receptors*

Sensitive Receptor Description	Easting	Northing
Wesley Gaines Elementary	391906	3749981
Leona Jackson	391734	3749982
McKinley School	392735	3749368
Promise Hospital	392423	3749880
Grant Elementary	391500	3748571
Major Lynn Mokler Elementary	393594	3749682
Lincoln Elementary	392861	3750905
Our Lady of Rosary	392543	3751474
Hamilton Middle School	391051	3749595
Mark Keppel Elementary	390872	3750881
Dominguez High School	390807	3750776
Frank J. Zamboni School	391102	3750542
David Starr Jordan High School	390568	3748667

7.3.2 *Source Data*

Emissions of TACs are expected from the nine proposed furnaces, the abrasive blasting cabinet, eight existing furnaces, and Rule 219 exempt furnaces and ovens. Therefore, 14 point sources were modeled. Source parameters are presented in Table 10, which includes source locates in the Universal Transverse Mercator coordinate system (NAD83), exhaust temperature, stack height, stack diameter, velocity, and emission rates. A unit emission rate of 1 gram per second (g/s) was used in the dispersion model. The existing Thorpe Furnace is vented through two vents; therefore, the Thorpe Furnace is modeled as two point sources with half of the total emissions assigned to each vent. The existing ovens and furnaces expected to have an increase in emissions are located in Buildings A, B, and O. The existing ovens and furnaces in Buildings A and B are vented to the atmosphere through the Robertson Ventilator. The Robertson Ventilator is 7 feet wide and 208 feet long, and is modeled as an elevated area source. The existing ovens and furnaces in Building O are vented through side louvers and doors in the building and is modeled as two volume sources.

Existing grinding and sawing operations are conducted in four operation centers located in Building A1, Building H, Building M and Building P. Building H, M and P are currently serviced by operational baghouse-type air pollution control equipment. These baghouses were modeled as point sources. Building A1 is also equipped with a baghouse system, but it was not operational at the time of the baseline emissions assessment. In addition to these point sources (i.e., baghouses), uncontrolled fugitive emissions from grinding/sawing operations were estimated from the four buildings which house those operations and were modeled as volume sources.

Additionally, diesel manipulators and fork lifts will be operated in the new press building. Therefore, emissions from the manipulators and forklifts are modeled as volume sources.

Table 10 Point Source Data

Emission Source	Easting (m)	Northing (m)	Exhaust Temperature (Kelvin)	Stack Height (m)	Stack Diameter (m)	Velocity (m/s)	Emission Rate (g/s)
Large Rotary Furnace	392167	3749653	1033	16.764	1.168	9.040	1
Medium Rotary Furnace	392121	3749652	1033	16.764	1.067	8.674	1
Medium Rotary Furnace	392143	3749652	1033	16.764	1.067	8.674	1
Chain Conveyor_1	392088	3749662	589	16.764	0.610	4.570	1
Chain Conveyor_2	392100	3749661	589	16.764	0.610	4.570	1
Die Heater_1	392090	3749613	533	16.764	0.711	5.430	1
Die Heater_2	392100	3749613	533	16.764	0.711	5.430	1
Die Heater_3	392168	3749613	533	16.764	0.711	5.430	1
Die Heater_4	392180	3749613	533	16.764	0.711	5.430	1
Thorpe Furnace Vent 1	392251	3749832	350	10.668	0.700	0.813	1
Thorpe Furnace Vent 2	392260	3749832	350	10.668	0.700	0.813	1
Lindberg (OVE-332) V1	392236	3749822	366	9.144	2.750	0.500	1
Lindberg (OVE-332) V2	392237	3749817	366	9.144	2.750	0.500	1
Abrasive Blasting	392045	3749613	298	15.240	0.018	0.610	1
Baghouse Building H	392157	BH_H	298.15	6.71	0.91	5.69	1
Baghouse Building P	392141	BH_P	298.15	8.53	1.37	5.62	1
Baghouse Building M	392234	BH_M	298.15	6.40	1.00	9.75	1

m/s = Microns per second

Table 11 Area Source Data

Emission Source	Easting (m)	Northing (m)	Release Height (m)	Easterly Length (m)	Northerly Length (m)	Angle from North	Initial Vertical Dimension. (m)	Emission Rate (g/s)
Robertson Ventilator	392271	3749759	19.152	2.134	63.398	0	8.908	1

Table 12 Volume Source Data

Emission Source	Easting (m)	Northing (m)	Release Height (m)	Initial Horizontal Dimension (m)	Initial Vertical Dimension (m)	Unit Emission Rate (g/s)
Building O	392208	3749643	6.553	10.633	6.096	1
Building O	392253	3749642	6.553	10.633	6.096	1
New Building	392068	3749633	7.620	18.075	7.088	1
New Building	392146	3749633	7.620	18.075	7.088	1
Grinding Building H	392164	3749831	4.84	3.47	4.50	1
Grinding Building P	392179	3749784	4.27	6.76	3.97	1
Grinding Building M	392256	3749600	3.96	11.50	3.68	1
Grinding Building A1	392228	3749795	4.27	8.09	3.97	1

7.3.3 *Building Downwash*

Building downwash was also considered in the model. To account for building downwash, buildings housing the emission sources and on-site buildings and nearby off-site buildings were included in the analysis. Nearby buildings in this case include buildings that are within a distance to a stack equal to 10 times the building height.

7.4 *RISK CHARACTERIZATION*

Risk characterization was conducted using the Hotspots Analysis Reporting Program (HARP). Exposure outputs from the AERMOD dispersion model were input into HARP On-Ramp along with average annual and maximum 1-hour emission rates for identified TACs. HARP was used to calculate the cancer risk, and the chronic and acute non-cancer hazard indices for residential and worker receptors. The exposure duration is assumed to be 70 years for residential receptors and 40 years for worker receptors. The MEIR and sensitive receptors were evaluated with an exposure duration of 70 years. In the HARP model, cancer risks were evaluated using the derived (adjusted) analysis method and chronic hazard indices were evaluated with the derived (OEHHA) analysis method. In addition to inhalation, additional pathways were included the analysis of TAC emissions from boilers and generators. Exposure through inhalation, dermal, soil ingestion, home-grown vegetables, and mother's milk were included for residential receptors. Exposure through inhalation, dermal, and soil ingestion were included for worker receptors. For non-inhalation risks, a deposition rate of 0.02 m/s was used, since the PM combustion emissions are 2.5 microns or less.

7.5 *ESTIMATED HEALTH EFFECTS*

The estimated incremental cancer risk and chronic hazard index for the MEIR and MEIW from HARP are summarized in Table 13. Based on the results, the operation of the new and existing equipment with greater operating activity due to the project would not result in a cancer risk above the CEQA threshold of 10 in one million. Additionally, chronic and acute hazard indices at the peak residential, worker, and sensitive receptors were found to be below the significance threshold of 1 Locations of the MEIR and MEIW are provided in Figure 1. Additionally, the zone of potential impact where cancer risks are greater than 1 in one million is shown in Figure 2. Although the zone of potential impact is within 1,000 feet of the facility, cancer risk and chronic and acute hazard indices for sensitive receptors within one mile of the facility are provided in Table 14.

Table 13 ***Cancer Risk, Chronic and Acute Hazard Indices for Residential and Worker Receptors***

Receptor	Risk	Easting	Northing	Risk	Threshold
MEIR (in one million)	Cancer	391900	3749700	6.05	10
MEIW (in one million)	Cancer	392100	3749550	1.68	10
MEIR	Chronic	391900	3749700	0.103	1
MEIW	Chronic	392026	3749559	0.162	1
MEIR	Acute	391900	3749700	0.077	1
MEIW	Acute	392026	3749559	0.189	1

Table 14 ***Cancer Risk and Chronic and Acute Hazard Index at Sensitive Receptors***

Receptor	Easting	Northing	Cancer Risk (in one million)	Chronic Hazard Index	Acute Hazard Index
Wesley Gaines Elementary	391906	3749981	0.84	2.59E-02	5.38E-02
Leona Jackson	391734	3749982	0.54	1.73E-02	3.75E-02
McKinley School	392735	3749368	0.69	1.57E-02	1.76E-02
Promise Hospital	392423	3749880	4.39	7.16E-02	6.42E-02
Grant Elementary	391500	3748571	0.17	4.32E-03	5.03E-03
Major Lynn Mokler Elementary	393594	3749682	3.77	7.32E-03	5.63E-03
Lincoln Elementary	392861	3750905	0.12	2.82E-03	6.20E-03
Our Lady of Rosary	392543	3751474	0.092	2.09E-03	4.12E-03
Hamilton Middle School	391051	3749595	0.164	4.50E-03	6.13E-03
Mark Keppel Elementary	390872	3750881	0.088	2.15E-03	3.75E-03
Dominguez High School	390807	3750776	0.089	2.17E-03	3.76E-03
Frank J. Zamboni School	391102	3750542	0.131	3.27E-03	5.21E-03

Receptor	Easting	Northing	Cancer Risk (in one million)	Chronic Hazard Index	Acute Hazard Index
David Starr Jordan High School	390568	3748667	0.086	2.08E-03	3.08E-03

CEQA Checklist III(d): Would the Project expose sensitive receptors to substantial pollutant concentrations?

Operations Impact: Less than Significant Impact

8.0 GREENHOUSE GAS EMISSIONS

8.1 GHG CONSTRUCTION EMISSIONS

Daily emission of GHG from construction activities emissions was calculated in CalEEMod. To estimate annual emissions of GHG, daily emissions of CO_2e were multiplied by the expected duration of the construction phase. The total CO_2e emissions from construction is estimated to be 2,679 MT. Construction emissions amortized over 30 years is estimated to be 89 MT/yr. Appendix D includes the CalEEMod results .

8.2 GHG OPERATION EMISSIONS

Weber Metals is required to report its direct GHG emissions each year under California's Mandatory Reporting Regulation (MRR). The baseline direct GHG emissions from the facility were 17,663 MT/yr. Baseline emissions are presented in Appendix C.

GHG emissions are associated with the proposed new equipment, as well as additional operating activity associated with existing equipment due to the proposed project. Emissions were calculated as the difference between post-project emissions and baseline emissions. Baseline emissions were based on the average actual emissions emitted from the facility during the 2 years prior to preparation of this analysis. In this case, the baseline emissions were calculated based on fuel usage for 2013 and 2014 and GHG emissions from USEPA 40 Code of Federal Regulations (CFR) Part 98 Subpart C. Project emissions are provided in Appendix C.

8.2.1 *Existing Furnaces*

There are eight existing permitted furnaces and four Rule 219 permit exempt furnaces. The permitted furnaces are: 1) No. 1 Furnace (G26775); 2) No. 2 Furnace (G26776); 3) Rotary Furnace (F26557); 4) A&A Furnace (G26559); 5) Lindberg Furnace (G26560); 6) Car Bottom Furnace (G26558); 7) AOV Furnace (F26561); and 8) Thorpe Furnace (G26779). Operation of the existing permitted furnaces are expected to increase from 5 percent up to 30 percent from current operations. Emissions of GHG are expected as a result of natural gas combustion. Emissions of GHG were calculated by multiplying the maximum rated capacity of the furnaces by emission factors for natural gas combustion in 40 CFR Section 98

Subpart C. Emissions of methane (CH_4) and nitrous oxide (N_2O) were converted to CO_2e emissions by multiplying the emissions by the respective global warming potential (GWP) factors.

8.2.2 *Existing Boilers*

There are two existing Rule 219 boilers. Emissions of GHG are expected as a result of natural gas combustion. Emissions of GHG were calculated by multiplying the maximum rated capacity of the furnaces by emission factors for natural gas combustion in 40 CFR Section 98 Subpart C. Emissions of CH_4 and N_2O were converted to CO_2e emissions by multiplying the emissions by the respective GWP factors.

8.2.3 *Existing Ovens*

There are 14 existing Rule 219 ovens. Operation of the existing exempt ovens is expected to increase from the proposed project up to 20 percent from current operations. Emissions of GHG are expected as a result of natural gas combustion. Emissions of GHG were calculated by multiplying the maximum rated capacity of the furnaces by emission factors for natural gas combustion in 40 CFR Section 98 Subpart C. Emissions of CH_4 and N_2O were converted to CO_2e emissions by multiplying the emissions by the respective GWP factors.

8.2.4 *Existing Dryer*

There is an existing permitted sludge dryer (F73290). Operation of the existing sludge dryer is expected to increase by 25 percent. Emissions of GHG are expected as a result of natural gas combustion. Emissions of GHG were calculated by multiplying the maximum rated capacity of the furnaces by emission factors for natural gas combustion in 40 CFR Section 98 Subpart C. Emissions of CH_4 and N_2O were converted to CO_2e emissions by multiplying the emissions by the respective GWP factors.

8.2.5 *Proposed Furnaces*

Four natural gas fired furnaces will be installed as part of the proposed project. Specifically, one (1) large rotary furnace, one (1) c chain conveyor furnace, and two (2) pedestal die heating furnaces, with the other 5 being installed in the future. The size will be determined by the product that needs to be produced by the press

at that time. It has been assumed that the remaining 5 furnaces will consist of two (2) medium rotary furnaces rated at 14 million British thermal units per hour, one (1) chain conveyor furnace identical to the proposed chain conveyor furnace, and two (2) pedestal die heating furnaces identical to the proposed pedestal die heating furnaces.

Emissions of GHG are expected as a result of natural gas combustion. Emissions of GHG were calculated by multiplying the maximum rated capacity of the furnaces by emission factors for natural gas combustion in 40 CFR Section 98 Subpart C. Emissions of CH_4 and N_2O were converted to CO_{2e} emissions by multiplying the emissions by the respective GWP factors.

8.2.6 *Proposed Manipulators*

Two diesel-powered manipulators will be installed as part of the proposed project. Emissions of GHG are expected as a result of diesel combustion. Emissions of GHG were calculated by multiplying the maximum rated capacity of the furnaces by emission factors for combustion of Distillate No. 2 in 40 CFR Section 98 Subpart C. Emissions of CH_4 and N_2O were converted to CO_2e emissions by multiplying the emissions by the respective GWP factors.

8.2.7 *Proposed Fork Trucks*

Four propane-powered fork lifts will be operated in the proposed project. Emissions of GHG are expected as a result of propane combustion. Emissions of GHG were calculated by multiplying the maximum rated capacity of the furnaces by emission factors for propane combustion in 40 CFR Section 98 Subpart C. Emissions of CH_4 and N_2O were converted to CO_2e emissions by multiplying the emissions by the respective GWP factors.

8.2.8 *Indirect GHG Emissions*

Indirect GHG emissions from electricity consumption were estimated using emissions factors from the Southern California Edison 2012 Corporate Responsibility & Sustainability Report. Increases in GHG emissions were calculated by subtracting baseline emissions from GHG emissions from electricity consumption of the proposed project. Baseline emissions were based on the average electricity consumption during 2013 and 2014.

8.2.9 *GHG Emissions Summary*

SCAQMD established an interim CEQA GHG significance threshold in 2008. The interim GHG significance threshold for industrial facilities is 10,000 MT of CO_{2e} per year, which is calculated from the sum of GHG construction emissions amortized over 30 years and annual direct and indirect operation emissions. [2, 3]

An increase in direct GHG emissions is expected due to the new combustion sources. Increases in emissions is calculated based on emissions from new equipment in the proposed project, emission increases due to increased operation of existing equipment. The project will also result in indirect GHG emissions from increased electricity consumption. The baseline direct GHG emissions from operations were based on the average actual emissions directly emitted from the facility in the past 2 years. In this case, the baseline emissions were calculated based on fuel usage for 2013 and 2014 and emission factors reported on the 2013 AER and emission factors from 40 CFR Section 98 Subpart C. Baseline emissions and post project emissions are provided in Appendix C.

Emission increases from operations at the proposed project is provided in Table 15 and compared to the applicable SCAQMD significance threshold for industrial facilities.

Under the CEQA guidelines (Section 15064), a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan addressing the cumulative condition. As part of the State of California's Assembly Bill 32 Global Warming Solutions Act of 2006 (AB32), the California Air Resources Board (CARB) has implemented the AB32 Scoping Plan which includes the Cap & Trade Program for the management of GHG emissions from industrial facilities within the State. The Cap-and-Trade program is applicable to industrial facilities which report direct GHG emissions in excess of 25,000 MT/yr. In addition, all GHG

---

[2] SCAQMD Governing Board meeting minutes, December 5, 2008.

[3] SCAQMD GHG CEQA Significance Threshold Stakeholder Working Group #15 meeting notes (September 28, 2010)

emissions due to electricity (in-state and imported) are subject to the Cap-and-Trade program.

As shown in Appendix C, the baseline direct emissions from the Weber facility are 17,663 MT/yr. With the proposed project, the Weber facility will exceed the 25,000 MT threshold and thus become subject to the Cap & Trade Program. As a "covered" facility, Weber will be required by regulation to obtain CARB-approved GHG credits every calendar year to cover direct GHG emissions reported under the MRR program. These GHG credits are generally CARB-auctioned California Carbon Allowances (CCA) with up to 8% California Compliance Offsets (CCOs) allowed.[4, 5] As such, all GHG emissions from project operations are expected to be covered by approved GHG credits each year. Construction emissions will not be subject to Cap & Trade and thus, are shown is a positive number after Cap & Trade compliance.

In addition, the indirect GHG emissions associated with increased electricity consumption at Weber will also be covered under the Cap & Trade program via the electric utility. As such, these emissions will also be fully covered by the Cap & Trade regulation and thus, are shown as zero post-compliance.

By complying with the AB32 regulations, the GHG emissions associated with the proposed project (direct + indirect) will be below the applicable SCAQMD significance threshold for industrial facilities.

---

[4] An overview of the Cap-and-Trade program is available on the CARB website (http://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf).

[5] CCOs are carbon offsets issued by CARB in accordance with one of several CARB-approved offset protocols.

Table 15 Summary of Annual GHG Emissions from Proposed Project

Emission Source	CO_{2e} (MT/yr)
Direct Project Operational Emissions	56,152
Construction Emissions Amortized Over 30 Years	89
Total Direct Project Emissions, Operational + Construction	56,241
Direct Project Emissions Increase after Cap-and-Trade Compliance (Direct Net) [1]	89
Indirect Project Emissions from Increased Electricity Consumption	5,414
Indirect Project Emissions Increase after Cap-and-Trade Compliance (Indirect Net) [2]	0
Total Project Emissions after Cap-and-Trade Compliance (Direct Net + Indirect Net)	89
Applicable Significance Threshold	*10,000*
Exceeds Significance Threshold?	No

1 Once direct GHG emissions reported by Weber exceed 25,000 MT/yr, all direct operational GHG emissions will be subject to Cap & Trade regulation.

2 All indirect GHG emissions associated with the increased electricity consumption from the project are subject to the Cap & Trade program.

CEQA Checklist VII(a): Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

GHG Impact: Less than Significant Impact

CEQA Checklist VII(b): Would the Project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

GHG Impact: Less than Significant Impact

9.0 CO HOT SPOTS ANALYSIS

A CO Hot Spots analysis is required for projects where traffic associated with the proposed project will change the Level of Service (LOS) of one or more intersections. Construction of the proposed project will be short-term and would not have a permanent impact on the LOS of nearby intersections. Operation of the proposed project is not anticipated to include enough additional vehicles to result in a change in LOS at intersections. Therefore, a more detailed CO Hot Spots analysis has not been prepared at this time.

Figures

Figure 1
MEIR & MEIW Locations
Weber Metals
16706 Garfield Avenue
Paramount, California

ERM *04/2015*

Figure 2
Zone of Impact Map
Weber Metals
16706 Garfield Avenue
Paramount, California

ERM *04/2015*

Appendix A

Construction Emissions

Note: Appendix to be provided in supplemental CD

Table A.1 Construction Emissions without Mitigation

Phase	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
Maximum Daily Emissions	12	97	95	0.2	19	10
Significant Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Table A.2 Construction Schedule by Project Phase

Construction Phase	Phase Description	2015								2016											
		May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
1	Site Preparation	X	X																		
2	Excavation/Dewatering	X	X	X																	
3A	Press Facility Construction				X	X	X	X	X	X	X	X	X	X							
3B	Paving														X						
4A	Equipment Installation														X	X	X	X	X		
4B	Final Equipment Installation														X						
5	Utility/Electrical Connections													X	X	X	X	X	X		
6A	Substation Site Prep					X															
6B	Substation Construction						X	X	X	X	X	X	X	X	X						
6C	Substation Demo															X					

Table A.3 CalEEMOD Outputs

Phase I - Site Preparation (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	1.4954	12.5124	11.8708	0.0113	5.5618	3.3316	1.4954	12.5124	11.8708	0.0113	5.5618	3.3316
Off-site	0.1123	0.1354	1.68	3.31E-03	0.2628	0.0712	0.1152	0.1487	1.5577	3.10E-03	0.2628	0.0712
Total	1.6077	12.6478	13.5508	0.01461	5.8246	3.4028	1.6106	12.6611	13.4285	0.0144	5.8246	3.4028

Note: Dozers used in Phase 1 will be equipped with Tier 2 engines.

Phase 2 - Excavation/Dewatering (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	3.5838	36.6584	26.8493	0.0377	6.7589	4.4647	3.5838	36.6584	26.8493	0.0377	6.7589	4.4647
Off-site	2.7854	48.0093	28.108	1.18E-01	6.109	2.145	2.9069	49.8251	30.8979	0.1174	6.1109	2.1467
Total	6.3692	84.6677	54.9573	0.1555	12.8679	6.6097	6.4907	86.4835	57.7472	0.1551	12.8698	6.6114

Note: Dozers used in Phase 2 will be equipped with Tier 2 engines.

Phase 3A - Press Facility Construction (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	6.0473	56.4372	37.6441	0.059	3.2936	3.1321	6.0473	56.4372	37.6441	0.059	3.2936	3.1321
Off-site	2.361	6.819	33.9061	0.0728	5.3503	1.5094	2.4271	7.2298	31.8429	0.0689	5.3505	1.5096
Total	8.4083	63.2562	71.5502	0.1318	8.6439	4.6415	8.4744	63.667	69.487	0.1279	8.6441	4.6417

Phase 3A - Press Facility Construction (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	5.5397	52.427	37.1648	0.059	2.9444	2.8001	5.5397	52.427	37.1648	0.059	2.9444	2.8001
Off-site	2.1293	6.0301	30.7101	0.0727	5.3339	1.4944	2.1849	6.3946	28.7768	0.0688	5.3341	1.4946
Total	7.669	58.4571	67.8749	0.1317	8.2783	4.2945	7.7246	58.8216	65.9416	0.1278	8.2785	4.2947

Phase 3B -Paving (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	1.0266	3.3848	2.1391	3.90E-03	0.1682	0.1547	1.0266	3.3848	2.1391	3.90E-03	0.1682	0.1547
Off-site	0.2491	2.6116	2.929	0.0104	0.5268	0.1764	0.2578	2.7161	2.9688	0.0102	0.527	0.1765
Total	1.2757	5.9964	5.0681	0.0143	0.695	0.3311	1.2844	6.1009	5.1079	0.0141	0.6952	0.3312

Phase 4A - Equipment Installation (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	5.1566	61.1291	23.5364	0.0429	2.821	2.5953	5.1566	91.1291	23.5364	0.0429	2.821	2.5953
Off-site	0.5683	0.6839	8.5187	1.85E-02	1.4708	0.3981	0.5821	0.7511	7.8735	0.0174	1.4708	0.3981
Total	5.7249	61.813	32.0551	0.0614	4.2918	2.9934	5.7387	91.8802	31.4099	0.0603	4.2918	2.9934

Phase 4B - Equipment Installation (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	-	-	-	-	-	-	-	-	-	-	-	-
Off-site	0.0361	0.6443	0.3728	0.00175	0.0517	0.0207	0.0377	0.6685	0.4174	0.00174	0.0518	0.0208
Total	0.0361	0.6443	0.3728	0.00175	0.0517	0.0207	0.0377	0.6685	0.4174	0.00174	0.0518	0.0208

Phase 5 - Utility/Electrical Connections (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	3.1636	21.1351	21.3512	0.0312	1.3293	1.2885	3.1636	21.1351	21.3512	0.0312	1.3293	1.2885
Off-site	0.3045	0.3664	4.5636	9.91E-03	0.7879	0.2133	0.3118	0.4024	4.218	9.29E-03	0.7879	0.2133
Total	3.4681	21.5015	25.9148	0.04111	2.1172	1.5018	3.4754	21.5375	25.5692	0.04049	2.1172	1.5018

Phase 6A - Substation Site Preparation (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	1.4954	15.9385	11.8708	0.0113	5.4578	3.3203	1.4954	15.9385	11.8708	0.0113	5.4578	3.3203
Off-site	0.0449	0.0542	0.672	1.32E-03	0.3768	0.0952	0.0461	0.0595	0.6231	1.24E-03	0.3768	0.0952
Total	1.5403	15.9927	12.5428	0.01262	5.8346	3.4155	1.5415	15.998	12.4939	0.01254	5.8346	3.4155

Phase 6B - Substation Construction (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	2.27618	26.1613	19.3051	0.0285	1.468	1.394	2.7618	26.1613	19.3051	0.0285	1.1468	1.3694
Off-site	0.2695	0.3249	4.0319	7.93E-03	1.174	0.3042	0.2765	0.357	3.7385	0.00744	1.174	0.3042
Total	2.54568	26.4862	23.337	0.03643	2.642	1.6982	3.0383	26.5183	23.0436	0.03594	2.3208	1.6736

Phase 6B - Substation Construction (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	2.5092	24.0609	19.0571	0.0285	1.2938	1.2073	2.5092	24.0609	19.0571	0.0285	1.2938	1.2073
Off-site	0.2436	0.2931	3.6509	7.93E-03	1.1737	0.304	0.2495	0.3219	3.3744	7.43E-03	1.1737	0.304
Total	2.7528	24.354	22.708	0.03643	2.4675	1.5113	2.7587	24.3828	22.4315	0.03593	2.4675	1.5113

Phase 6C - Substation Demolition (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	2.5092	24.0609	19.0571	0.0285	1.3922	1.2222	2.5092	24.0609	19.0571	0.0285	1.3922	1.2222
Off-site	0.2544	0.4859	3.7625	0.00845	0.6458	0.1768	0.2607	0.522	3.4993	7.95E-03	0.6458	0.1768
Total	2.7636	24.5468	22.8196	0.03695	2.038	1.399	2.7699	24.5829	22.5564	0.03645	2.038	1.399

Table A.4 CalEEMOD Outputs

Phase 3A - Press Facility Construction (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	0.3192	4.0636	5.5362	0.00517	0.2255	0.2075	0.3192	4.0636	3.5362	0.00517	0.2255	0.2075
Off-site	2.1293	6.0301	30.7101	0.0727	5.3339	1.4944	2.1849	6.3946	28.7768	0.0688	5.3341	1.4946
Total	2.4485	10.0937	36.2463	0.07787	5.5594	1.7019	2.5041	10.4582	32.313	0.07397	5.5596	1.7021

Phase 4A - Equipment Installation (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	0.0421	0.6921	0.8138	0.00124	0.0285	0.0262	0.0421	0.6921	0.8138	0.00124	0.0285	0.0262
Off-site	0.5683	0.6839	8.5187	1.85E-02	1.4708	0.3981	0.2765	0.357	3.7385	0.00744	1.174	0.3042
Total	0.6104	1.376	9.3325	0.01974	1.4993	0.4243	0.3186	1.0491	4.5523	0.00868	1.2025	0.3304

Phase 6B - Substation Construction (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	0.2017	2.7239	2.5819	3.82E-03	0.1412	0.1299	0.2017	2.7239	2.5819	0.00382	0.1412	0.1299
Off-site	0.2436	0.2931	3.6509	7.93E-03	1.1737	0.304	0.2495	0.3219	3.3744	0.00743	1.737	0.304
Total	0.4453	3.017	6.2328	0.01175	1.3149	0.4339	0.4512	3.0458	5.9563	0.01125	1.8782	0.4339

Table A.5-1 Construction Phase 1: Site Preparation (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC					1.61	1.61																		
NOx					12.65	12.65																		
CO					13.55	13.55																		
SOx					0.01	0.01																		
PM10					5.82	5.82																		
PM2.5					3.40	3.40																		

Table A.5-2 Construction Phase 2: Excavation/Dewatering (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC					6.37	6.37	6.37																	
NOx					84.67	84.67	84.67																	
CO					54.96	54.96	54.96																	
SOx					0.16	0.16	0.16																	
PM10					12.87	12.87	12.87																	
PM2.5					6.61	6.61	6.61																	

Table A.5-3 Construction Phase 3A: Press/Facility Construction (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC								8.41	8.41	8.41	8.47	8.47	7.72	7.72	7.72	2.50	2.45							
NOx								63.26	63.26	63.26	63.67	63.67	58.82	58.82	58.82	10.46	10.09							
CO								71.55	71.55	71.55	69.49	69.49	65.94	65.94	65.94	32.31	36.25							
SOx								0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.07	0.08							
PM10								8.64	8.64	8.64	8.64	8.64	8.28	8.28	8.28	5.56	5.56							
PM2.5								4.64	4.64	4.64	4.64	4.64	4.29	4.29	4.29	1.70	1.70							

Table A.5-4 Construction Phase 3B: Paving (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																		1.28						
NOx																		6.00						
CO																		5.07						
SOx																		0.01						
PM10																		0.70						
PM2.5																		0.33						

Table A.5-5 Construction Phase 4A: Equipment Installations (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																		0.04	5.72	5.72	5.72	5.72		
NOx																		0.69	61.81	61.81	61.81	61.81		
CO																		0.81	32.06	32.06	32.06	32.06		
SOx																		1.24E-03	0.06	0.06	0.06	0.06		
PM10																		0.03	4.29	4.29	4.29	4.29		
PM2.5																		0.03	2.99	2.99	2.99	2.99		

Table A.5-6 Construction Phase 4B: Press Installation (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																		0.04						
NOx																		0.64						
CO																		0.37						
SOx																		1.75E-03						
PM10																		0.05						
PM2.5																		0.02						

Table A.5-7 Construction Phase 5: Utility/Electrical Connections (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																	3.47	3.47	3.47	3.47	3.47	3.47		
NOx																	21.50	21.50	21.50	21.50	21.50	21.50		
CO																	25.91	25.91	25.91	25.91	25.91	25.91		
SOx																	0.04	0.04	0.04	0.04	0.04	0.04		
PM10																	2.12	2.12	2.12	2.12	2.12	2.12		
PM2.5																	1.50	1.50	1.50	1.50	1.50	1.50		

Table A.5-8 Construction Phase 6A: Substation Site Preparation (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC									1.54															
NOx									15.99															
CO									12.54															
SOx									0.01															
PM10									5.83															
PM2.5									3.42															

Table A.5-9 Construction Phase 6B: Substation Construction (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC										2.55	3.04	3.04	2.76	2.76	2.76	2.76	0.45	0.45						
NOx										26.49	26.52	26.52	24.38	24.38	24.38	24.38	3.02	3.02						
CO										23.34	23.04	23.04	22.43	22.43	22.43	22.43	6.23	6.23						
SOx										0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.01						
PM10										2.64	2.32	2.32	2.47	2.47	2.47	2.47	1.31	1.31						
PM2.5										1.70	1.67	1.67	1.51	1.51	1.51	1.51	0.43	0.43						

Table A.5-10 Construction Phase 6C: Substation Demolition (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																			2.76					
NOx																			24.55					
CO																			22.82					
SOx																			0.04					
PM10																			2.04					
PM2.5																			1.40					

Table A.5-11 Total From All Phases (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC	0.00	0.00	0.00	0.00	7.98	7.98	6.37	8.41	9.95	10.95	11.51	11.51	10.48	10.48	10.48	5.26	6.36	5.23	9.19	9.19	9.19	9.19	0.00	0.00
NOx	0.00	0.00	0.00	0.00	97.32	97.32	84.67	63.26	79.25	89.74	90.19	90.19	83.20	83.20	83.20	34.84	34.61	31.21	83.31	83.31	83.31	83.31	0.00	0.00
CO	0.00	0.00	0.00	0.00	68.51	68.51	54.96	71.55	84.09	94.89	92.53	92.53	88.37	88.37	88.37	54.74	68.39	38.03	57.97	57.97	57.97	57.97	0.00	0.00
SOx	0.00	0.00	0.00	0.00	0.17	0.17	0.16	0.13	0.14	0.17	0.16	0.16	0.16	0.16	0.16	0.11	0.13	0.07	0.10	0.10	0.10	0.10	0.00	0.00
PM10	0.00	0.00	0.00	0.00	18.69	18.69	12.87	8.64	14.48	11.29	10.96	10.96	10.75	10.75	10.75	8.03	8.99	4.16	6.41	6.41	6.41	6.41	0.00	0.00
PM2.5	0.00	0.00	0.00	0.00	10.01	10.01	6.61	4.64	8.06	6.34	6.32	6.32	5.81	5.81	5.81	3.21	3.64	2.29	4.50	4.50	4.50	4.50	0.00	0.00

* Summer season is May through October and winter season is November through April.

Table A.6 Construction Equipment by Phase

	Phase 1		Phase 2		Phase 3A		Phase 3B		Phase 4A		Phase 4B		Phase 5		Phase 6A		Phase 6B		Phase 6C	
Equipment	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**
Drill Rig			1	6																
Water Truck																				
Forklift									1	6										
Excavator			4	6																
Cranes Composite					3	6			9	6							1	6	1	6
Paving Equipment							1	6												
Pickup Trucks					120				110				25				30		30	
Passenger Vehicles					350				30				50		10		30		30	
HHDT											35									
Dump Truck			8	6																
Concrete Truck					10	6														
Front End Loader	2	6	2	6											2	6				
Bulldozer	1	6	1	6											1	6				
Rolling Compactor			2	6																
Rough Terrain Forklift					6	6							2	6			6	6	6	6
Aerial Lift Composite					5	6			3	6			2	6			2	6	2	6
Welders Composite					2	6							4	6			2	6	2	6
Air compressor composite					2	6							2	6						
Scissor Lift					4	6							8	6			2	6	2	6
Concrete Pump Truck					2	6														

Note:

1. Days of operation based on construction schedule of 7am to 7pm and assumption of 5 days of construction per week.
2. Equipment expected to operate 6 hours per day.
3. Paving to occur during new press facility construction phase (Phase 3). However, paving is only scheduled for 10 days during the end of Phase 3 and is modeled as a separate phase to accurately represent emissions.

Table A.7 Construction Equipment Refined

	Phase 3A		Phase 4A		Phase 6A	
Duration	**April 2016 to May 2016**		**June 2016**		**May 2016 to June 2016**	
Equipment	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**
Drill Rig						
Water Truck						
Forklift			0	8		
Excavator						
Cranes Composite	0	8	0	8	0	8
Paving Equipment						
Pickup Trucks	120		110		30	
Passenger Vehicles	350		30		30	
Dump Truck						
Concrete Truck	0	8				
Front End Loader						
Bulldozer						
Rolling Compactor						
Rough Terrain Forklift	2	8			1	8
Aerial Lift Composite	0	8	1	8	1	8
Welders Composite	0	8			0	8
Air compressor composite	0	8				
Scissor Lift	0	8			0	8
Concrete Pump Truck	0	8				

Note:

1. Days of operation based on construction schedule of 7am to 7pm and assumption of 5 days of construction per week.
2. Equipment expected to operate 6 hours per day.
3. Paving to occur during new press facility construction phase (Phase 3). However, paving is only scheduled for 10 days during the end of Phase 3 and is modeled as a separate phase to accurately represent emissions.

Appendix B

Operational Emissions

Note: Appendix to be provided in supplemental CD

Table B.1 Operational Project Impacts from Criteria Emissions

Criterial Pollutants	VOC	NOx	SOx	CO	PM10	PM2.5
Total (lbs/day)	53.39	220.66	1.68	154.88	36.69	36.69
Significance Thresholds	55	55	150	550	150	55
Exceeds (Yes/No)	No	Yes	No	No	No	No

Note: PM2.5 is assumed to be conservatively equal to PM10

B.2 Project Criteria Emissions

Project emissions include emissions from proposed emission units and emission increases from existing emission units. Project emissions are summarized in Table B.5-1.

B.2-1 - Summary of Emissions from Proposed Project

	Daily Emissions (lbs/day)					Annual Emissions (tons/yr)				
Device	VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
Large Rotary Furnace	3.52	39.07	0.30	17.60	3.77	0.64	7.13	0.06	3.21	0.69
Medium Rotary Furnace #1	2.24	24.86	0.19	11.20	2.40	0.41	4.54	0.04	2.04	0.44
Medium Rotary Furnace #2	2.24	24.86	0.19	11.20	2.40	0.41	4.54	0.04	2.04	0.44
Chain Conveyor Furnace #1	2.08	23.09	0.18	10.40	2.23	0.38	4.21	0.03	1.90	0.41
Chain Conveyor Furnace #2	2.08	23.09	0.18	10.40	2.23	0.38	4.21	0.03	1.90	0.41
Pedestal Die Heating Furnace #1	1.28	14.21	0.11	6.40	1.37	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #2	1.28	14.21	0.11	6.40	1.37	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #3	1.28	14.21	0.11	6.40	1.37	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #4	1.28	14.21	0.11	6.40	1.37	0.23	2.59	0.02	1.17	0.25
Abrasive Blasting	-	-	-	-	0.31	-	-	-	-	0.06
Cooling Towers	-	-	-	-	0.17	-	-	-	-	0.03
New Press	34.99	-	-	-	-	6.39	-	-	-	-
Sludge Dryer	1.77E-03	0.03	1.52E-04	8.86E-03	1.90E-03	3.23E-04	6.00E-03	2.77E-05	1.62E-03	3.46E-04
Thorpe Furnace	0.01	0.08	1.20E-03	0.12	0.02	2.56E-03	0.01	2.19E-04	0.02	2.74E-03
No. 1 Furnace	0.01	0.08	1.01E-03	0.07	0.01	2.14E-03	0.02	1.83E-04	0.01	2.29E-03
No. 2 Furnace	0.02	0.11	1.30E-03	0.08	0.02	2.76E-03	0.02	2.36E-04	0.02	2.96E-03
Rotary Furnace	0.06	0.46	5.53E-03	0.36	0.07	0.01	0.08	1.01E-03	0.07	0.01
Lindberg Furnace	0.07	0.40	6.39E-03	0.62	0.08	0.01	0.07	1.17E-03	0.11	0.01
Car Bottom Furnace	0.05	0.27	4.33E-03	0.42	0.05	9.22E-03	0.05	7.90E-04	0.08	9.87E-03
AOV Furnace	7.31E-03	0.04	6.27E-04	0.06	7.84E-03	1.33E-03	7.14E-03	1.14E-04	0.01	1.43E-03
#1 Car Bottom Furnace	0.04	0.20	3.13E-03	0.30	0.04	6.67E-03	0.04	5.72E-04	0.06	7.15E-03
Exempt Oven	0.80	14.86	0.07	4.00	0.86	0.15	2.71	0.01	0.73	0.16
CEC Furnaces	0.04	0.75	3.45E-03	0.20	0.04	7.35E-03	0.14	6.30E-04	0.04	7.87E-03
Manipulators	-	9.56	0.04	10.10	0.06	-	1.74	8.20E-03	1.84	0.01
Forklifts	-	2.03	0.06	52.15	0.83	-	0.37	0.01	9.52	0.15
Grinding/Sawing	0.00E+00	0.00E+00	0.00E+00	0.00E+00	15.62	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94
Total	53.39	220.66	1.68	154.88	36.69	9.74	40.27	0.31	28.27	5.79

Emissions from Proposed Combustion Sources

Emissions of criteria pollutants from combustion sources were calculated based on the following equation. The proposed equipment is expected to operate up to 24 hours per day and 365 days per year:
Daily Emissions = Max heat rating (MMBtu/hr)/HHV (mmbtu/mmscf) x Hours of operation per day (hr/day) x Emission Factor (lb/mmscf)
Annual Emissions = Daily Emissions x Days of operation per year (day/yr)

B.2-2 - Emissions from Proposed Combustion Sources

	Heat Rating	Heat Rating	Emission Factor (lbs/mmscf)					Daily Emissions (lbs/day)					Annual Emissions (lbs/yr)					Annual Emissions (tons/yr)				
Device	(MMBtu/hr)	(MMscf/hr)	VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
Large Rotary Furnace	22	0.0210	7	77.70	0.6	35	7.5	3.52	39.07	0.30	17.60	3.77	1,284.80	14,261.28	110.13	6,424.00	1,376.57	0.64	7.13	0.06	3.21	0.69
Medium Rotary Furnace #1	14	0.0133	7	77.70	0.6	35	7.5	2.24	24.86	0.19	11.20	2.40	817.60	9,075.36	70.08	4,088.00	876.00	0.41	4.54	0.04	2.04	0.44
Medium Rotary Furnace #2	14	0.0133	7	77.70	0.6	35	7.5	2.24	24.86	0.19	11.20	2.40	817.60	9,075.36	70.08	4,088.00	876.00	0.41	4.54	0.04	2.04	0.44
Chain Conveyor Furnance #1	13	0.0124	7	77.70	0.6	35	7.5	2.08	23.09	0.18	10.40	2.23	759.20	8,427.12	65.07	3,796.00	813.43	0.38	4.21	0.03	1.90	0.41
Chain Conveyor Furnance #2	13	0.0124	7	77.70	0.6	35	7.5	2.08	23.09	0.18	10.40	2.23	759.20	8,427.12	65.07	3,796.00	813.43	0.38	4.21	0.03	1.90	0.41
Pedestal Die Heating Furnace #1	8	0.0076	7	77.70	0.6	35	7.5	1.28	14.21	0.11	6.40	1.37	467.20	5,185.92	40.05	2,336.00	500.57	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #2	8	0.0076	7	77.70	0.6	35	7.5	1.28	14.21	0.11	6.40	1.37	467.20	5,185.92	40.05	2,336.00	500.57	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #3	8	0.0076	7	77.70	0.6	35	7.5	1.28	14.21	0.11	6.40	1.37	467.20	5,185.92	40.05	2,336.00	500.57	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #4	8	0.0076	7	77.70	0.6	35	7.5	1.28	14.21	0.11	6.40	1.37	467.20	5,185.92	40.05	2,336.00	500.57	0.23	2.59	0.02	1.17	0.25

Note:
1. Medium Rotary Furnace #2 to be installed and operated in 2019 and expected to be identical to Medium Furnace #1.
2. CO, SOx, PM10, VOC Emission Factors are SCAQMD Emission Factors.
3. NOx Emission Factor was calculated using the F Factor for natural gas, 60 ppmv for NOx, the conversion factor of 379.5 standard cubic feet per pound mole, the correction to 3% oxygen and the molecular weight for NO_2.

Emissions from Proposed Abrasive Blasting Cabinet

Emission of PM from the Abrasive Blasting Cabinet vented to a baghouse were estimated based on the following equation:
Hourly Emissions = F (lbs/hr) x N x EF (lb PM/lb abrasive media) x FR x (1-C)
Daily Emissions = Hourly Emissions x Operating hours per day (hr/day)
Annual Emissions = Daily Emissions x Days of operation per year (day/yr)

F = Flow Rate of Nozzle =	6223
N = Number of Nozzles =	1
EF = Emission Factor =	0.0041
FR = Fraction of PM_{10} =	0.5
C = control efficiency =	0.999
Hours of Operation =	24
Days of Operation =	365

B.2-3 - PM10 emissions from Abrasive Blasting Cabinet

Pollutant	Hourly Emissions (lbs/hr)	Daily Emissions (lbs/day)	Annual Emission (lb/yr)	Annual Emissions (ton/yr)
PM10	0.01	0.31	111.75	0.06

1. Control efficiency is SCAQMD default for indoor blasting with a baghouse.
2. Flow rate from Table 2-2 of U.S.E.P.A. Emission Factor Determination for AP-42, Section 13.2.6, Abrasive Blasting, for flow rate of abrasive through a 1/2-inch nozzle and pressure of 100 psig.
3. EF is SCAQMD default emission factor for abrasive blasting, uncontrolled for shot.
4. There are two nozzles in the blasting room, but only one nozzle will be used at any given time.

Emissions from Proposed Cooling Towers

Emissions of PM10 are expected from the proposed cooling towers and were calculated using the following equation:
Drift (gal/day) = Circulation Rate (gal/min) x Operating Hours (hrs/day) x TDS (ppm) x Drift Factor (%)
Daily Emissions = drift (gal/yr) x density of water (lb/gal) x TDS (lb/MMlb) / 1,000,000 (lb)
Annual Emissions = drift (gal/yr) x density of water (lb/gal) x TDS (lb/MMlb) ÷ 1,000,000 (lb)

B.2-4 - PM10

Source	Circulation Rate (gpm)	Operating Hours (hr/day)	Days of Operation (days/yr)	TDS	Drift Factor	Drift (gal/day)	PM10 (lb/day)	PM10 (ton/yr)
60K Press	1000	24	365	1010	0.00001	14.4	0.12	0.02
Quench Tank	400	24	365	1010	0.00001	5.76	0.05	0.01
						Total	0.17	0.03

1. Default emission factor of 0.02% for drift eliminator
2. TDS value based on 3 cycles of concentration and onsite sample value with contingency added

Emissions from Onsite Mobile Equipment

Emissions from mobile equipment are estimated using the following equations:
Hourly Emissions = BHP x LF x EF; or
Hourly Emissions = Fuel Consumption x LF x EF
Daily Emissions = hourly emissions x operating hours
Annual Emissions = daily emissions x operating days

where,
BHP = rated capacity, bhp
LF = load factor
EF = emission factor, g/bhp-hr or lbs/Mgal

B.2-5 - Emissions from Proposed Mobile Equipment

				Operating Hours		Emission Factors[2,3]				Emission (lbs/hr)				Emission (lbs/day)				Emission (tons/yr)			
Source	BHP	Load Factor	Fuel Rate (gal/hr)[1]	hours per day	days per year	NOx+NMHC	CO	PM	SOx	NOx+NMHC	CO	PM	SOx	NOx+NMHC	CO	PM	SOx	NOx+NMHC	CO	PM	SOx
Manipulator_1	60	0.43	4.46	24	365	3.5	3.7	0.022	0.21	0.199	0.210	1.25E-03	9.36E-04	4.778	5.051	0.030	0.022	0.872	0.922	0.005	0.004
Manipulator_2	60	0.43	4.46	24	365	3.5	3.7	0.022	0.21	0.199	0.210	1.25E-03	9.36E-04	4.778	5.051	0.030	0.022	0.872	0.922	0.005	0.004
Forklift_1	100	0.2	10.83	24	365	0.6	15.4	5	0.35	0.026	0.679	1.08E-02	7.58E-04	0.635	16.296	0.260	0.018	0.116	2.974	0.047	0.003
Forklift_2	100	0.2	10.83	24	365	0.6	15.4	5	0.35	0.026	0.679	1.08E-02	7.58E-04	0.635	16.296	0.260	0.018	0.116	2.974	0.047	0.003
Forklift_3	60	0.2	6.50	24	365	0.6	15.4	5	0.35	0.016	0.407	6.50E-03	4.55E-04	0.381	9.778	0.156	0.011	0.070	1.784	0.028	0.002
Forklift_4	60	0.2	6.50	24	365	0.6	15.4	5	0.35	0.016	0.407	6.50E-03	4.55E-04	0.381	9.778	0.156	0.011	0.070	1.784	0.028	0.002

1. Fuel consumption rate calculated per RECLAIM Rule 2012 Protocol, Chapter 4, Equation 8 and adjusted by the load factor
2. Emission factors for diesel powered manipulators for NOx+NMHC, CO, and PM based on Tier 4 standards and are in units of g/bhp-hr. SOx emission factor based on SCAQMD default for diesel powered ICEs and is uniits of lb/Mgal.
3. Emission factors for forklifts for NOx+NMHC and CO are based on LSI standards and are in units of g/bhp-hr. PM, and SOx emission factor based on SCAQMD default for propane powered ICEs and is in units of lb/Mgal.
4. NOx+NHMC assumed to be all NOx.

Emission Increases from Existing Equipment

Increase in emissions of criteria pollutants from existing equipment are expected from increased operated due to the proposed project. Emission increased are estimated from baseline emissions and the expected increase in operations.

B.2-6 - Emissions Increases from Existing Combustion Equipment

Permit Number	Device	Expected Increase in Operations (%)	Increase in Daily Emissions (lbs/day)*					Increase in Annual Emissions (lbs/yr)					Annual Emissions (tons/yr)				
			VOC	NOx	SOx	CO	PM10	VOC	NOx	SOx	CO	PM10	VOC	NOx	SOx	CO	PM10
F73290	Sludge Dryer	25	1.77E-03	0.03	1.52E-04	8.86E-03	1.90E-03	0.65	12.01	0.06	3.23	0.69	3.23E-04	6.00E-03	2.77E-05	1.62E-03	3.46E-04
G26779	Thorpe Furnace	20	0.01	0.08	1.20E-03	0.12	0.02	5.12	27.39	0.44	42.42	5.49	2.56E-03	0.014	2.19E-04	0.021	2.74E-03
G26775	No. 1 Furnace	5	0.01	0.08	1.01E-03	0.07	0.01	4.28	30.53	0.37	23.73	4.59	2.14E-03	0.015	1.83E-04	0.012	2.29E-03
G26776	No. 2 Furnace	5	0.02	0.11	1.30E-03	0.08	0.02	5.52	39.35	0.47	30.58	5.91	2.76E-03	0.020	2.36E-04	0.015	2.96E-03
G26557	Rotary Furnace	20	0.06	0.46	5.53E-03	0.36	0.07	23.55	167.99	2.02	130.54	25.23	0.012	0.084	1.01E-03	0.065	0.013
G26560	Lindberg Furnace	30	0.07	0.40	6.39E-03	0.62	0.08	27.19	145.47	2.33	225.30	29.13	0.014	0.073	1.17E-03	0.113	0.015
G26558	Car Bottom Furnace	20	0.05	0.27	4.33E-03	0.42	0.05	18.43	98.64	1.58	152.73	19.75	9.22E-03	0.049	7.90E-04	0.076	9.87E-03
G26561	AOV Furnace	20	7.31E-03	0.04	6.27E-04	0.06	7.84E-03	2.67	14.28	0.23	22.12	2.86	1.33E-03	7.14E-03	1.14E-04	0.011	1.43E-03
R219	#1 Car Bottom Furnace	30	0.04	0.20	3.13E-03	0.30	0.04	13.34	71.41	1.14	110.57	14.30	6.67E-03	0.036	5.72E-04	0.055	7.15E-03
R219	Exempt Ovens	20	0.80	14.86	0.07	4.00	0.86	292.03	5,423.35	25.03	1,460.13	312.89	0.146	2.712	0.013	0.730	0.156
R219	CEC Furnaces	20	0.04	0.75	3.45E-03	0.20	0.04	14.69	272.89	1.26	73.47	15.74	7.35E-03	0.136	6.30E-04	0.037	7.87E-03

Note: Emission units are expected to operate up to 365 days per year

B.2-7 - Emissions Increases from Existing Process Tanks

Permit Number	Device	Expected Increase in Operations (%)	Increase in Daily Emissions (lbs/day)*					Increase in Annual Emissions (lbs/yr)					Annual Emissions (tons/yr)				
			VOC	NOx	SOx	CO	PM10	VOC	NOx	SOx	CO	PM10	VOC	NOx	SOx	CO	PM10
G26562	Aqueous Solution Line	20	-	-	-	-	-	-	-	-	-	9.54	-	-	-	-	4.77E-03
D79100	Surface Prep Line	20	-	-	-	-	-	-	-	-	-	22.45	-	-	-	-	0.011224

Emissions from Grinding Operations

PM10 emissions increases were calculated by subtracting baseline emissions from expected PM10 emissions from increased operations from the project. Emissions from grinding operations are vented to baghouses with a control efficiency of 99%. Emissions of PM10 from grinding operations were calculated based on site specific measurements of controlled and uncontrolled emissions from the grinding and sawing operation centers in Building A1, Building H, Building M and Building P.

Table B.2-7 - Post-Project Emissions from Grinding/Sawing Operations

Work Center	Hourly Emissions (lbs/day)[1]		Daily Emissions (lbs/day)		Annual Emissions (lbs/yr)[2]		Annual Emissions (tons/yr)[2]	
Bldg. H Baghouse	PM	6.35E-02	PM	1.52E+00	PM	3.79E+02	PM	1.90E-01
Bldg. P Baghouse	PM	1.36E-01	PM	3.27E+00	PM	8.14E+02	PM	4.07E-01
Bldg. M Baghouse	PM	1.56E+00	PM	3.75E+01	PM	9.35E+03	PM	4.67E+00
Bldg. A1 Fugitives	PM	1.28E-01	PM	3.06E+00	PM	7.62E+02	PM	3.81E-01
Bldg. M Fugitives	PM	9.64E-03	PM	2.31E-01	PM	5.76E+01	PM	2.88E-02
Bldg. H Fugitives	PM	1.24E-02	PM	2.97E-01	PM	7.41E+01	PM	3.70E-02
Bldg. P Fugitives	PM	3.82E-02	PM	9.17E-01	PM	2.28E+02	PM	1.14E-01
Total	1.95E+00		4.68E+01		1.17E+04		5.83E+00	

1. Based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.
2. Based on potential increase in grinding/sawing operations of +50% in the four operation centers

Table B.2-8 - PM10 Emission Increases from Grinding/Sawing Operations

Work Center	Hourly Emissions (lbs/day)[1]		Daily Emissions (lbs/day)		Annual Emissions (lbs/yr)[2]		Annual Emissions (tons/yr)[2]	
Bldg. H Baghouse	PM	2.12E-02	PM	5.08E-01	PM	1.26E+02	PM	6.32E-02
Bldg. P Baghouse	PM	4.54E-02	PM	1.09E+00	PM	2.71E+02	PM	1.36E-01
Bldg. M Baghouse	PM	5.22E-01	PM	1.25E+01	PM	3.12E+03	PM	1.56E+00
Bldg. A1 Fugitives	PM	4.25E-02	PM	1.02E+00	PM	2.54E+02	PM	1.27E-01
Bldg. M Fugitives	PM	3.21E-03	PM	7.71E-02	PM	1.92E+01	PM	9.60E-03
Bldg. H Fugitives	PM	4.13E-03	PM	9.91E-02	PM	2.47E+01	PM	1.23E-02
Bldg. P Fugitives	PM	1.27E-02	PM	3.06E-01	PM	7.61E+01	PM	3.80E-02
Total	6.51E-01		1.56E+01		3.89E+03		1.94E+00	

1. Based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.
2. Based on potential increase in grinding/sawing operations of +50% in the four operation centers

B.3 - Baseline Emissions

Table B.3-1 - Baseline Usage

A/N	Permit Number	Device	2013 Usage (mmscf/yr)[1]	2014 Usage (mmscf/yr)[2]	2013/2014 Average (mmscf/yr)
437120	F73290	Sludge Dryer	0.30	0.44	0.37
544934	G26779	Thorpe Furnace	0	3.66	3.66
544939	G26775	No. 1 Furnace	12.51	11.95	12.23
544940	G26776	No. 2 Furnace	15.15	16.38	15.76
544941	G26557	Rotary Furnace	16.25	17.39	16.82
544942	G26559	A&A Furnace	6.53	7.70	7.12
544943	G26560	Lindberg Furnace	14.00	11.90	12.95
544944	G26558	Car Bottom Furnace	12.88	13.45	13.17
544945	G26561	AOV Furnace	1.90	1.91	1.91
NA	R219	Exempt Boilers	5.13	5.33	5.23
NA	R219	AgingFurnace	1.83	1.85	1.84
NA	R219	#1 Car Bottom Furnace	11.04	1.67	6.35
NA	R219	Exempt Ovens	210.32	206.86	208.59
NA	R219	CEC Furnace	10.37	10.63	10.50

Notes:

1. Usage from 2013 Recordkeeping
2. Usage from 2014 Recordkeeping. December not available at the time this report was prepared. December usage is assumed to be the average from usage reported for January 2014 through November 2014.
3. Thorpe Furnace was installed and operated in 2014.

B.4 - Baseline Criteria Emissions

Table B.4-1 -Baseline Criteria Emissions Summary

Permit Number	Device	Annual Emissions (lbs/yr)					Annual Emissions (tons/yr)				
		VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
F73290	Sludge Dryer	2.59	48.03	0.2	12.93	2.77	1.29E-03	0.02	1.11E-04	6.47E-03	1.39E-03
G26779	Thorpe Furnace	25.60	136.96	2.2	212.12	27.43	0.01	0.07	1.10E-03	0.11	0.01
G26775	No. 1 Furnace	85.61	610.62	7.3	474.51	91.72	0.04	0.31	3.67E-03	0.24	0.05
G26776	No. 2 Furnace	110.35	787.08	9.5	611.63	118.23	0.06	0.39	4.73E-03	0.31	0.06
G26557	Rotary Furnace	117.76	839.94	10.1	652.70	126.17	0.06	0.42	5.05E-03	0.33	0.06
G26559	A&A Furnace	49.81	266.54	4.3	412.68	53.36	0.02	0.13	2.13E-03	0.21	0.03
G26560	Lindberg Furnace	90.64	484.91	7.8	751.00	97.11	0.05	0.24	3.88E-03	0.38	0.05
G26558	Car Bottom Furnace	92.16	493.21	7.9	763.65	98.75	0.05	0.25	3.95E-03	0.38	0.05
G26561	AOV Furnace	13.35	71.41	1.1	110.60	14.30	6.67E-03	0.04	5.72E-04	0.06	7.15E-03
R219	Exempt Boiler	28.78	196.02	3.1	439.56	39.77	0.01	0.10	1.57E-03	0.22	0.02
R219	AgingFurnace	12.86	68.80	1.1	106.53	13.78	6.43E-03	0.03	5.51E-04	0.05	6.89E-03
R219	#1 Car Bottom Furnace	44.48	238.04	3.8	368.56	47.66	0.02	0.12	1.91E-03	0.18	0.02
R219	Exempt Ovens	1,460.13	27,116.77	125.2	7,300.67	1,564.43	0.73	13.56	0.06	3.65	0.78
R219	CEC Furnace	73.47	1,364.44	6.3	367.35	78.72	0.04	0.68	3.15E-03	0.18	0.04
R219	Cooling Towers	-	-	-	-	14,693.97	-	-	-	-	7.35
G26562	Aqueous Solution Line	-	-	-	-	9.54	-	-	-	-	4.77E-03
D79100	Surface Prep Line	-	-	-	-	22.45	-	-	-	-	0.01
R219	Grinding/Sawing	-	-	-	-	7,776.44	-	-	-	-	3.89
Total		2,207.57	32,722.78	189.89	12,584.48	24,876.58	1.10	16.36	0.09	6.29	12.44

Note:
1. Baseline emissions for Thorpe furnace is based on emissions from 2013. Thorpe Furnace was installed and operated in 2013.
2. Emissions from open process tank lines are assumed to be identical for 2012 and 2013 since there are no changes to operating conditions and operating hours.

Emissions from Combustion Sources

Emissions of criteria pollutants from combustion sources were calculated based on the following equation:
Annual Emissions = Throughput (mmscf) x Emission factor (lb/mmscf)

Table B. 4-2 - 2013 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factor (lbs/mmscf)					Annual Emissions (lbs/yr)				
			VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
F73290	Sludge Dryer	0.30	7	130.0	0.6	35	7.5	2.07	38.35	0.18	10.33	2.21
G26779	Thorpe Furnace	0	7	37.5	0.6	58	7.5	0	0	0	0	0
G26775	No. 1 Furnace	12.51	7	49.9	0.6	38.8	7.5	87.54	624.41	7.50	485.23	93.79
G26776	No. 2 Furnace	15.15	7	49.9	0.6	38.8	7.5	106.03	756.28	9.09	587.70	113.60
G26557	Rotary Furnace	16.25	7	49.9	0.6	38.8	7.5	113.78	811.54	9.75	630.64	121.90
G26559	A&A Furnace	6.53	7	37.5	0.6	58	7.5	45.68	244.46	3.92	378.50	48.94
G26560	Lindberg Furnace	14.00	7	37.5	0.6	58	7.5	98.00	524.28	8.40	811.97	105.00
G26558	Car Bottom Furnace	12.88	7	37.5	0.6	58	7.5	90.18	482.58	7.73	747.19	96.62
G26561	AOV Furnace	1.90	7	37.5	0.6	58	7.5	13.33	71.32	1.14	110.46	14.28
R219	Exempt Boiler	5.13	5.5	37.5	0.6	84	7.6	28.23	192.26	3.08	431.11	39.01
R219	AgingFurnace	1.83	7	37.5	0.6	58	7.5	12.78	68.38	1.10	105.87	13.69
R219	#1 Car Bottom Furnace	11.04	7	37.5	0.6	58	7.5	77.30	413.67	6.63	640.49	82.82
R219	Exempt Ovens	210.32	7	130.0	0.6	35	7.5	1,472.23	27,341.47	126.19	7,361.17	1,577.39
R219	CEC Furnace	10.37	7	130.0	0.6	35	7.5	72.57	1,347.64	6.22	362.83	77.75

Table B.4-3 - 2014 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factor (lbs/mmscf)					Annual Emissions (lbs/yr)				
			VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
F73290	Sludge Dryer	0.44	7	130.0	0.6	35	7.5	3.11	57.71	0.27	15.54	3.33
G26779	Thorpe Furnace	3.66	7	37.5	0.6	58	7.5	25.60	136.96	2.19	212.12	27.43
G26775	No. 1 Furnace	11.95	7	49.9	0.6	38.8	7.5	83.67	596.83	7.17	463.79	89.65
G26776	No. 2 Furnace	16.38	7	49.9	0.6	38.8	7.5	114.66	817.88	9.83	635.57	122.85
G26557	Rotary Furnace	17.39	7	49.9	0.6	38.8	7.5	121.74	868.33	10.43	674.77	130.43
G26559	A&A Furnace	7.70	7	37.5	0.6	58	7.5	53.93	288.62	4.62	446.87	57.78
G26560	Lindberg Furnace	11.90	7	37.5	0.6	58	7.5	83.28	445.54	7.14	690.03	89.23
G26558	Car Bottom Furnace	13.45	7	37.5	0.6	58	7.5	94.15	503.85	8.07	780.11	100.88
G26561	AOV Furnace	1.91	7	37.5	0.6	58	7.5	13.36	71.50	1.15	110.73	14.32
R219	Exempt Boiler	5.33	5.5	37.5	0.6	84	7.6	29.33	199.79	3.20	448.00	40.53
R219	Aging Furnace	1.85	7	37.5	0.6	58	7.5	12.94	69.23	1.11	107.18	13.86
R219	#1 Car Bottom Furnace	1.67	7	37.5	0.6	58	7.5	11.66	62.41	1.00	96.63	12.50
R219	Exempt Oven	206.86	7	130.0	0.6	35	7.5	1,448.03	26,892.08	124.12	7,240.17	1,551.47
R219	CEC Furnace	10.63	7	130.0	0.6	35	7.5	74.38	1,381.25	6.38	371.88	79.69

Notes:
1. VOC, SOx, and PM emissions for all units are based on SCAQMD AER values for natural gas fired external combustion sources.
2. NOx and CO emission factors used in 2013 AER were derived based on permitted emissions limits.
3. NOx and CO emission factors for all other listed sources were based on SCAQMD AER values for natural gas fired external combustion sources.

Emissions from Cooling Towers

Emissions of PM emissions from Cooling Towers were calculated based on the following equation:
Annual Emission = Throughput (MMgal/yr) x Emisson factor (lb/MMgal)

Table B.4-4 - 2012 Emissions

Permit Number	Device	Throughput (MMgal/day)	Emission Factor (lb/MMgal)-day	Annual Emissions (lb/yr)	Annual Emissions (ton/yr)
R219	Cooling Towers	817.27	19	15,528.07	7.76

Table B.4-5 - 2013 Emissions

Permit Number	Device	Throughput (MMgal/yr)	Emission Factor (lb/MMgal)	Annual Emissions (lb/yr)	Annual Emissions (ton/yr)
R219	Cooling Towers	729.47	19	13,859.87	6.93

Note: Emission factor based on SCAQMD value for PM emissions from cooling towers used in "other" type of industry.

Emissions from Grinding/Sawing Operations

Baseline PM10 emissions were calculated based on 2015 measurements. Emissions from grinding/sawing operations are vented to baghouses with a control efficiency of 99%.

Table B.4-6 - Baseline PM10 Emissions from Grinding & Sawing Operations

Work Center	Hourly Emissions (lbs/day)[1]		Daily Emissions (lbs/day)		Annual Emissions (lbs/yr)[2]		Annual Emissions (tons/yr)[2]	
Bldg. H Baghouse	PM	4.23E-02	PM	1.02E+00	PM	2.53E+02	PM	1.26E-01
Bldg. P Baghouse	PM	9.08E-02	PM	2.18E+00	PM	5.42E+02	PM	2.71E-01
Bldg. M Baghouse	PM	1.04E+00	PM	2.50E+01	PM	6.23E+03	PM	3.12E+00
Bldg. A1 Fugitives	PM	8.50E-02	PM	2.04E+00	PM	5.08E+02	PM	2.54E-01
Bldg. M Fugitives	PM	6.43E-03	PM	1.54E-01	PM	3.84E+01	PM	1.92E-02
Bldg. H Fugitives	PM	8.26E-03	PM	1.98E-01	PM	4.94E+01	PM	2.47E-02
Bldg. P Fugitives	PM	2.55E-02	PM	6.11E-01	PM	1.52E+02	PM	7.61E-02
Total	1.30E+00		3.12E+01		7.78E+03		3.89E+00	

1. Based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.

Table B.5 - EMISSIONS FROM OPEN PROCESS TANKS DUE TO ELECTROLYSIS AND EVAPORATION (Aqueous Solution Line)

TOTAL						
R1(EVAP)=	0.031	LB/HR	(vaporized acids and/or ammonia--these are reported as total PM)	R1(EVAP) =	38.147300	lb/yr
R1(PLAT)=	0.000	LB/HR	(Total PM)	R1(PLAT)=	0.000000	lb/yr
				Total =	38.147300	lb/yr
R2(EVAP)=	0.008	LB/HR	(vaporized acids and/or ammonia--these are reported as total PM)	R2(EVAP) =	9.536800	lb/yr
R2(PLAT)=	0.000	LB/HR	(Total PM)	R2(PLAT)=	0.000000	lb/yr
				Total =	**9.536800**	**lb/yr**
Hours per year =	8760					

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
ambiant temp=	77	F																		air	air				
TANK No.	Chemical	WT %	OPER. T Deg F	V.P. mm HG	MW	VENT RATE CFM	Surface W x L ft x ft	I amps	CATHODE PLATING EFF. %	EVAP APCS EFF. %	PLATING APCS EFF. %	‖	EVAP R1 lb/hr	EVAP R2 lb/hr	PLATING R1 lb/hr	PLATING R2 lb/hr	‖	Conc. lb/cu.ft	Dab ft^2/sec	u lb/ft-sec	p lb/ft^3	Re	Sc	Sh	k ft/sec
Etch Tank 6	HNO3	45.0	77.0	0.23000	63.01	1405	31.95		0	75.00	0.00	‖	0.015283	0.003821	0.000000	0.000E+00	‖	4.86E-05	0.0001	1.242E-05	0.0738734	24640	1.46	134.20	0.0027
Etch Tank 4	HNO3	45.0	77.0	0.23000	63.01	1405	31.95		0	75.00	0.00	‖	0.015283	0.003821	0.000000	0.000E+00	‖	4.86E-05	0.0001	1.242E-05	0.0738734	24640	1.46	134.20	0.0027

For cases where there is no ventilation, use assumed ventilation rate = 44 CFM per square foot of tank area.

Copy each entire line to increase the number of compounds.

Enter data only in columns A through L.

Notes: R1 = uncontrolled emissions.
R2 = controlled emissions -- This means the emission rate after applying the control efficiency.

Table B.6 - EMISSIONS FROM OPEN PROCESS TANKS DUE TO ELECTROLYSIS AND EVAPORATION

TOTAL						
R1(EVAP)=	0.072	LB/HR	(vaporized acids and/or ammonia--these are reported as total PM)	R1(EVAP) =	89.791400	lb/yr
R1(PLAT)=	0.000	LB/HR	(Total PM)	R1(PLAT)=	0.000000	lb/yr
				Total =	89.791400	lb/yr
R2(EVAP)=	0.018	LB/HR	(vaporized acids and/or ammonia--these are reported as total PM)	R2(EVAP) =	22.447900	lb/yr
R2(PLAT)=	0.000	LB/HR	(Total PM)	R2(PLAT)=	0.000000	lb/yr
				Total =	**22.447900**	**lb/yr**
Hours per year =	8760					

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
ambiant temp=	77	F																		air	air				
TANK No.	Chemical	WT %	OPER. T Deg F	V.P. mm HG	MW	VENT RATE CFM	Surface W x L ft x ft	I amps	CATHODE PLATING EFF. %	EVAP APCS EFF. %	PLATING APCS EFF. %	||	EVAP R1 lb/hr	EVAP R2 lb/hr	PLATING R1 lb/hr	PLATING R2 lb/hr	||	Conc. lb/cu.ft	Dab ft^2/sec	u lb/ft-sec	p lb/ft^3	Re	Sc	Sh	k ft/sec
Tank 5	HNO3	45.0	77.0	0.23000	63.01	4400	100.00		0	75.00	0.00	||	0.035974	0.008994	0.000000	0.000E+00	||	0.0000	0.0001	1.2421E-05	0.07387337	43616	1.46	178.54	0.0021
Tank 8	HNO3	45.0	77.0	0.23000	63.01	4400	100.00		0	75.00	0.00	||	0.035974	0.008994	0.000000	0.000E+00	||	0.0000	0.0001	1.2421E-05	0.07387337	43616	1.46	178.54	0.0021

For cases where there is no ventilation, use assumed ventilation rate = 44 CFM per square foot of tank area.

Copy each entire line to increase the number of compounds.

Enter data only in columns A through L.

Notes: R1 = uncontrolled emissions.
R2 = controlled emissions -- This means the emission rate after applying the control efficiency.

B.7 Project TAC Emissions

Project TAC emissions include emissions from proposed emission units and emission increases from existing emission units. Project emissions are summarized in Table B.7-1.

B.7-1 - Proposed Project Hourly TAC Emissions Summary

Device	Hourly Emissions (lb/hr)																																
	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Hexavalent Chromium	Manganese	Nickel	DPM	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Methylene Chloride	Vinyl Chloride	Tetrachloroethane, 1,1,2,2-	Trichloroethane, 1,1,2-	Chloroform	Methanol	Styrene	Arsenic	Beryllium	Cadmium	Copper	Lead	Selenium
Large Rotary Furnace	1.22E-04	2.58E-04	2.10E-06	6.29E-06	6.50E-05	5.66E-05	6.70E-02	1.45E-04	9.64E-05	5.55E-04	4.13E-04	1.11E-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Rotary Furnace #1	7.73E-05	1.64E-04	1.33E-06	4.00E-06	4.13E-05	3.60E-05	4.27E-02	9.20E-05	6.13E-05	3.53E-04	2.63E-04	7.07E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Rotary Furnace #2	7.73E-05	1.64E-04	1.33E-06	4.00E-06	4.13E-05	3.60E-05	4.27E-02	9.20E-05	6.13E-05	3.53E-04	2.63E-04	7.07E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chain Conveyor Furnance #1	7.18E-05	1.52E-04	1.24E-06	3.71E-06	3.84E-05	3.34E-05	3.96E-02	8.54E-05	5.70E-05	3.28E-04	2.44E-04	6.56E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chain Conveyor Furnance #2	7.18E-05	1.52E-04	1.24E-06	3.71E-06	3.84E-05	3.34E-05	3.96E-02	8.54E-05	5.70E-05	3.28E-04	2.44E-04	6.56E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #1	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #2	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #3	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #4	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrasive Blasting	-	-	-	-	-	-	-	-	-	-	-	-	3.70E-11	1.08E-04	1.15E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sludge Dryer	8.43E-08	1.79E-07	1.05E-09	3.16E-09	4.53E-08	2.85E-08	3.37E-05	1.00E-07	6.64E-08	3.86E-07	2.87E-07	7.71E-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thorpe Furnace	6.68E-07	1.42E-06	8.35E-09	2.50E-08	3.59E-07	2.25E-07	2.67E-04	7.93E-07	5.26E-07	3.06E-06	2.27E-06	6.10E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 1 Furnace	5.58E-07	1.19E-06	6.98E-09	2.09E-08	3.00E-07	1.88E-07	2.23E-04	6.63E-07	4.40E-07	2.55E-06	1.90E-06	5.10E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 2 Furnace	7.20E-07	1.53E-06	9.00E-09	2.70E-08	3.87E-07	2.43E-07	2.88E-04	8.55E-07	5.67E-07	3.29E-06	2.45E-06	6.58E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rotary Furnace	2.23E-06	4.72E-06	3.84E-08	1.15E-07	1.19E-06	1.04E-06	1.23E-03	2.65E-06	1.77E-06	1.02E-05	7.57E-06	2.04E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lindberg Furnace	3.55E-06	7.54E-06	4.43E-08	1.33E-07	1.91E-06	1.20E-06	1.42E-03	4.21E-06	2.79E-06	1.62E-05	1.21E-05	3.24E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Car Bottom Furnace	1.74E-06	3.70E-06	3.01E-08	9.02E-08	9.32E-07	8.12E-07	9.62E-04	2.07E-06	1.38E-06	7.97E-06	5.92E-06	1.59E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOV Furnace	3.48E-07	7.40E-07	4.35E-09	1.31E-08	1.87E-07	1.18E-07	1.39E-04	4.14E-07	2.74E-07	1.59E-06	1.18E-06	3.18E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#1 Car Bottom Furnace	1.74E-06	3.70E-06	2.18E-08	6.53E-08	9.36E-07	5.88E-07	6.96E-04	2.07E-06	1.37E-06	7.96E-06	5.92E-06	1.59E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exempt Oven	3.81E-05	8.10E-05	4.76E-07	1.43E-06	2.05E-05	1.29E-05	1.52E-02	4.52E-05	3.00E-05	1.74E-04	1.30E-04	3.48E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CEC Furnaces	1.92E-06	4.07E-06	2.40E-08	7.19E-08	1.03E-06	6.47E-07	7.67E-04	2.28E-06	1.51E-06	8.77E-06	6.52E-06	1.75E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manipulators	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Forklifts	9.91E-04	1.29E-02	-	6.09E-05	1.75E-03	1.65E-03	2.08E-03	1.55E-05	-	3.50E-04	1.22E-04	-	-	-	-	-	4.16E-04	1.11E-05	1.34E-05	7.07E-06	2.59E-05	4.51E-06	1.59E-05	9.56E-06	8.59E-06	1.92E-03	7.49E-06	-	-	-	-	-	-
Grinding / Sawing	-	-	-	-	-	-	-	-	-	-	-	-	-	4.17E-04	2.74E-04	-	-	-	-	-	-	-	-	-	-	-	-	7.53E-07	6.26E-08	6.64E-07	2.03E-03	8.04E-06	0.00E+00

B.7-2 - Proposed Project Annual TAC Emissions Summary

Device	Annual Emissions (lb/yr)																																
	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Hexavalent Chromium	Manganese	Nickel	DPM	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Methylene Chloride	Vinyl Chloride	Tetrachloroethane, 1,1,2,2-	Trichloroethane, 1,1,2-	Chloroform	Methanol	Styrene	Arsenic	Beryllium	Cadmium	Copper	Lead	Selenium
Large Rotary Furnace	1.06	2.26	0.02	0.06	0.57	0.50	587.34	1.27	0.84	4.86	3.62	97.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Rotary Furnace #1	0.68	1.44	0.01	0.04	0.36	0.32	373.76	0.81	0.54	3.10	2.30	61.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Rotary Furnace #2	0.68	1.44	0.01	0.04	0.36	0.32	373.76	0.81	0.54	3.10	2.30	61.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chain Conveyor Furnace #1	0.63	1.33	0.01	0.03	0.34	0.29	347.06	0.75	0.50	2.87	2.14	57.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chain Conveyor Furnace #2	0.63	1.33	0.01	0.03	0.34	0.29	347.06	0.75	0.50	2.87	2.14	57.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #1	0.53	1.13	6.67E-03	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #2	0.53	1.13	6.67E-03	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #3	0.53	1.13	6.67E-03	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #4	0.53	1.13	6.67E-03	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrasive Blasting	-	-	-	-	-	-	-	-	-	-	-	-	3.24E-07	0.95	1.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sludge Dryer	7.39E-04	1.57E-03	9.24E-06	2.77E-05	3.97E-04	2.49E-04	0.30	8.77E-04	5.82E-04	3.38E-03	2.51E-03	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thorpe Furnace	5.85E-03	0.01	7.31E-05	2.19E-04	3.15E-03	1.97E-03	2.34	6.95E-03	4.61E-03	0.03	0.02	0.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 1 Furnace	4.89E-03	0.01	6.11E-05	1.83E-04	2.63E-03	1.65E-03	1.96	5.81E-03	3.85E-03	0.02	0.02	0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 2 Furnace	6.31E-03	0.01	7.88E-05	2.36E-04	3.39E-03	2.13E-03	2.52	7.49E-03	4.97E-03	0.03	0.02	0.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rotary Furnace	0.02	0.04	3.36E-04	1.01E-03	0.01	9.08E-03	10.77	0.02	0.02	0.09	0.07	1.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lindberg Furnace	0.03	0.07	3.88E-04	1.17E-03	0.02	0.01	12.43	0.04	0.02	0.14	0.11	2.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Car Bottom Furnace	0.02	0.03	2.63E-04	7.90E-04	8.16E-03	7.11E-03	8.43	0.02	0.01	0.07	0.05	1.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOV Furnace	3.05E-03	6.48E-03	3.81E-05	1.14E-04	1.64E-03	1.03E-03	1.22	3.62E-03	2.40E-03	0.01	0.01	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#1 Car Bottom Furnace	0.02	0.03	1.91E-04	5.72E-04	8.20E-03	5.15E-03	6.10	0.02	0.01	0.07	0.05	1.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exempt Oven	0.33	0.71	4.17E-03	0.01	0.18	0.11	133.50	0.40	0.26	1.53	1.13	30.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CEC Furnaces	0.02	0.04	2.10E-04	6.30E-04	9.03E-03	5.67E-03	6.72	0.02	0.01	0.08	0.06	1.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manipulators	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Forklifts	8.68	112.93	-	0.53	15.30	14.45	18.21	0.14	-	3.07	1.07	-	-	-	-	-	3.64	0.10	0.12	0.06	0.23	0.04	0.14	0.08	0.08	16.82	0.07	-	-	-	-	-	-
Grinding / Sawing	-	-	-	-	-	-	-	-	-	-	-	-	-	1.25	0.82	-	-	-	-	-	-	-	-	-	-	-	-	2.25E-03	1.87E-04	1.98E-03	6.06E+00	2.40E-02	0.00E+00
Total	14.95	126.23	0.10	0.82	18.66	17.04	3,087.78	7.58	4.96	31.71	22.36	572.55	3.24E-07	2.20	1.83	21.92	3.64	0.10	0.12	0.06	0.23	0.04	0.14	0.08	0.08	16.82	0.07	2.25E-03	1.87E-04	1.98E-03	6.06	0.02	0.00E+00

Emissions from Proposed Combustion Sources

Emissions of TACs from combustion sources were calculated based on the following equation. The proposed equipment is expected to operate up to 24 hours per day and 365 days per year.

Hourly Emissions = Max heat rating (MMBtu/hr)/HHV (mmbtu/mmscf) x Emission Factor (lb/mmscf)

Annual Emissions = Hourly Emissions x Hours of operation per day x Operating days per year

B.7-3 - Hourly Emissions from Proposed Combustion Sources

Device	Heat Rating (MMBtu/hr)	Heat Rating (MMscf/hr)	Emission Factors (lb/mmscf)												Hourly Emissions (lb/hr)											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
Large Rotary Furnace	22	0.0210	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	1.22E-04	2.58E-04	2.10E-06	6.29E-06	6.50E-05	5.66E-05	6.70E-02	1.45E-04	9.64E-05	5.55E-04	4.13E-04	1.11E-02
Medium Rotary Furnace #1	14	0.0133	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	7.73E-05	1.64E-04	1.33E-06	4.00E-06	4.13E-05	3.60E-05	4.27E-02	9.20E-05	6.13E-05	3.53E-04	2.63E-04	7.07E-03
Medium Rotary Furnace #2	14	0.0133	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	7.73E-05	1.64E-04	1.33E-06	4.00E-06	4.13E-05	3.60E-05	4.27E-02	9.20E-05	6.13E-05	3.53E-04	2.63E-04	7.07E-03
Chain Conveyor Furnace #1	13	0.0124	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	7.18E-05	1.52E-04	1.24E-06	3.71E-06	3.84E-05	3.34E-05	3.96E-02	8.54E-05	5.70E-05	3.28E-04	2.44E-04	6.56E-03
Chain Conveyor Furnace #2	13	0.0124	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	7.18E-05	1.52E-04	1.24E-06	3.71E-06	3.84E-05	3.34E-05	3.96E-02	8.54E-05	5.70E-05	3.28E-04	2.44E-04	6.56E-03
Pedestal Die Heating Furnace #1	8	0.0076	0.008	0.017	0.0001	0.0003	0.0043	0.0027	3.2	0.0095	0.0063	0.0366	0.0272	0.731	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03
Pedestal Die Heating Furnace #2	8	0.0076	0.008	0.017	0.0001	0.0003	0.0043	0.0027	3.2	0.0095	0.0063	0.0366	0.0272	0.731	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03
Pedestal Die Heating Furnace #3	8	0.0076	0.008	0.017	0.0001	0.0003	0.0043	0.0027	3.2	0.0095	0.0063	0.0366	0.0272	0.731	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03
Pedestal Die Heating Furnace #4	8	0.0076	0.008	0.017	0.0001	0.0003	0.0043	0.0027	3.2	0.0095	0.0063	0.0366	0.0272	0.731	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03

Note:
1. Medium Rotary Furnace #2 to be installed and operated in 2019 and expected to be identical to Medium Furnace #1.
2. Emission factors were based on AB2588 emission factors.
3. Ammonia emission factor is based on SCAQMD AER value for sources not equipped with an NSCR or SCR.

B.7-4 - Annual Emissions from Proposed Combustion Sources

Device	Heat Rating (MMBtu/hr)	Heat Rating (MMscf/hr)	Annual Emissions (lb/yr)												Annual Emissions (ton/yr)											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
Large Rotary Furnace	22	0.0210	1.06	2.26	0.02	0.06	0.57	0.50	587.34	1.27	0.84	4.86	3.62	97.28	5.32E-04	1.13E-03	9.18E-06	2.75E-05	2.84E-04	2.48E-04	0.29	6.39E-04	4.22E-04	2.43E-03	1.81E-03	0.05
Medium Rotary Furnace #1	14	0.0133	0.68	1.44	0.01	0.04	0.36	0.32	373.76	0.81	0.54	3.10	2.30	61.90	3.39E-04	7.18E-04	5.84E-06	1.75E-05	1.81E-04	1.58E-04	0.19	4.03E-04	2.69E-04	1.55E-03	1.15E-03	0.03
Medium Rotary Furnace #2	14	0.0133	0.68	1.44	0.01	0.04	0.36	0.32	373.76	0.81	0.54	3.10	2.30	61.90	3.39E-04	7.18E-04	5.84E-06	1.75E-05	1.81E-04	1.58E-04	0.19	4.03E-04	2.69E-04	1.55E-03	1.15E-03	0.03
Chain Conveyor Furnace #1	13	0.0124	0.63	1.33	0.01	0.03	0.34	0.29	347.06	0.75	0.50	2.87	2.14	57.48	3.15E-04	6.67E-04	5.42E-06	1.63E-05	1.68E-04	1.46E-04	0.17	3.74E-04	2.49E-04	1.44E-03	1.07E-03	0.03
Chain Conveyor Furnace #2	13	0.0124	0.63	1.33	0.01	0.03	0.34	0.29	347.06	0.75	0.50	2.87	2.14	57.48	3.15E-04	6.67E-04	5.42E-06	1.63E-05	1.68E-04	1.46E-04	0.17	3.74E-04	2.49E-04	1.44E-03	1.07E-03	0.03
Pedestal Die Heater #1	8	0.0076	0.53	1.13	0.01	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	2.67E-04	5.67E-04	3.34E-06	1.00E-05	1.43E-04	9.01E-05	0.11	3.17E-04	2.10E-04	1.22E-03	9.08E-04	0.02
Pedestal Die Heater #2	8	0.0076	0.53	1.13	0.01	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	2.67E-04	5.67E-04	3.34E-06	1.00E-05	1.43E-04	9.01E-05	0.11	3.17E-04	2.10E-04	1.22E-03	9.08E-04	0.02
Pedestal Die Heater #3	8	0.0076	0.53	1.13	0.01	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	2.67E-04	5.67E-04	3.34E-06	1.00E-05	1.43E-04	9.01E-05	0.11	3.17E-04	2.10E-04	1.22E-03	9.08E-04	0.02
Pedestal Die Heater #4	8	0.0076	0.53	1.13	0.01	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	2.67E-04	5.67E-04	3.34E-06	1.00E-05	1.43E-04	9.01E-05	0.11	3.17E-04	2.10E-04	1.22E-03	9.08E-04	0.02

Emissions from Abrasive Blasting Cabinet

Emission of PM from the Abrasive Blasting Cabinet vented to a baghouse were estimated based on the following equation:
Hourly Emissions = Hourly PM Emissions x Weight Proportion of TAC (lb TAC/lb PM)
Daily Emissions = Hourly Emissions x Operating hours per day (hr/day)
Annual Emissions = Daily Emissions x Days of operation per year (day/yr)

Hours of Operation = 24
Days of Operation = 365

B.7-5 - TAC Emissions from Abrasive Blasting Cabinet

Pollutant	Hourly PM Emissions (lbs/hr)	Emission Factors (lb/lb)	Hourly Emissions (lb/hr)	Annual Emissions (lb/yr)	Annual Emissions (ton/yr)
Hexavent Chromium	0.01	2.90E-09	3.70E-11	3.24E-07	1.62E-10
Manganese	0.01	8.50E-03	1.08E-04	0.95	4.75E-04
Nickel	0.01	9.00E-03	1.15E-04	1.01	5.03E-04

Emissions from Onsite Mobile Equipment

Diesel Manipulators

Diesel manipulators are expected to emit diesel particulate matter (DPM). All PM10 emitted from diesel fired manipulators are assumed to be DPM.

B.7-6 - TAC Emissions from Abrasive Blasting Cabinet

Source	DPM (lb/hr)	DPM (lb/yr)
Diesel Manipulators	1.25E-03	10.96
Diesel Manipulators	1.25E-03	10.96
Total	2.50E-03	21.92

Propane Fired Forklifts

Emissions from mobile equipment are estimated using the following equations:
Hourly Emissions = Fuel Consumption x LF x EF
Annual Emissions = daily emissions x operating hours per day x operating days per year

where,
BHP = rated capacity, bhp
LF = load factor
EF = emission factor, g/bhp-hr or lbs/Mgal

B.7-7 - Emissions Factors from Propane Combustion

Source	Emission Factors, lbs/Mgal																			
	Benzene	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Formaldehyde	Methylene Chloride	Naphthalene	Vinyl Chloride	Ammonia	Tetrachloroethane, 1,1,2,2-	Trichloroethane, 1,1,2-	Acetaldehyde	Acrolein	Chloroform	Ethyl benzene	Methanol	Styrene	Toluene	Xylene
Forklift_1	0.143	0.06	0.0016	0.00193	0.00102	1.86	0.00373	0.00879	0.00065	0.3	0.00229	0.00138	0.252	0.238	0.00124	0.00224	0.277	0.00108	0.0505	0.0176
Forklift_2	0.143	0.06	0.0016	0.00193	0.00102	1.86	0.00373	0.00879	0.00065	0.3	0.00229	0.00138	0.252	0.238	0.00124	0.00224	0.277	0.00108	0.0505	0.0176
Forklift_3	0.143	0.06	0.0016	0.00193	0.00102	1.86	0.00373	0.00879	0.00065	0.3	0.00229	0.00138	0.252	0.238	0.00124	0.00224	0.277	0.00108	0.0505	0.0176
Forklift_4	0.143	0.06	0.0016	0.00193	0.00102	1.86	0.00373	0.00879	0.00065	0.3	0.00229	0.00138	0.252	0.238	0.00124	0.00224	0.277	0.00108	0.0505	0.0176

Note: Emission factors based on SCAQMD AB2588 Emission factors for propane combustion for 4 stroke rich burn engines.

B.7-8 - Hourly Emissions from Proposed Forklifts

Source	BHP	Load Factor	Fuel Rate (gal/hr)[1]	Hourly Emissions (lbs/hr)																			
				Benzene	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Formaldehyde	Methylene Chloride	Naphthalene	Vinyl Chloride	Ammonia	Tetrachloroethane, 1,1,2,2-	Trichloroethane, 1,1,2-	Acetaldehyde	Acrolein	Chloroform	Ethyl benzene	Methanol	Styrene	Toluene	Xylene
Forklift_1	100	0.2	10.83	3.10E-04	1.30E-04	3.47E-06	4.18E-06	2.21E-06	4.03E-03	8.08E-06	1.90E-05	1.41E-06	6.50E-04	4.96E-06	2.99E-06	5.46E-04	5.15E-04	2.69E-06	4.85E-06	6.00E-04	2.34E-06	1.09E-04	3.81E-05
Forklift_2	100	0.2	10.83	3.10E-04	1.30E-04	3.47E-06	4.18E-06	2.21E-06	4.03E-03	8.08E-06	1.90E-05	1.41E-06	6.50E-04	4.96E-06	2.99E-06	5.46E-04	5.15E-04	2.69E-06	4.85E-06	6.00E-04	2.34E-06	1.09E-04	3.81E-05
Forklift_3	60	0.2	6.50	1.86E-04	7.80E-05	2.08E-06	2.51E-06	1.33E-06	2.42E-03	4.85E-06	1.14E-05	8.45E-07	3.90E-04	2.98E-06	1.79E-06	3.27E-04	3.09E-04	1.61E-06	2.91E-06	3.60E-04	1.40E-06	6.56E-05	2.29E-05
Forklift_4	60	0.2	6.50	1.86E-04	7.80E-05	2.08E-06	2.51E-06	1.33E-06	2.42E-03	4.85E-06	1.14E-05	8.45E-07	3.90E-04	2.98E-06	1.79E-06	3.27E-04	3.09E-04	1.61E-06	2.91E-06	3.60E-04	1.40E-06	6.56E-05	2.29E-05
			Total	9.91E-04	4.16E-04	1.11E-05	1.34E-05	7.07E-06	1.29E-02	2.59E-05	6.09E-05	4.51E-06	2.08E-03	1.59E-05	9.56E-06	1.75E-03	1.65E-03	8.59E-06	1.55E-05	1.92E-03	7.49E-06	3.50E-04	1.22E-04

B.7-9 - Annual Emissions from Proposed Forklifts

Source	Operating Hours		Annual Emissions (lbs/yr)																				
	hrs/day	days/yr	Benzene	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Formaldehyde	Methylene Chloride	Naphthalene	Vinyl Chloride	Ammonia	Tetrachloroethane, 1,1,2,2-	Trichloroethane, 1,1,2-	Acetaldehyde	Acrolein	Chloroform	Ethyl benzene	Methanol	Styrene	Toluene	Xylene
Forklift_1	24	365	2.71E+00	1.14E+00	3.04E-02	3.66E-02	1.94E-02	3.53E+01	7.08E-02	1.67E-01	1.23E-02	5.69E+00	4.34E-02	2.62E-02	4.78E+00	4.52E+00	2.35E-02	4.25E-02	5.26E+00	2.05E-02	9.58E-01	3.34E-01
Forklift_2	24	365	2.71E+00	1.14E+00	3.04E-02	3.66E-02	1.94E-02	3.53E+01	7.08E-02	1.67E-01	1.23E-02	5.69E+00	4.34E-02	2.62E-02	4.78E+00	4.52E+00	2.35E-02	4.25E-02	5.26E+00	2.05E-02	9.58E-01	3.34E-01
Forklift_3	24	365	1.63E+00	6.83E-01	1.82E-02	2.20E-02	1.16E-02	2.12E+01	4.25E-02	1.00E-01	7.40E-03	3.42E+00	2.61E-02	1.57E-02	2.87E+00	2.71E+00	1.41E-02	2.55E-02	3.15E+00	1.23E-02	5.75E-01	2.00E-01
Forklift_4	24	365	1.63E+00	6.83E-01	1.82E-02	2.20E-02	1.16E-02	2.12E+01	4.25E-02	1.00E-01	7.40E-03	3.42E+00	2.61E-02	1.57E-02	2.87E+00	2.71E+00	1.41E-02	2.55E-02	3.15E+00	1.23E-02	5.75E-01	2.00E-01
		Total	8.68	3.64	0.10	0.12	0.06	112.93	0.23	0.53	0.04	18.21	0.14	0.08	15.30	14.45	0.08	0.14	16.82	0.07	3.07	1.07

Emission Increases from Existing Equipment

Increase in emissions of TACs from existing equipment are expected from increased operated due to the proposed project. Emission increased are estimated from baseline emissions and the expected increase in operations

B.7-6 - Emissions Increases from Existing Combustion Units

Permit Number	Device	Expected Increase in Operations (%)	Hourly Emissions (lbs/hr)*											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
F73290	Sludge Dryer	25	8.43E-08	1.79E-07	1.05E-09	3.16E-09	4.53E-08	2.85E-08	3.37E-05	1.00E-07	6.64E-08	3.86E-07	2.87E-07	7.71E-06
G26779	Thorpe Furnace	20	6.68E-07	1.42E-06	8.35E-09	2.50E-08	3.59E-07	2.25E-07	2.67E-04	7.93E-07	5.26E-07	3.06E-06	2.27E-06	6.10E-05
G26775	No. 1 Furnace	5	5.58E-07	1.19E-06	6.98E-09	2.09E-08	3.00E-07	1.88E-07	2.23E-04	6.63E-07	4.40E-07	2.55E-06	1.90E-06	5.10E-05
G26776	No. 2 Furnace	5	7.20E-07	1.31E-06	9.00E-09	2.70E-08	3.87E-07	2.43E-07	2.88E-04	8.55E-07	5.67E-07	3.29E-06	2.45E-06	6.38E-05
G26557	Rotary Furnace	20	2.23E-06	4.72E-06	3.84E-08	1.15E-07	1.19E-06	1.04E-06	1.23E-03	2.63E-06	1.77E-06	1.02E-05	7.57E-06	2.04E-04
G26560	Lindberg Furnace	30	3.55E-06	7.54E-06	4.43E-08	1.33E-07	1.91E-06	1.20E-06	1.42E-03	4.21E-06	2.79E-06	1.62E-05	1.21E-05	3.24E-04
G26558	Car Bottom Furnace	20	1.74E-06	3.70E-06	3.01E-08	9.02E-08	9.32E-07	8.12E-07	9.62E-04	2.07E-06	1.38E-06	7.97E-06	5.92E-06	1.59E-04
G26561	AOV Furnace	20	3.48E-07	7.40E-07	4.35E-09	1.31E-08	1.87E-07	1.18E-07	1.39E-04	4.14E-07	2.74E-07	1.59E-06	1.18E-06	3.18E-05
R219	#1 Car Bottom Furnace	30	1.74E-06	3.70E-06	2.18E-08	6.53E-08	9.36E-07	5.88E-07	6.96E-04	2.07E-06	1.37E-06	7.96E-06	5.92E-06	1.59E-04
R219	Exempt Oven	20	3.81E-05	8.10E-05	4.76E-07	1.43E-06	2.05E-05	1.29E-05	0.02	4.52E-05	3.00E-05	1.74E-04	1.30E-04	3.48E-03
R219	CEC Furnace	20	1.92E-06	4.07E-06	2.40E-08	7.19E-08	1.03E-06	6.47E-07	7.67E-04	2.28E-06	1.51E-06	8.77E-06	6.52E-06	1.75E-04

Permit Number	Device	Annual Emissions (lb/yr)											
		Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
F73290	Sludge Dryer	7.39E-04	1.57E-03	9.24E-06	2.77E-05	3.97E-04	2.49E-04	0.30	8.77E-04	5.82E-04	3.38E-03	2.51E-03	0.07
G26779	Thorpe Furnace	5.85E-03	0.01	7.31E-05	2.19E-04	3.15E-03	1.97E-03	2.34	6.95E-03	4.61E-03	0.03	0.02	0.53
G26775	No. 1 Furnace	4.89E-03	0.01	6.11E-05	1.83E-04	2.63E-03	1.65E-03	1.96	5.81E-03	3.85E-03	0.02	0.02	0.45
G26776	No. 2 Furnace	6.31E-03	0.01	7.88E-05	2.36E-04	3.39E-03	2.13E-03	2.52	7.49E-03	4.97E-03	0.03	0.02	0.58
G26557	Rotary Furnace	0.02	0.04	3.36E-04	1.01E-03	0.01	9.08E-03	10.77	0.02	0.02	0.09	0.07	1.78
G26560	Lindberg Furnace	0.03	0.07	3.88E-04	1.17E-03	0.02	0.01	12.43	0.04	0.02	0.14	0.11	2.84
G26558	Car Bottom Furnace	0.02	0.03	2.63E-04	7.90E-04	8.16E-03	7.11E-03	8.43	0.02	0.01	0.07	0.05	1.40
G26561	AOV Furnace	3.05E-03	6.48E-03	3.81E-05	1.14E-04	1.64E-03	1.03E-03	1.22	3.62E-03	2.40E-03	0.01	0.01	0.28
R219	#1 Car Bottom Furnace	0.02	0.03	1.91E-04	5.72E-04	8.20E-03	5.15E-03	6.10	0.02	0.01	0.07	0.05	1.39
R219	Exempt Oven	0.33	0.71	4.17E-03	0.01	0.18	0.11	133.50	0.40	0.26	1.53	1.13	30.50
R219	CEC Furnace	0.02	0.04	2.10E-04	6.30E-04	9.03E-03	5.67E-03	6.72	0.02	0.01	0.08	0.06	1.53

Note: Emission units are expected up to 24 hours per day, 365 days per year

Table B.7-7 - TAC Emissions Increase from Grinding / Sawing Operations

Emission Source	Hourly Emissions (lbs/hr) [1]									Annual Emissions (lbs/yr) [2]								
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium
Bldg. H Baghouse	2.88E-08	ND	1.90E-08	NA	7.40E-06	1.17E-06	3.18E-06	7.49E-06	ND	8.59E-05	ND	5.69E-05	NA	2.21E-02	3.50E-03	9.49E-03	2.24E-02	ND
Bldg. P Baghouse	5.17E-08	ND	2.54E-08	NA	3.09E-06	ND	4.12E-06	1.09E-05	ND	1.55E-04	ND	7.59E-05	NA	9.22E-03	ND	1.23E-02	3.25E-02	ND
Bldg. M Baghouse	ND	ND	5.32E-07	NA	2.73E-04	4.90E-06	7.29E-05	2.37E-04	ND	ND	ND	1.59E-03	NA	8.17E-01	1.46E-02	2.18E-01	7.07E-01	ND
Bldg. A1 Fugitives	4.90E-07	6.26E-08	ND	NA	1.73E-03	1.26E-06	3.28E-04	1.01E-05	ND	1.46E-03	1.87E-04	ND	NA	5.17E+00	3.77E-03	9.79E-01	3.03E-02	ND
Bldg. M Fugitives	6.89E-08	ND	1.06E-08	NA	2.71E-06	2.88E-07	6.72E-06	1.62E-06	ND	2.06E-04	ND	3.17E-05	NA	8.09E-03	8.62E-04	2.01E-02	4.84E-03	ND
Bldg. H Fugitives	3.57E-08	ND	2.12E-08	NA	1.39E-06	ND	6.61E-07	2.24E-06	ND	1.07E-04	ND	6.32E-05	NA	4.16E-03	ND	1.97E-03	6.68E-03	ND
Bldg. P Fugitives	7.75E-08	ND	5.58E-08	NA	1.04E-05	4.19E-07	2.37E-06	5.29E-06	ND	2.32E-04	ND	1.67E-04	NA	3.11E-02	1.25E-03	7.08E-03	1.58E-02	ND
Totals	7.53E-07	6.26E-08	6.64E-07	0.00E+00	2.03E-03	8.04E-06	4.17E-04	2.74E-04	0.00E+00	2.25E-03	1.87E-04	1.98E-03	0.00E+00	6.06E+00	2.40E-02	1.23E+00	8.20E-01	0.00E+00

Note:

1. Estimated TAC emissions based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.
2 Based on potential increase in annual grinding/sawing operations of +50% in the four operation centers

B.8 - Baseline TAC Emissions

Baseline TAC Emissions were based on emissions from 2012 and 2013 and are summarized in Table B.8-1.

Table B.8-1 - Baseline TAC Emissions Summary

Permit Number	Device	Annual Emissions (lb/yr)																				
		Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium
F73290	Sludge Dryer	2.96E-03	6.28E-03	3.69E-05	1.11E-04	1.59E-03	9.98E-04	1.18	3.51E-03	2.33E-03	0.01	0.01	0.27	-	-	-	-	-	-	-	-	-
G26779	Thorpe Furnace	0.03	0.06	3.66E-04	1.10E-03	0.02	9.87E-03	11.70	0.03	0.02	0.13	0.10	2.67	-	-	-	-	-	-	-	-	-
G26775	No. 1 Furnace	0.10	0.21	1.22E-03	3.67E-03	0.05	0.03	39.13	0.12	0.08	0.45	0.33	8.94	-	-	-	-	-	-	-	-	-
G26776	No. 2 Furnace	0.13	0.27	1.58E-03	4.73E-03	0.07	0.04	50.44	0.15	0.10	0.58	0.43	11.52	-	-	-	-	-	-	-	-	-
G26557	Rotary Furnace	0.10	0.21	1.68E-03	5.05E-03	0.05	0.05	53.83	0.12	0.08	0.45	0.33	8.92	-	-	-	-	-	-	-	-	-
G26559	A&A Furnace	0.06	0.12	7.12E-04	2.13E-03	0.03	0.02	22.77	0.07	0.04	0.26	0.19	5.20	-	-	-	-	-	-	-	-	-
G26560	Lindberg Furnace	0.10	0.22	1.29E-03	3.88E-03	0.06	0.03	41.43	0.12	0.08	0.47	0.35	9.47	-	-	-	-	-	-	-	-	-
G26558	Car Bottom Furnace	0.08	0.16	1.32E-03	3.95E-03	0.04	0.04	42.13	0.09	0.06	0.35	0.26	6.98	-	-	-	-	-	-	-	-	-
G26561	AOV Furnace	0.02	0.03	1.91E-04	5.72E-04	8.20E-03	5.15E-03	6.10	0.02	0.01	0.07	0.05	1.39	-	-	-	-	-	-	-	-	-
R219	Exempt Boilers	0.04	0.09	5.23E-04	1.57E-03	0.02	0.01	16.75	0.05	0.03	0.19	0.14	3.83	-	-	-	-	-	-	-	-	-
R219	AgingFurnace	0.01	0.03	1.84E-04	5.51E-04	7.90E-03	4.96E-03	5.88	0.02	0.01	0.07	0.05	1.34	-	-	-	-	-	-	-	-	-
R219	#1 Car Bottom Furnace	0.05	0.11	6.35E-04	1.91E-03	0.03	0.02	20.33	0.06	0.04	0.23	0.17	4.65	-	-	-	-	-	-	-	-	-
R219	Exempt Ovens	1.67	3.55	0.02	0.06	0.90	0.56	667.49	1.98	1.31	7.63	5.67	152.48	-	-	-	-	-	-	-	-	-
R219	CEC Furnace	0.08	0.18	1.05E-03	3.15E-03	0.05	0.03	33.59	0.10	0.07	0.38	0.29	7.67	-	-	-	-	-	-	-	-	-
R219	Grinding / Sawing	-	-	-	-	-	-	-	-	-	-	-	-	2.25E-06	1.87E-07	1.98E-06	0.00E+00	6.06E-03	2.40E-05	1.25E-03	8.20E-04	0.00E+00
Total		2.47E+00	5.24E+00	3.16E-02	9.49E-02	1.32E+00	8.55E-01	1.01E+03	2.93E+00	1.94E+00	1.13E+01	8.38E+00	2.25E+02	2.25E-06	1.87E-07	1.98E-06	0.00E+00	6.06E-03	2.40E-05	1.25E-03	8.20E-04	0.00E+00

Permit Number	Device	Annual Emissions (tons/yr)																				
		Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium
F73290	Sludge Dryer	1.48E-06	3.14E-06	1.85E-08	5.54E-08	7.94E-07	4.99E-07	5.91E-04	1.75E-06	1.16E-06	6.76E-06	5.02E-06	1.35E-04	-	-	-	-	-	-	-	-	-
G26779	Thorpe Furnace	1.46E-05	3.11E-05	1.83E-07	5.49E-07	7.86E-06	4.94E-06	5.85E-03	1.74E-05	1.15E-05	6.69E-05	4.97E-05	1.34E-03	-	-	-	-	-	-	-	-	-
G26775	No. 1 Furnace	4.89E-05	1.04E-04	6.11E-07	1.83E-06	2.63E-05	1.65E-05	0.02	5.81E-05	3.85E-05	2.24E-04	1.66E-04	4.47E-03	-	-	-	-	-	-	-	-	-
G26776	No. 2 Furnace	6.31E-05	1.34E-04	7.88E-07	2.36E-06	3.39E-05	2.13E-05	0.03	7.49E-05	4.97E-05	2.88E-04	2.14E-04	5.76E-03	-	-	-	-	-	-	-	-	-
G26557	Rotary Furnace	4.88E-05	1.03E-04	8.41E-07	2.52E-06	2.61E-05	2.27E-05	0.03	5.80E-05	3.87E-05	2.23E-04	1.66E-04	4.46E-03	-	-	-	-	-	-	-	-	-
G26559	A&A Furnace	2.85E-05	6.05E-05	3.56E-07	1.07E-06	1.53E-05	9.61E-06	0.01	3.38E-05	2.24E-05	1.30E-04	9.68E-05	2.60E-03	-	-	-	-	-	-	-	-	-
G26560	Lindberg Furnace	5.18E-05	1.10E-04	6.47E-07	1.94E-06	2.78E-05	1.75E-05	0.02	6.15E-05	4.08E-05	2.37E-04	1.76E-04	4.73E-03	-	-	-	-	-	-	-	-	-
G26558	Car Bottom Furnace	3.82E-05	8.10E-05	6.58E-07	1.97E-06	2.04E-05	1.78E-05	0.02	4.54E-05	3.03E-05	1.74E-04	1.30E-04	3.49E-03	-	-	-	-	-	-	-	-	-
G26561	AOV Furnace	7.63E-06	1.62E-05	9.53E-08	2.86E-07	4.10E-06	2.57E-06	3.05E-03	9.06E-06	6.01E-06	3.49E-05	2.59E-05	6.97E-04	-	-	-	-	-	-	-	-	-
R219	Exempt Boilers	2.09E-05	4.45E-05	2.62E-07	7.85E-07	1.13E-05	7.06E-06	8.37E-03	2.49E-05	1.65E-05	9.58E-05	7.12E-05	1.91E-03	-	-	-	-	-	-	-	-	-
R219	AgingFurnace	7.35E-06	1.56E-05	9.18E-08	2.76E-07	3.95E-06	2.48E-06	2.94E-03	8.72E-06	5.79E-06	3.36E-05	2.50E-05	6.71E-04	-	-	-	-	-	-	-	-	-
R219	#1 Car Bottom Furnace	2.54E-05	5.40E-05	3.18E-07	9.53E-07	1.37E-05	8.58E-06	0.01	3.02E-05	2.00E-05	1.16E-04	8.64E-05	2.32E-03	-	-	-	-	-	-	-	-	-
R219	Exempt Ovens	8.34E-04	1.77E-03	1.04E-05	3.13E-05	4.48E-04	2.82E-04	0.33	9.91E-04	6.57E-04	3.82E-03	2.84E-03	0.08	-	-	-	-	-	-	-	-	-
R219	CEC Furnace	4.20E-05	8.92E-05	5.25E-07	1.57E-06	2.26E-05	1.42E-05	0.02	4.99E-05	3.31E-05	1.92E-04	1.43E-04	3.84E-03	-	-	-	-	-	-	-	-	-
R219	Grinding / Sawing	-	-	-	-	-	-	-	-	-	-	-	-	4.50E-03	3.74E-04	3.97E-03	0.00E+00	1.21E+01	4.81E-02	2.49E+00	1.64E+00	0.00E+00
Total		1.23E-03	2.62E-03	1.58E-05	4.75E-05	6.62E-04	4.27E-04	5.06E-01	1.46E-03	9.71E-04	5.64E-03	4.19E-03	1.13E-01	4.50E-03	3.74E-04	3.97E-03	0.00E+00	1.21E+01	4.81E-02	2.49E+00	1.64E+00	0.00E+00

Note: Baseline emissions for Thorpe furnace is based on emissions from 2014. Thorpe Furnace was installed and operated in 2014.

Emissions from Combustion Sources

Emissions of criteria pollutants from combustion sources were calculated based on the following equation:
Annual Emissions = Throughput (mmscf) x Emission factor (lb/mmscf)

Table B.8-2 - 2013Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factors (lb/mmscf)											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
F73290	Sludge Dryer	0.30	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
G26779	Thorpe Furnace	0	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
G26775	No. 1 Furnace	12.51	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
G26776	No. 2 Furnace	15.15	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
G26557	Rotary Furnace	16.25	5.80E-03	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	3.20E+00	6.90E-03	4.60E-03	2.65E-02	1.97E-02	5.30E-01
G26559	A&A Furnace	6.53	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
G26560	Lindberg Furnace	14.00	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
G26558	Car Bottom Furnace	12.88	5.80E-03	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	3.20E+00	6.90E-03	4.60E-03	2.65E-02	1.97E-02	5.30E-01
G26561	AOV Furnace	1.90	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
R219	Exempt Boilers	5.13	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
R219	AgingFurnace	1.83	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
R219	#1 Car Bottom Furnace	11.04	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
R219	Exempt Ovens	210.32	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01
R219	CEC Furnace	10.37	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01

Permit Number	Device	Annual Emissions (lb/yr)											
		Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
F73290	Sludge Dryer	2.36E-03	5.02E-03	2.95E-05	8.85E-05	1.27E-03	7.97E-04	9.44E-01	2.80E-03	1.86E-03	1.08E-02	8.02E-03	2.16E-01
G26779	Thorpe Furnace	0	0	0	0	0	0	0	0	0	0	0	0
G26775	No. 1 Furnace	1.00E-01	2.13E-01	1.25E-03	3.75E-03	5.38E-02	3.38E-02	4.00E+01	1.19E-01	7.88E-02	4.58E-01	3.40E-01	9.14E+00
G26776	No. 2 Furnace	1.21E-01	2.57E-01	1.51E-03	4.54E-03	6.51E-02	4.09E-02	4.85E+01	1.44E-01	9.54E-02	5.54E-01	4.12E-01	1.11E+01
G26557	Rotary Furnace	9.43E-02	2.00E-01	1.63E-03	4.88E-03	5.04E-02	4.39E-02	5.20E+01	1.12E-01	7.48E-02	4.31E-01	3.20E-01	8.61E+00
G26559	A&A Furnace	5.22E-02	1.11E-01	6.53E-04	1.96E-03	2.81E-02	1.76E-02	2.09E+01	6.20E-02	4.11E-02	2.39E-01	1.78E-01	4.77E+00
G26560	Lindberg Furnace	1.12E-01	2.38E-01	1.40E-03	4.20E-03	6.02E-02	3.78E-02	4.48E+01	1.33E-01	8.82E-02	5.12E-01	3.81E-01	1.02E+01
G26558	Car Bottom Furnace	7.47E-02	1.58E-01	1.29E-03	3.86E-03	3.99E-02	3.48E-02	4.12E+01	8.89E-02	5.93E-02	3.41E-01	2.54E-01	6.83E+00
G26561	AOV Furnace	1.52E-02	3.24E-02	1.90E-04	5.71E-04	8.19E-03	5.14E-03	6.09E+00	1.81E-02	1.20E-02	6.97E-02	5.18E-02	1.39E+00
R219	Exempt Boilers	4.11E-02	8.72E-02	5.13E-04	1.54E-03	2.21E-02	1.39E-02	1.64E+01	4.88E-02	3.23E-02	1.88E-01	1.40E-01	3.75E+00
R219	AgingFurnace	1.46E-02	3.10E-02	1.83E-04	5.48E-04	7.85E-03	4.93E-03	5.84E+00	1.73E-02	1.15E-02	6.68E-02	4.96E-02	1.33E+00
R219	#1 Car Bottom Furnace	8.83E-02	1.88E-01	1.10E-03	3.31E-03	4.75E-02	2.98E-02	3.53E+01	1.05E-01	6.96E-02	4.04E-01	3.00E-01	8.07E+00
R219	Exempt Ovens	1.68E+00	3.58E+00	2.10E-02	6.31E-02	9.04E-01	5.68E-01	6.73E+02	2.00E+00	1.33E+00	7.70E+00	5.72E+00	1.54E+02
R219	CEC Furnace	8.29E-02	1.76E-01	1.04E-03	3.11E-03	4.46E-02	2.80E-02	3.32E+01	9.85E-02	6.53E-02	3.79E-01	2.82E-01	7.58E+00

Table B.8-3 - 2014 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factors (lb/mmscf)												Annual Emissions (lb/yr)											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
F73290	Sludge Dryer	0.44	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	3.55E-03	7.55E-03	4.44E-05	1.33E-04	1.91E-03	1.20E-03	1.42E+00	4.22E-03	2.80E-03	1.62E-02	1.21E-02	3.24E-01
G26779	Thorpe Furnace	3.66	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	2.93E-02	6.22E-02	3.66E-04	1.10E-03	1.57E-02	9.87E-03	1.17E+01	3.47E-02	2.30E-02	1.34E-01	9.95E-02	2.67E+00
G26775	No. 1 Furnace	11.95	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	9.56E-02	2.03E-01	1.20E-03	3.59E-03	5.14E-02	3.23E-02	3.83E+01	1.14E-01	7.53E-02	4.37E-01	3.25E-01	8.74E+00
G26776	No. 2 Furnace	16.38	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.31E-01	2.78E-01	1.64E-03	4.91E-03	7.04E-02	4.42E-02	5.24E+01	1.56E-01	1.03E-01	6.00E-01	4.46E-01	1.20E+01
G26557	Rotary Furnace	17.39	5.80E-03	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	3.20E+00	6.90E-03	4.60E-03	2.65E-02	1.97E-02	5.30E-01	1.01E-01	2.14E-01	1.74E-03	5.22E-03	5.39E-02	4.70E-02	5.57E+01	1.20E-01	8.00E-02	4.61E-01	3.43E-01	9.22E+00
G26559	A&A Furnace	7.70	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	6.16E-02	1.31E-01	7.70E-04	2.31E-03	3.31E-02	2.08E-02	2.47E+01	7.32E-02	4.85E-02	2.82E-01	2.10E-01	5.63E+00
G26560	Lindberg Furnace	11.90	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	9.52E-02	2.02E-01	1.19E-03	3.57E-03	5.12E-02	3.21E-02	3.81E+01	1.13E-01	7.50E-02	4.35E-01	3.24E-01	8.70E+00
G26558	Car Bottom Furnace	13.45	5.80E-03	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	3.20E+00	6.90E-03	4.60E-03	2.65E-02	1.97E-02	5.30E-01	7.80E-02	1.65E-01	1.35E-03	4.04E-03	4.17E-02	3.63E-02	4.30E+01	9.28E-02	6.19E-02	3.56E-01	2.65E-01	7.13E+00
G26561	AOV Furnace	1.91	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.53E-02	3.25E-02	1.91E-04	5.73E-04	8.21E-03	5.15E-03	6.11E+00	1.81E-02	1.20E-02	6.99E-02	5.19E-02	1.40E+00
R219	Exempt Boilers	5.33	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	4.27E-02	9.07E-02	5.33E-04	1.60E-03	2.29E-02	1.44E-02	1.71E+01	5.07E-02	3.36E-02	1.95E-01	1.45E-01	3.90E+00
R219	AgingFurnace	1.85	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.48E-02	3.14E-02	1.85E-04	5.54E-04	7.95E-03	4.99E-03	5.91E+00	1.76E-02	1.16E-02	6.76E-02	5.03E-02	1.35E+00
R219	#1 Car Bottom Furnace	1.67	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.33E-02	2.83E-02	1.67E-04	5.00E-04	7.16E-03	4.50E-03	5.33E+00	1.58E-02	1.01E-02	6.10E-02	4.33E-02	1.22E+00
R219	Exempt Ovens	206.86	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.65E+00	3.52E+00	2.07E-02	6.21E-02	8.90E-01	5.59E-01	6.62E+02	1.97E+00	1.30E+00	7.57E+00	5.63E+00	1.51E+02
R219	CEC Furnace	10.63	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	8.50E-02	1.81E-01	1.06E-03	3.19E-03	4.57E-02	2.87E-02	3.40E+01	1.01E-01	6.69E-02	3.89E-01	2.89E-01	7.77E+00

Note:

1. Emission factors were based on AB2588 emission factors.
2. Ammonia emission factor is based on SCAQMD AER value for sources not equipped with an NSCR or SCR.

Table B.8-4 - Estimated Baseline TAC Emissions from Grinding / Sawing Operations

Emission Source	Hourly Emissions (lbs/hr) [1]									Annual Emissions (lbs/yr) [2]								
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium
Bldg. H Baghouse	2.88E-08	ND	1.90E-08	NA	7.40E-06	1.17E-06	3.18E-06	7.49E-06	ND	1.72E-04	ND	1.14E-04	NA	4.42E-02	7.00E-03	1.90E-02	4.47E-02	ND
Bldg. P Baghouse	3.17E-08	ND	2.54E-08	NA	3.09E-06	ND	4.12E-06	1.09E-05	ND	3.09E-04	ND	1.52E-04	NA	1.84E-02	ND	2.46E-02	6.51E-02	ND
Bldg. M Baghouse	ND	ND	3.52E-07	NA	2.75E-04	4.90E-06	7.29E-05	2.57E-04	ND	ND	ND	3.18E-03	NA	1.63E+00	2.93E-02	4.36E-01	1.41E+00	ND
Bldg. A1 Fugitives	4.90E-07	6.26E-08	ND	NA	1.73E-03	1.26E-06	3.28E-04	1.01E-05	ND	2.93E-03	3.74E-04	ND	NA	1.03E+01	7.54E-03	1.96E+00	6.06E-02	ND
Bldg. M Fugitives	6.89E-08	ND	1.06E-08	NA	2.71E-06	2.88E-07	6.72E-06	1.62E-06	ND	4.12E-04	ND	6.35E-05	NA	1.62E-02	1.72E-03	4.01E-02	9.68E-03	ND
Bldg. H Fugitives	3.57E-08	ND	2.12E-08	NA	1.39E-06	ND	6.61E-07	2.24E-06	ND	2.13E-04	ND	1.26E-04	NA	8.32E-03	ND	3.95E-03	1.34E-02	ND
Bldg. P Fugitives	7.75E-08	ND	5.58E-08	NA	1.04E-05	4.19E-07	2.37E-06	5.29E-06	ND	4.63E-04	ND	3.34E-04	NA	6.21E-02	2.50E-03	1.42E-02	3.16E-02	ND
Totals	7.53E-07	6.26E-08	6.64E-07	0.00E+00	2.03E-03	8.04E-06	4.17E-04	2.74E-04	0.00E+00	4.50E-03	3.74E-04	3.97E-03	0.00E+00	1.21E+01	4.81E-02	2.49E+00	1.64E+00	0.00E+00

Note:

1. Estimated TAC emissions based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.
2. Annual emissions based on current operating schedule of 5 days a week, 52 weeks per year less 11 holidays

Appendix C

Greenhouse Gas Emissions

Note: Appendix to be provided in supplemental CD

Table C.1 Greenhouse Gas Project Impacts

Emission Source	CO2e (MT/yr)
Construction Emissions from CalEEMod	2,679
Construction Emissions Amortized Over 30 Years	89
Direct Operational Emissions	56,152
GHG credits required for Direct Operational Emissions under Cap-and-Trade	-56,152
Indirect Electricity Consumption	5,414
GHG credits required for Indirect Electricity Consumption under Cap-and-Trade	-5,414
Total	89
Threshold	10,000
Exceeds Threshold?	No

Table C.2-1 Baseline Indirect GHG Emissions from Electricity Consumption

Year	MWh/yr	lb CO2e/yr	MT CO2e/yr
2013	21,260	14,988,300	6,794
2014	23,378	16,481,490	7,471
		Average	7,133

Table C.2-2 Indirect GHG Emissions from Electricity Consumption from Proposed Project

Year	MWh/yr	lb CO2e/yr	MT CO2e/yr
2018	39,259	27,677,595	12,547

Note: Emission factor basis is 705 lb/CO2e/MWh from SCE, 2012 Corporate Responsibility & Sustainability Report (2013)

Table C.2-3 Increase in Indirect GHG Emissions from Electricity Consumption

Category	MT CO2e/yr
Baseline Emissions	7,133
Post Project Emissions	12,547
Emission Increases	5,414

C.3 Project GHG Emissions

Project GHG emissions include emissions from proposed emission units and emission increases from existing emission units. Project GHG emissions are summarized in Table B.7-1.

C.3-1 - Emissions from Proposed Combustion Sources

Device	Annual CO2e (MT/yr)
Large Rotary Furnace	10,243.45
Medium Rotary Furnace #1	6,518.56
Medium Rotary Furnace #2	6,518.56
Chain Conveyor Furnace #1	6,052.95
Chain Conveyor Furnace #2	6,052.95
Pedestal Die Heating Furnace #1	3,724.89
Pedestal Die Heating Furnace #2	3,724.89
Pedestal Die Heating Furnace #3	3,724.89
Pedestal Die Heating Furnace #4	3,724.89
Sludge Dryer	5.15
Thorpe Furnace	40.82
No. 1 Furnace	34.13
No. 2 Furnace	43.99
Rotary Furnace	187.77
Lindberg Furnace	119.13
Car Bottom Furnace	144.53
AOV Furnace	146.96
#1 Car Bottom Furnace	30.75
Exempt Oven	70.93
CEC Furnaces	2,328.27
Manipulators	794.13
Fork Trucks	1,919.88
Total	56,152.48

Emissions from Proposed Combustion Sources

Emissions of GHG were estimated using the following equation. Proposed emission units are expected to operate 8,760 hours per year:
Annual Emissions = maximum heat rating (mmbtu/hr) x operating hours per year (hrs/yr) x Emission factor (kg/mmbtu)

Emissions of CO2e were calculated based global warming potential factors for each GHG as shown in the following equation:
CO2e (MT/yr)= [CO2 emissions (kg/yr) + 21 (kg CO2e/kg CH4) x CH4 emissions (kg/yr) + 310 (kg CO2e/ kg N2O) x N2O emissions (kg/yr)]/1000 (kg/MT)

C.3-2 - Emissions from Proposed Natural Gas Combustion Sources

Device	Heat Rating (MMBtu/hr)	Emission Factor (kg/mmbtu)			Annual Emissions (kg/yr)			CO2e (MT/yr)
		CO2	CH4	N2O	CO2	CH4	N2O	
Large Rotary Furnace	22	53.1	0.001	0.0001	10,233,432	193	19	10,243.45
Medium Rotary Furnace #1	14	53.1	0.001	0.0001	6,512,184	123	12	6,518.56
Medium Rotary Furnace #2	14	53.1	0.001	0.0001	6,512,184	123	12	6,518.56
Chain Conveyor Furnace #1	13	53.1	0.001	0.0001	6,047,028	114	11	6,052.95
Chain Conveyor Furnace #2	13	53.1	0.001	0.0001	6,047,028	114	11	6,052.95
Pedestal Die Heating Furnace #1	8	53.1	0.001	0.0001	3,721,248	70	7	3,724.89
Pedestal Die Heating Furnace #2	8	53.1	0.001	0.0001	3,721,248	70	7	3,724.89
Pedestal Die Heating Furnace #3	8	53.1	0.001	0.0001	3,721,248	70	7	3,724.89
Pedestal Die Heating Furnace #4	8	53.1	0.001	0.0001	3,721,248	70	7	3,724.89

Note:
1. Medium Rotary Furnace #2 to be installed and operated in 2019 and expected to be identical to Medium Furnace #1.
2. GHG emission factors are based on emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

C.3-3 - Emissions from Proposed Diesel Combustion Sources

Device	Heat Rating (MMBtu/hr)	Emission Factor (kg/mmbtu)			Annual Emissions (kg/yr)			CO2e (MT/yr)
		CO2	CH4	N2O	CO2	CH4	N2O	
Manipulator #1	0.6108	73.96	3.00E-03	6.00E-04	395,731	16	3	397.06
Manipulator #2	0.6108	73.96	3.00E-03	6.00E-04	395,731	16	3	397.06

1. GHG emission factors are based on emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

C.3-4 - Emissions from Proposed Propane Combustion Sources

Device	Heat Rating (MMBtu/hr)	Emission Factor (kg/mmbtu)			Annual Emissions (kg/yr)			CO2e (MT/yr)
		CO2	CH4	N2O	CO2	CH4	N2O	
Fork Truck #1	1.018	62.87	3.00E-03	6.00E-04	560,655	27	5	562.88
Fork Truck #2	1.018	62.87	3.00E-03	6.00E-04	560,655	27	5	562.88
Fork Truck #3	0.6108	73.96	3.00E-03	6.00E-04	395,731	16	3	397.06
Fork Truck #4	0.6108	73.96	3.00E-03	6.00E-04	395,731	16	3	397.06

1. GHG emission factors are based on emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

Emission Increases from Existing Sources

Increase in emissions of criteria pollutants from existing are expected from increased operated due to the proposed project. Emission increased are estimated from baseline emissions and the expected increase in operations.

C.3-5 - Emissions Increases from Existing Emission Units

Permit Number	Device	Expected Increase in Operations (%)	Annual CO2e (MT/yr)
F73290	Sludge Dryer	25	5.15
G26779	Thorpe Furnace	20	40.82
G26775	No. 1 Furnace	5	34.13
G26776	No. 2 Furnace	5	43.99
G26557	Rotary Furnace	20	187.77
G26560	Lindberg Furnace	30	119.13
G26558	Car Bottom Furnace	20	144.53
G26561	AOV Furnace	20	146.96
R219	#1 Car Bottom Furnace	30	30.75
R219	Exempt Oven	20	70.93
R219	CEC Furnaces	20	2,328.27

Note: Emission units are expected up to 365 days per year

C.4 Baseline GHG Emissions

Emissions of GHG were estimated using the following equation:
Annual Emissions = Throughput (mmscf) x Emission factor (kg/MMBtu) x HHV (1050 MMBtu/mmscf)

Emissions of CO2e were calculated based global warming potential factors for each GHG as shown in the following equation:
CO2e (MT/yr)= [CO2 emissions (kg/yr) + 21 (kg CO2e/kg CH4) x CH4 emissions (kg/yr) + 310 (kg CO2e/ kg N2O) x N2O emissions (kg/yr)]/1000 (kg/MT)

C.4-1 - 2013 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factor (kg/MMbtu)			Annual Emissions (kg/yr)			Annual CO2e (MT/yr)
			CO2	CH4	N2O	CO2	CH4	N2O	
F73290	Sludge Dryer	0.30	53.1	0.001	0.0001	16,448	0.31	0.03	16.46
G26779	Thorpe Furnace	0	53.1	0.001	0.0001	0	0	0	0.00
G26775	No. 1 Furnace	12.51	53.1	0.001	0.0001	697,261	13	1	697.94
G26776	No. 2 Furnace	15.15	53.1	0.001	0.0001	844,515	16	2	845.34
G26557	Rotary Furnace	16.25	53.1	0.001	0.0001	906,219	17	2	907.11
G26559	A&A Furnace	6.53	53.1	0.001	0.0001	363,846	7	1	364.20
G26560	Lindberg Furnace	14.00	53.1	0.001	0.0001	780,537	15	1	781.30
G26558	Car Bottom Furnace	12.88	53.1	0.001	0.0001	718,269	14	1	718.97
G26561	AOV Furnace	1.90	53.1	0.001	0.0001	106,185	2	0.20	106.29
R219	Exempt Boilers	5.13	53.1	0.001	0.0001	286,151	5	1	286.43
R219	AgingFurnace	1.83	53.1	0.001	0.0001	101,772	2	0	101.87
R219	#1 Car Bottom Furnace	11.04	53.1	0.001	0.0001	615,697	12	1	616.30
R219	Exempt Ovens	210.32	53.1	0.001	0.0001	11,726,337	221	22	11,737.82
R219	CEC Furnace	10.37	53.1	0.001	0.0001	577,981	11	1	578.55

C.4-2 - 2014 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factor (kg/mmscf)			Annual Emissions (kg/yr)			Annual CO2e (MT/yr)
			CO2	CH4	N2O	CO2	CH4	N2O	
F73290	Sludge Dryer	0.44	53.1	0.001	0.0001	24,749	0.47	0.05	24.77
G26779	Thorpe Furnace	3.66	53.1	0.001	0.0001	203,905	4	0	204.10
G26775	No. 1 Furnace	11.95	53.1	0.001	0.0001	666,457	13	1	667.11
G26776	No. 2 Furnace	16.38	53.1	0.001	0.0001	913,297	17	2	914.19
G26557	Rotary Furnace	17.39	53.1	0.001	0.0001	969,632	18	2	970.58
G26559	A&A Furnace	7.70	53.1	0.001	0.0001	429,573	8	1	429.99
G26560	Lindberg Furnace	11.90	53.1	0.001	0.0001	663,318	12	1	663.97
G26558	Car Bottom Furnace	13.45	53.1	0.001	0.0001	749,919	14	1	750.65
G26561	AOV Furnace	1.91	53.1	0.001	0.0001	106,447	2	0.20	106.55
R219	Exempt Boilers	5.33	53.1	0.001	0.0001	297,361	6	1	297.65
R219	AgingFurnace	1.85	53.1	0.001	0.0001	103,035	2	0	103.14
R219	#1 Car Bottom Furnace	1.67	53.1	0.001	0.0001	92,888	2	0	92.98
R219	Exempt Ovens	206.86	53.1	0.001	0.0001	11,533,598	217	21.72	11,544.89
R219	CEC Furnace	10.63	53.1	0.001	0.0001	592,398	11	1	592.98

Note: GHG emission factors are based on emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

C.4-3 - Baseline GHG Emissions Summary

Permit Number	Device	Baseline CO2e (MT/yr)
F73290	Sludge Dryer	20.62
G26779	Thorpe Furnace	204.10
G26775	No. 1 Furnace	682.53
G26776	No. 2 Furnace	879.77
G26557	Rotary Furnace	938.84
G26559	A&A Furnace	397.10
G26560	Lindberg Furnace	722.63
G26558	Car Bottom Furnace	734.81
G26561	AOV Furnace	106.42
R219	Exempt Boilers	292.04
R219	Aging Furnace	102.50
R219	#1 Car Bottom Furnace	354.64
R219	Exempt Ovens	11,641.36
R219	CEC Furnace	585.76

Note: Baseline emissions for Thorpe furnace is based on emissions from 2014. Thorpe Furnace was installed and operated in 2014.

Appendix D

CalEEMOD inputs/outputs

Note: Appendix to be provided in supplemental CD

CALEEMOD Annual Results

Weber Metals

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	115.00	1000sqft	2.64	115,000.00	0
User Defined Industrial	30.00	User Defined Unit	0.69	30,000.00	0
Parking Lot	120.50	1000sqft	2.77	120,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Footprint of substation is 30,000 SF. Total paving area is 120,500 SF

Construction Phase - Based on construction schedule provided by Weber Metals; 4B expected to occur in one day in the month of June

Off-road Equipment - 1 dozers and 2 loader

Off-road Equipment - 1 drill rig, 4 excavators, 2 loaders, 1 dozer, 2 rollers

Off-road Equipment - 3 cranes, 6 rough terrain forklifts, 9 lifts (5 aerial, 4 scissor), 2 welders, 2 air compressors, 2 pumps

Off-road Equipment - one paver

Off-road Equipment - 1 forklift, 9 cranes, 3 lifts

Off-road Equipment - 9 cranes, 3 aerial lifts, 1 forklift

Off-road Equipment - 35 trucks to haul new press; no on-site off road equipment

Off-road Equipment - 2 rough terrain forklifts, 10 lifts (2 aerial, 8 scissor), 4 welders, 2 air compressors

Off-road Equipment - 1 dozer, 2 loaders

Off-road Equipment - 1 crane, 6 rough terrain forklifts, 2 welders, 4 aerial lifts

Off-road Equipment - 4 lifts, 6 rough terrain forklifts, 2 welders, 1 crane

Trips and VMT - excavation/dewatering - 6,876 trips; press facility construction - 470 vehicles, 12 concrete trucks; substation construction - 60 vehicles; utility connections - 75 vehicles; equipment installation - 140 vehicles

Demolition - demolition of old substation. footprint ~ 35' x 60'

Grading - pit estimated to be 190' by 150' and 85' deep, up to 120,000 SF disturbed per day during site prep, up to 30,000 SF disturbed during Substation site prep

Architectural Coating -

Road Dust -

Area Coating - no architectural coating

Landscape Equipment - no landscaping

Energy Use - Electricity to be calculated outside of CalEEMod

Construction Off-road Equipment Mitigation - dust mitigation, Tier 2 dozers in Phase 1 and 2

Operational Off-Road Equipment - No Offroad Equiipment

Off-road Equipment - 2 rough terrain forklifts

Off-road Equipment - 1 aerial lift

Off-road Equipment - one aerial lift, one rough terrain forklift

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	74308	0
tblAreaCoating	Area_Nonresidential_Interior	222923	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	216.00
tblConstructionPhase	NumDays	230.00	196.00
tblConstructionPhase	NumDays	230.00	131.00

tblConstructionPhase	NumDays	230.00	87.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	230.00	43.00
tblConstructionPhase	NumDays	230.00	22.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	PhaseEndDate	12/30/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/29/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/2/2016	6/2/2016
tblConstructionPhase	PhaseEndDate	7/13/2016	7/31/2016
tblConstructionPhase	PhaseEndDate	7/14/2016	6/14/2016
tblConstructionPhase	PhaseEndDate	9/30/2015	7/31/2015
tblConstructionPhase	PhaseEndDate	6/29/2016	9/30/2015
tblConstructionPhase	PhaseEndDate	8/30/2016	5/31/2016
tblConstructionPhase	PhaseEndDate	7/4/2016	6/30/2016
tblConstructionPhase	PhaseEndDate	8/1/2016	6/30/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	5/1/2016
tblConstructionPhase	PhaseStartDate	8/1/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	11/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	5/1/2015
tblConstructionPhase	PhaseStartDate	5/31/2016	9/1/2015
tblConstructionPhase	PhaseStartDate	7/1/2016	4/1/2016

tblConstructionPhase	PhaseStartDate	6/3/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/1/2016	5/1/2016
tblGrading	AcresOfGrading	0.00	0.65
tblGrading	AcresOfGrading	0.00	2.75
tblGrading	AcresOfGrading	0.00	0.69
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	HorsePower	62.00	46.00
tblOffRoadEquipment	LoadFactor	0.31	0.45
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts

tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	PhaseName		4A_Equipment Installation
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		3A_Adjusted
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections

tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		4A_Adjusted
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00

tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripNumber	0.00	35.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripNumber	44.00	12.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00

tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	33.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	8.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	75.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00
tblTripsAndVMT	WorkerTripNumber	112.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	25.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00

tblTripsAndVMT	WorkerTripNumber	5.00	60.00

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					
2015	0.8211	7.8741	6.9410	0.0139	0.8189	0.3629	1.1817	0.2997	0.3400	0.6397	0.0000	1,230.5068	1,230.5068	0.1650	0.0000	1,233.9714
2016	1.1622	9.4236	9.2827	0.0169	0.6042	0.4858	1.0899	0.1600	0.4574	0.6174	0.0000	1,439.1953	1,439.1953	0.2647	0.0000	1,444.7537
Total	**1.9832**	**17.2977**	**16.2238**	**0.0308**	**1.4231**	**0.8486**	**2.2717**	**0.4598**	**0.7974**	**1.2571**	**0.0000**	**2,669.7021**	**2,669.7021**	**0.4297**	**0.0000**	**2,678.7251**

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					
2015	0.7868	7.6497	6.7368	0.0139	0.6533	0.3462	0.9995	0.2099	0.3251	0.5350	0.0000	1,230.5061	1,230.5061	0.1650	0.0000	1,233.9708
2016	1.1622	9.4236	9.2827	0.0169	0.6036	0.4858	1.0894	0.1599	0.4574	0.6173	0.0000	1,439.1943	1,439.1943	0.2647	0.0000	1,444.7527
Total	**1.9490**	**17.0733**	**16.0195**	**0.0308**	**1.2569**	**0.8320**	**2.0889**	**0.3698**	**0.7825**	**1.1523**	**0.0000**	**2,669.7004**	**2,669.7004**	**0.4297**	**0.0000**	**2,678.7235**

	ROG	NOx	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	**1.73**	**1.30**	**1.26**	**0.00**	**11.68**	**1.96**	**8.05**	**19.56**	**1.87**	**8.34**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	542.3348	542.3348	0.0218	6.1800e-003	544.7080
Mobile	0.1202	0.4350	1.5845	4.2000e-003	0.2895	6.0500e-003	0.2955	0.0775	5.5700e-003	0.0830	0.0000	325.0446	325.0446	0.0126	0.0000	325.3086
Waste						0.0000	0.0000		0.0000	0.0000	28.9465	0.0000	28.9465	1.7107	0.0000	64.8710
Water						0.0000	0.0000		0.0000	0.0000	8.4370	99.0931	107.5300	0.8711	0.0214	132.4586
Total	**1.0912**	**0.5410**	**1.6735**	**4.8400e-003**	**0.2895**	**0.0141**	**0.3036**	**0.0775**	**0.0136**	**0.0911**	**37.3835**	**966.4725**	**1,003.8560**	**2.6162**	**0.0276**	**1,067.3462**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	542.3348	542.3348	0.0218	6.1800e-003	544.7080
Mobile	0.1202	0.4350	1.5845	4.2000e-003	0.2895	6.0500e-003	0.2955	0.0775	5.5700e-003	0.0830	0.0000	325.0446	325.0446	0.0126	0.0000	325.3086
Waste						0.0000	0.0000		0.0000	0.0000	28.9465	0.0000	28.9465	1.7107	0.0000	64.8710
Water						0.0000	0.0000		0.0000	0.0000	8.4370	99.0931	107.5300	0.8710	0.0214	132.4451
Total	**1.0912**	**0.5410**	**1.6735**	**4.8400e-003**	**0.2895**	**0.0141**	**0.3036**	**0.0775**	**0.0136**	**0.0911**	**37.3835**	**966.4725**	**1,003.8560**	**2.6161**	**0.0276**	**1,067.3328**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.11**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1_Site Preparation	Site Preparation	5/1/2015	6/30/2015	5	43	
2	2_Excavation/Dewatering	Site Preparation	5/1/2015	7/31/2015	5	66	
3	3A_Press Facility Construction	Building Construction	8/1/2015	5/30/2016	5	216	
4	6A_Site Prep	Site Preparation	9/1/2015	9/30/2015	5	22	
5	6B_Substation Construction	Building Construction	10/1/2015	6/30/2016	5	196	
6	3A_Adjusted	Building Construction	4/1/2016	5/31/2016	5	43	
7	6A_Adjusted	Site Preparation	5/1/2016	6/30/2016	5	44	
8	5_Utility and Electrical Connections	Building Construction	5/1/2016	10/31/2016	5	131	
9	4B_Press Installaion	Building Construction	6/1/2016	6/2/2016	5	2	
10	4A_Adjusted	Building Construction	6/1/2016	6/30/2016	5	22	
11	3B_Paving	Paving	6/1/2016	6/14/2016	5	10	
12	6C_Substation Demolition	Demolition	7/1/2016	7/31/2016	5	21	
13	4A_Equipment Installation	Building Construction	7/1/2016	10/31/2016	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1_Site Preparation	Rubber Tired Dozers	1	6.00	255	0.40
1_Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
4A_Equipment Installation	Aerial Lifts	3	6.00	62	0.31
6C_Substation Demolition	Aerial Lifts	4	6.00	62	0.31
6A_Adjusted	Aerial Lifts	1	8.00	62	0.31

2_Excavation/Dewatering	Rubber Tired Dozers	1	6.00	255	0.40
2_Excavation/Dewatering	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6C_Substation Demolition	Rough Terrain Forklifts	6	6.00	100	0.40
6C_Substation Demolition	Welders	2	6.00	46	0.45
3A_Press Facility Construction	Cranes	3	6.00	226	0.29
6C_Substation Demolition	Cranes	1	6.00	226	0.29
3A_Press Facility Construction	Welders	2	6.00	46	0.45
6A_Site Prep	Rubber Tired Dozers	1	6.00	255	0.40
6A_Site Prep	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6B_Substation Construction	Rough Terrain Forklifts	6	6.00	100	0.40
6B_Substation Construction	Cranes	1	6.00	226	0.29
3A_Adjusted	Rough Terrain Forklifts	2	8.00	100	0.40
6B_Substation Construction	Welders	2	6.00	46	0.45
6A_Adjusted	Rough Terrain Forklifts	1	8.00	100	0.40
5_Utility and Electrical Connections	Welders	4	6.00	46	0.45
4A_Equipment Installation	Cranes	9	6.00	226	0.29
4A_Equipment Installation	Forklifts	1	6.00	89	0.20
3B_Paving	Pavers	1	6.00	125	0.42
6B_Substation Construction	Aerial Lifts	4	6.00	62	0.31
5_Utility and Electrical Connections	Rough Terrain Forklifts	2	6.00	100	0.40
5_Utility and Electrical Connections	Aerial Lifts	10	6.00	62	0.31
5_Utility and Electrical Connections	Air Compressors	2	6.00	78	0.48
4A_Adjusted	Aerial Lifts	1	8.00	46	0.45
2_Excavation/Dewatering	Bore/Drill Rigs	1	6.00	205	0.50
2_Excavation/Dewatering	Excavators	4	6.00	162	0.38
2_Excavation/Dewatering	Rollers	2	6.00	80	0.38
3A_Press Facility Construction	Rough Terrain Forklifts	6	6.00	100	0.40
3A_Press Facility Construction	Aerial Lifts	9	6.00	62	0.31

3A_Press Facility Construction	Air Compressors	2	6.00	78	0.48
3A_Press Facility Construction	Pumps	2	6.00	84	0.74
4B_Press Installaion	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1_Site Preparation	3	25.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
2_Excavation/Dewatering	10	25.00	0.00	6,875.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Press Facility Construction	24	470.00	12.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Site Prep	3	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6B_Substation Construction	13	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
5_Utility and Electrical Connections	18	75.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Equipment Installation	13	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4B_Press Installaion	0	0.00	0.00	35.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3B_Paving	1	25.00	8.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6C_Substation Demolition	13	60.00	0.00	10.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Adjusted	2	470.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Adjusted	1	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Adjusted	2	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 1_Site Preparation - 2015

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					0.0975	0.0000	0.0975	0.0534	0.0000	0.0534	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0322	0.3427	0.2552	2.4000e-004		0.0195	0.0195		0.0179	0.0179	0.0000	23.2431	23.2431	6.9400e-003	0.0000	23.3888
Total	**0.0322**	**0.3427**	**0.2552**	**2.4000e-004**	**0.0975**	**0.0195**	**0.1169**	**0.0534**	**0.0179**	**0.0713**	**0.0000**	**23.2431**	**23.2431**	**6.9400e-003**	**0.0000**	**23.3888**

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	2.3300e-003	3.2900e-003	0.0343	7.0000e-005	5.5000e-003	5.0000e-005	5.5500e-003	1.4600e-003	5.0000e-005	1.5100e-003	0.0000	5.3414	5.3414	3.0000e-004	0.0000	5.3478
Total	**2.3300e-003**	**3.2900e-003**	**0.0343**	**7.0000e-005**	**5.5000e-003**	**5.0000e-005**	**5.5500e-003**	**1.4600e-003**	**5.0000e-005**	**1.5100e-003**	**0.0000**	**5.3414**	**5.3414**	**3.0000e-004**	**0.0000**	**5.3478**

3.2 1_Site Preparation - 2015

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					0.0439	0.0000	0.0439	0.0240	0.0000	0.0240	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0209	0.2690	0.1882	2.4000e-004		0.0140	0.0140		0.0130	0.0130	0.0000	23.2431	23.2431	6.9400e-003	0.0000	23.3888
Total	**0.0209**	**0.2690**	**0.1882**	**2.4000e-004**	**0.0439**	**0.0140**	**0.0579**	**0.0240**	**0.0130**	**0.0371**	**0.0000**	**23.2431**	**23.2431**	**6.9400e-003**	**0.0000**	**23.3888**

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	2.3300e-003	3.2900e-003	0.0343	7.0000e-005	5.5000e-003	5.0000e-005	5.5500e-003	1.4600e-003	5.0000e-005	1.5100e-003	0.0000	5.3414	5.3414	3.0000e-004	0.0000	5.3478
Total	**2.3300e-003**	**3.2900e-003**	**0.0343**	**7.0000e-005**	**5.5000e-003**	**5.0000e-005**	**5.5500e-003**	**1.4600e-003**	**5.0000e-005**	**1.5100e-003**	**0.0000**	**5.3414**	**5.3414**	**3.0000e-004**	**0.0000**	**5.3478**

3.3 2_Excavation/Dewatering - 2015

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					0.1536	0.0000	0.1536	0.0826	0.0000	0.0826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1183	1.3228	0.8860	1.2400e-003		0.0705	0.0705		0.0649	0.0649	0.0000	118.4931	118.4931	0.0354	0.0000	119.2360
Total	**0.1183**	**1.3228**	**0.8860**	**1.2400e-003**	**0.1536**	**0.0705**	**0.2242**	**0.0826**	**0.0649**	**0.1475**	**0.0000**	**118.4931**	**118.4931**	**0.0354**	**0.0000**	**119.2360**

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	0.0910	1.6669	0.9550	3.7800e-003	0.1551	0.0275	0.1826	0.0406	0.0253	0.0659	0.0000	348.8628	348.8628	2.7100e-003	0.0000	348.9196
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	3.5800e-003	5.0500e-003	0.0526	1.0000e-004	0.0158	8.0000e-005	0.0158	4.0400e-003	7.0000e-005	4.1100e-003	0.0000	8.1985	8.1985	4.6000e-004	0.0000	8.2082
Total	**0.0946**	**1.6719**	**1.0076**	**3.8800e-003**	**0.1708**	**0.0276**	**0.1984**	**0.0446**	**0.0254**	**0.0700**	**0.0000**	**357.0612**	**357.0612**	**3.1700e-003**	**0.0000**	**357.1278**

3.3 2_Excavation/Dewatering - 2015

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					0.0691	0.0000	0.0691	0.0372	0.0000	0.0372	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1010	1.2097	0.7831	1.2400e-003		0.0622	0.0622		0.0574	0.0574	0.0000	118.4930	118.4930	0.0354	0.0000	119.2359
Total	**0.1010**	**1.2097**	**0.7831**	**1.2400e-003**	**0.0691**	**0.0622**	**0.1313**	**0.0372**	**0.0574**	**0.0946**	**0.0000**	**118.4930**	**118.4930**	**0.0354**	**0.0000**	**119.2359**

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	0.0910	1.6669	0.9550	3.7800e-003	0.1551	0.0275	0.1826	0.0406	0.0253	0.0659	0.0000	348.8628	348.8628	2.7100e-003	0.0000	348.9196
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	3.5800e-003	5.0500e-003	0.0526	1.0000e-004	0.0158	8.0000e-005	0.0158	4.0400e-003	7.0000e-005	4.1100e-003	0.0000	8.1985	8.1985	4.6000e-004	0.0000	8.2082
Total	**0.0946**	**1.6719**	**1.0076**	**3.8800e-003**	**0.1708**	**0.0276**	**0.1984**	**0.0446**	**0.0254**	**0.0700**	**0.0000**	**357.0612**	**357.0612**	**3.1700e-003**	**0.0000**	**357.1278**

3.4 3A_Press Facility Construction - 2015

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	0.3296	3.0758	2.0516	3.2100e-003		0.1795	0.1795		0.1707	0.1707	0.0000	293.5564	293.5564	0.0737	0.0000	295.1040
Total	**0.3296**	**3.0758**	**2.0516**	**3.2100e-003**		**0.1795**	**0.1795**		**0.1707**	**0.1707**	**0.0000**	**293.5564**	**293.5564**	**0.0737**	**0.0000**	**295.1040**

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	0.0140	0.2460	0.1374	5.8000e-004	0.0174	4.6600e-003	0.0221	4.9700e-003	4.2900e-003	9.2600e-003	0.0000	53.2776	53.2776	3.8000e-004	0.0000	53.2856
Worker	0.1111	0.1568	1.6330	3.2300e-003	0.2619	2.3600e-003	0.2643	0.0696	2.1700e-003	0.0717	0.0000	254.5503	254.5503	0.0144	0.0000	254.8530
Total	**0.1252**	**0.4028**	**1.7704**	**3.8100e-003**	**0.2794**	**7.0200e-003**	**0.2864**	**0.0745**	**6.4600e-003**	**0.0810**	**0.0000**	**307.8279**	**307.8279**	**0.0148**	**0.0000**	**308.1385**

3.4 3A_Press Facility Construction - 2015

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	0.3296	3.0758	2.0516	3.2100e-003		0.1795	0.1795		0.1707	0.1707	0.0000	293.5560	293.5560	0.0737	0.0000	295.1036
Total	**0.3296**	**3.0758**	**2.0516**	**3.2100e-003**		**0.1795**	**0.1795**		**0.1707**	**0.1707**	**0.0000**	**293.5560**	**293.5560**	**0.0737**	**0.0000**	**295.1036**

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	0.0140	0.2460	0.1374	5.8000e-004	0.0174	4.6600e-003	0.0221	4.9700e-003	4.2900e-003	9.2600e-003	0.0000	53.2776	53.2776	3.8000e-004	0.0000	53.2856
Worker	0.1111	0.1568	1.6330	3.2300e-003	0.2619	2.3600e-003	0.2643	0.0696	2.1700e-003	0.0717	0.0000	254.5503	254.5503	0.0144	0.0000	254.8530
Total	**0.1252**	**0.4028**	**1.7704**	**3.8100e-003**	**0.2794**	**7.0200e-003**	**0.2864**	**0.0745**	**6.4600e-003**	**0.0810**	**0.0000**	**307.8279**	**307.8279**	**0.0148**	**0.0000**	**308.1385**

3.4 3A_Press Facility Construction - 2016

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	0.2964	2.8048	1.9883	3.1600e-003		0.1575	0.1575		0.1498	0.1498	0.0000	286.1457	286.1457	0.0711	0.0000	287.6391
Total	**0.2964**	**2.8048**	**1.9883**	**3.1600e-003**		**0.1575**	**0.1575**		**0.1498**	**0.1498**	**0.0000**	**286.1457**	**286.1457**	**0.0711**	**0.0000**	**287.6391**

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	0.0122	0.2109	0.1235	5.7000e-004	0.0171	3.8100e-003	0.0209	4.8800e-003	3.5100e-003	8.3900e-003	0.0000	51.7228	51.7228	3.3000e-004	0.0000	51.7297
Worker	0.0983	0.1389	1.4477	3.1600e-003	0.2571	2.2000e-003	0.2593	0.0683	2.0300e-003	0.0703	0.0000	241.2451	241.2451	0.0130	0.0000	241.5185
Total	**0.1105**	**0.3498**	**1.5712**	**3.7300e-003**	**0.2742**	**6.0100e-003**	**0.2803**	**0.0732**	**5.5400e-003**	**0.0787**	**0.0000**	**292.9679**	**292.9679**	**0.0134**	**0.0000**	**293.2482**

3.4 3A_Press Facility Construction - 2016

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	0.2964	2.8048	1.9883	3.1600e-003		0.1575	0.1575		0.1498	0.1498	0.0000	286.1454	286.1454	0.0711	0.0000	287.6387
Total	**0.2964**	**2.8048**	**1.9883**	**3.1600e-003**		**0.1575**	**0.1575**		**0.1498**	**0.1498**	**0.0000**	**286.1454**	**286.1454**	**0.0711**	**0.0000**	**287.6387**

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	0.0122	0.2109	0.1235	5.7000e-004	0.0171	3.8100e-003	0.0209	4.8800e-003	3.5100e-003	8.3900e-003	0.0000	51.7228	51.7228	3.3000e-004	0.0000	51.7297
Worker	0.0983	0.1389	1.4477	3.1600e-003	0.2571	2.2000e-003	0.2593	0.0683	2.0300e-003	0.0703	0.0000	241.2451	241.2451	0.0130	0.0000	241.5185
Total	**0.1105**	**0.3498**	**1.5712**	**3.7300e-003**	**0.2742**	**6.0100e-003**	**0.2803**	**0.0732**	**5.5400e-003**	**0.0787**	**0.0000**	**292.9679**	**292.9679**	**0.0134**	**0.0000**	**293.2482**

3.5 6A_Site Prep - 2015

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					0.0501	0.0000	0.0501	0.0274	0.0000	0.0274	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0165	0.1753	0.1306	1.2000e-004		9.9700e-003	9.9700e-003		9.1700e-003	9.1700e-003	0.0000	11.8918	11.8918	3.5500e-003	0.0000	11.9664
Total	**0.0165**	**0.1753**	**0.1306**	**1.2000e-004**	**0.0501**	**9.9700e-003**	**0.0600**	**0.0274**	**9.1700e-003**	**0.0365**	**0.0000**	**11.8918**	**11.8918**	**3.5500e-003**	**0.0000**	**11.9664**

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	2.8600e-003	4.0400e-003	0.0421	8.0000e-005	0.0243	6.0000e-005	0.0244	6.1000e-003	6.0000e-005	6.1600e-003	0.0000	6.5588	6.5588	3.7000e-004	0.0000	6.5666
Total	**2.8600e-003**	**4.0400e-003**	**0.0421**	**8.0000e-005**	**0.0243**	**6.0000e-005**	**0.0244**	**6.1000e-003**	**6.0000e-005**	**6.1600e-003**	**0.0000**	**6.5588**	**6.5588**	**3.7000e-004**	**0.0000**	**6.5666**

3.5 6A_Site Prep - 2015

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					0.0225	0.0000	0.0225	0.0123	0.0000	0.0123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0107	0.1376	0.0963	1.2000e-004		7.1800e-003	7.1800e-003		6.6700e-003	6.6700e-003	0.0000	11.8918	11.8918	3.5500e-003	0.0000	11.9664
Total	**0.0107**	**0.1376**	**0.0963**	**1.2000e-004**	**0.0225**	**7.1800e-003**	**0.0297**	**0.0123**	**6.6700e-003**	**0.0190**	**0.0000**	**11.8918**	**11.8918**	**3.5500e-003**	**0.0000**	**11.9664**

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	2.8600e-003	4.0400e-003	0.0421	8.0000e-005	0.0243	6.0000e-005	0.0244	6.1000e-003	6.0000e-005	6.1600e-003	0.0000	6.5588	6.5588	3.7000e-004	0.0000	6.5666
Total	**2.8600e-003**	**4.0400e-003**	**0.0421**	**8.0000e-005**	**0.0243**	**6.0000e-005**	**0.0244**	**6.1000e-003**	**6.0000e-005**	**6.1600e-003**	**0.0000**	**6.5588**	**6.5588**	**3.7000e-004**	**0.0000**	**6.5666**

3.6 6B_Substation Construction - 2015

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	0.0911	0.8633	0.6371	9.4000e-004		0.0484	0.0484		0.0452	0.0452	0.0000	86.8566	86.8566	0.0257	0.0000	87.3958
Total	**0.0911**	**0.8633**	**0.6371**	**9.4000e-004**		**0.0484**	**0.0484**		**0.0452**	**0.0452**	**0.0000**	**86.8566**	**86.8566**	**0.0257**	**0.0000**	**87.3958**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5900e-003	0.0121	0.1262	2.5000e-004	0.0378	1.8000e-004	0.0380	9.6900e-003	1.7000e-004	9.8500e-003	0.0000	19.6763	19.6763	1.1100e-003	0.0000	19.6997
Total	**8.5900e-003**	**0.0121**	**0.1262**	**2.5000e-004**	**0.0378**	**1.8000e-004**	**0.0380**	**9.6900e-003**	**1.7000e-004**	**9.8500e-003**	**0.0000**	**19.6763**	**19.6763**	**1.1100e-003**	**0.0000**	**19.6997**

3.6 6B_Substation Construction - 2015

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	0.0911	0.8633	0.6371	9.4000e-004		0.0484	0.0484		0.0452	0.0452	0.0000	86.8565	86.8565	0.0257	0.0000	87.3957
Total	**0.0911**	**0.8633**	**0.6371**	**9.4000e-004**		**0.0484**	**0.0484**		**0.0452**	**0.0452**	**0.0000**	**86.8565**	**86.8565**	**0.0257**	**0.0000**	**87.3957**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5900e-003	0.0121	0.1262	2.5000e-004	0.0378	1.8000e-004	0.0380	9.6900e-003	1.7000e-004	9.8500e-003	0.0000	19.6763	19.6763	1.1100e-003	0.0000	19.6997
Total	**8.5900e-003**	**0.0121**	**0.1262**	**2.5000e-004**	**0.0378**	**1.8000e-004**	**0.0380**	**9.6900e-003**	**1.7000e-004**	**9.8500e-003**	**0.0000**	**19.6763**	**19.6763**	**1.1100e-003**	**0.0000**	**19.6997**

3.6 6B_Substation Construction - 2016

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	0.1631	1.5640	1.2387	1.8500e-003		0.0841	0.0841		0.0785	0.0785	0.0000	169.5563	169.5563	0.0501	0.0000	170.6077
Total	**0.1631**	**1.5640**	**1.2387**	**1.8500e-003**		**0.0841**	**0.0841**		**0.0785**	**0.0785**	**0.0000**	**169.5563**	**169.5563**	**0.0501**	**0.0000**	**170.6077**

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	0.0153	0.0215	0.2245	4.9000e-004	0.0745	3.4000e-004	0.0748	0.0191	3.1000e-004	0.0194	0.0000	37.4172	37.4172	2.0200e-003	0.0000	37.4596
Total	**0.0153**	**0.0215**	**0.2245**	**4.9000e-004**	**0.0745**	**3.4000e-004**	**0.0748**	**0.0191**	**3.1000e-004**	**0.0194**	**0.0000**	**37.4172**	**37.4172**	**2.0200e-003**	**0.0000**	**37.4596**

3.6 6B_Substation Construction - 2016

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	0.1631	1.5640	1.2387	1.8500e-003		0.0841	0.0841		0.0785	0.0785	0.0000	169.5561	169.5561	0.0501	0.0000	170.6075
Total	**0.1631**	**1.5640**	**1.2387**	**1.8500e-003**		**0.0841**	**0.0841**		**0.0785**	**0.0785**	**0.0000**	**169.5561**	**169.5561**	**0.0501**	**0.0000**	**170.6075**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0153	0.0215	0.2245	4.9000e-004	0.0745	3.4000e-004	0.0748	0.0191	3.1000e-004	0.0194	0.0000	37.4172	37.4172	2.0200e-003	0.0000	37.4596
Total	**0.0153**	**0.0215**	**0.2245**	**4.9000e-004**	**0.0745**	**3.4000e-004**	**0.0748**	**0.0191**	**3.1000e-004**	**0.0194**	**0.0000**	**37.4172**	**37.4172**	**2.0200e-003**	**0.0000**	**37.4596**

3.7 3A_Adjusted - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.1165	0.1014	1.5000e-004		6.4700e-003	6.4700e-003		5.9500e-003	5.9500e-003	0.0000	13.9545	13.9545	4.2100e-003	0.0000	14.0429
Total	**9.1500e-003**	**0.1165**	**0.1014**	**1.5000e-004**		**6.4700e-003**	**6.4700e-003**		**5.9500e-003**	**5.9500e-003**	**0.0000**	**13.9545**	**13.9545**	**4.2100e-003**	**0.0000**	**14.0429**

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	0.0395	0.0558	0.5818	1.2700e-003	0.1033	8.9000e-004	0.1042	0.0274	8.1000e-004	0.0283	0.0000	96.9490	96.9490	5.2300e-003	0.0000	97.0588
Total	**0.0395**	**0.0558**	**0.5818**	**1.2700e-003**	**0.1033**	**8.9000e-004**	**0.1042**	**0.0274**	**8.1000e-004**	**0.0283**	**0.0000**	**96.9490**	**96.9490**	**5.2300e-003**	**0.0000**	**97.0588**

3.7 3A_Adjusted - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.1165	0.1014	1.5000e-004		6.4700e-003	6.4700e-003		5.9500e-003	5.9500e-003	0.0000	13.9544	13.9544	4.2100e-003	0.0000	14.0428
Total	**9.1500e-003**	**0.1165**	**0.1014**	**1.5000e-004**		**6.4700e-003**	**6.4700e-003**		**5.9500e-003**	**5.9500e-003**	**0.0000**	**13.9544**	**13.9544**	**4.2100e-003**	**0.0000**	**14.0428**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0558	0.5818	1.2700e-003	0.1033	8.9000e-004	0.1042	0.0274	8.1000e-004	0.0283	0.0000	96.9490	96.9490	5.2300e-003	0.0000	97.0588
Total	**0.0395**	**0.0558**	**0.5818**	**1.2700e-003**	**0.1033**	**8.9000e-004**	**0.1042**	**0.0274**	**8.1000e-004**	**0.0283**	**0.0000**	**96.9490**	**96.9490**	**5.2300e-003**	**0.0000**	**97.0588**

3.8 6A_Adjusted - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9200e-003	0.0799	0.0757	1.1000e-004		4.1400e-003	4.1400e-003		3.8100e-003	3.8100e-003	0.0000	10.5642	10.5642	3.1900e-003	0.0000	10.6312
Total	**5.9200e-003**	**0.0799**	**0.0757**	**1.1000e-004**		**4.1400e-003**	**4.1400e-003**		**3.8100e-003**	**3.8100e-003**	**0.0000**	**10.5642**	**10.5642**	**3.1900e-003**	**0.0000**	**10.6312**

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	5.1600e-003	7.2900e-003	0.0760	1.7000e-004	0.0135	1.2000e-004	0.0136	3.5800e-003	1.1000e-004	3.6900e-003	0.0000	12.6643	12.6643	6.8000e-004	0.0000	12.6786
Total	**5.1600e-003**	**7.2900e-003**	**0.0760**	**1.7000e-004**	**0.0135**	**1.2000e-004**	**0.0136**	**3.5800e-003**	**1.1000e-004**	**3.6900e-003**	**0.0000**	**12.6643**	**12.6643**	**6.8000e-004**	**0.0000**	**12.6786**

3.8 6A_Adjusted - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9200e-003	0.0799	0.0757	1.1000e-004		4.1400e-003	4.1400e-003		3.8100e-003	3.8100e-003	0.0000	10.5642	10.5642	3.1900e-003	0.0000	10.6311
Total	**5.9200e-003**	**0.0799**	**0.0757**	**1.1000e-004**		**4.1400e-003**	**4.1400e-003**		**3.8100e-003**	**3.8100e-003**	**0.0000**	**10.5642**	**10.5642**	**3.1900e-003**	**0.0000**	**10.6311**

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	5.1600e-003	7.2900e-003	0.0760	1.7000e-004	0.0135	1.2000e-004	0.0136	3.5800e-003	1.1000e-004	3.6900e-003	0.0000	12.6643	12.6643	6.8000e-004	0.0000	12.6786
Total	**5.1600e-003**	**7.2900e-003**	**0.0760**	**1.7000e-004**	**0.0135**	**1.2000e-004**	**0.0136**	**3.5800e-003**	**1.1000e-004**	**3.6900e-003**	**0.0000**	**12.6643**	**12.6643**	**6.8000e-004**	**0.0000**	**12.6786**

3.9 5_Utility and Electrical Connections - 2016

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	0.2072	1.3844	1.3985	2.0400e-003		0.0871	0.0871		0.0844	0.0844	0.0000	178.7902	178.7902	0.0456	0.0000	179.7480
Total	**0.2072**	**1.3844**	**1.3985**	**2.0400e-003**		**0.0871**	**0.0871**		**0.0844**	**0.0844**	**0.0000**	**178.7902**	**178.7902**	**0.0456**	**0.0000**	**179.7480**

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	0.0192	0.0271	0.2828	6.2000e-004	0.0502	4.3000e-004	0.0507	0.0133	4.0000e-004	0.0137	0.0000	47.1313	47.1313	2.5400e-003	0.0000	47.1847
Total	**0.0192**	**0.0271**	**0.2828**	**6.2000e-004**	**0.0502**	**4.3000e-004**	**0.0507**	**0.0133**	**4.0000e-004**	**0.0137**	**0.0000**	**47.1313**	**47.1313**	**2.5400e-003**	**0.0000**	**47.1847**

3.9 5_Utility and Electrical Connections - 2016

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	0.2072	1.3843	1.3985	2.0400e-003		0.0871	0.0871		0.0844	0.0844	0.0000	178.7900	178.7900	0.0456	0.0000	179.7478
Total	**0.2072**	**1.3843**	**1.3985**	**2.0400e-003**		**0.0871**	**0.0871**		**0.0844**	**0.0844**	**0.0000**	**178.7900**	**178.7900**	**0.0456**	**0.0000**	**179.7478**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0192	0.0271	0.2828	6.2000e-004	0.0502	4.3000e-004	0.0507	0.0133	4.0000e-004	0.0137	0.0000	47.1313	47.1313	2.5400e-003	0.0000	47.1847
Total	**0.0192**	**0.0271**	**0.2828**	**6.2000e-004**	**0.0502**	**4.3000e-004**	**0.0507**	**0.0133**	**4.0000e-004**	**0.0137**	**0.0000**	**47.1313**	**47.1313**	**2.5400e-003**	**0.0000**	**47.1847**

3.10 4B_Press Installaion - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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	4.1000e-004	7.4800e-003	4.5200e-003	2.0000e-005	4.5000e-004	1.1000e-004	5.6000e-004	1.2000e-004	1.0000e-004	2.3000e-004	0.0000	1.7563	1.7563	1.0000e-005	0.0000	1.7565
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	**4.1000e-004**	**7.4800e-003**	**4.5200e-003**	**2.0000e-005**	**4.5000e-004**	**1.1000e-004**	**5.6000e-004**	**1.2000e-004**	**1.0000e-004**	**2.3000e-004**	**0.0000**	**1.7563**	**1.7563**	**1.0000e-005**	**0.0000**	**1.7565**

3.10 4B_Press Installaion - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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	4.1000e-004	7.4800e-003	4.5200e-003	2.0000e-005	4.5000e-004	1.1000e-004	5.6000e-004	1.2000e-004	1.0000e-004	2.3000e-004	0.0000	1.7563	1.7563	1.0000e-005	0.0000	1.7565
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	**4.1000e-004**	**7.4800e-003**	**4.5200e-003**	**2.0000e-005**	**4.5000e-004**	**1.1000e-004**	**5.6000e-004**	**1.2000e-004**	**1.0000e-004**	**2.3000e-004**	**0.0000**	**1.7563**	**1.7563**	**1.0000e-005**	**0.0000**	**1.7565**

3.11 4A_Adjusted - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1000e-004	0.0148	0.0128	2.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	2.0511	2.0511	6.2000e-004	0.0000	2.0641
Total	**9.1000e-004**	**0.0148**	**0.0128**	**2.0000e-005**		**4.2000e-004**	**4.2000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**2.0511**	**2.0511**	**6.2000e-004**	**0.0000**	**2.0641**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0200e-003	8.5000e-003	0.0887	1.9000e-004	0.0158	1.3000e-004	0.0159	4.1800e-003	1.2000e-004	4.3100e-003	0.0000	14.7750	14.7750	8.0000e-004	0.0000	14.7918
Total	**6.0200e-003**	**8.5000e-003**	**0.0887**	**1.9000e-004**	**0.0158**	**1.3000e-004**	**0.0159**	**4.1800e-003**	**1.2000e-004**	**4.3100e-003**	**0.0000**	**14.7750**	**14.7750**	**8.0000e-004**	**0.0000**	**14.7918**

3.11 4A_Adjusted - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1000e-004	0.0148	0.0128	2.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	2.0511	2.0511	6.2000e-004	0.0000	2.0641
Total	**9.1000e-004**	**0.0148**	**0.0128**	**2.0000e-005**		**4.2000e-004**	**4.2000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**2.0511**	**2.0511**	**6.2000e-004**	**0.0000**	**2.0641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0200e-003	8.5000e-003	0.0887	1.9000e-004	0.0158	1.3000e-004	0.0159	4.1800e-003	1.2000e-004	4.3100e-003	0.0000	14.7750	14.7750	8.0000e-004	0.0000	14.7918
Total	**6.0200e-003**	**8.5000e-003**	**0.0887**	**1.9000e-004**	**0.0158**	**1.3000e-004**	**0.0159**	**4.1800e-003**	**1.2000e-004**	**4.3100e-003**	**0.0000**	**14.7750**	**14.7750**	**8.0000e-004**	**0.0000**	**14.7918**

3.12 3B_Paving - 2016

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	1.5000e-003	0.0169	0.0107	2.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	1.5956	1.5956	4.8000e-004	0.0000	1.6057
Paving	3.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1300e-003**	**0.0169**	**0.0107**	**2.0000e-005**		**8.4000e-004**	**8.4000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**1.5956**	**1.5956**	**4.8000e-004**	**0.0000**	**1.6057**

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	7.6000e-004	0.0131	7.6900e-003	4.0000e-005	1.0700e-003	2.4000e-004	1.3000e-003	3.0000e-004	2.2000e-004	5.2000e-004	0.0000	3.2226	3.2226	2.0000e-005	0.0000	3.2230
Worker	4.9000e-004	6.9000e-004	7.2000e-003	2.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1993	1.1993	6.0000e-005	0.0000	1.2006
Total	**1.2500e-003**	**0.0138**	**0.0149**	**6.0000e-005**	**2.3500e-003**	**2.5000e-004**	**2.5900e-003**	**6.4000e-004**	**2.3000e-004**	**8.7000e-004**	**0.0000**	**4.4219**	**4.4219**	**8.0000e-005**	**0.0000**	**4.4237**

3.12 3B_Paving - 2016

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	1.5000e-003	0.0169	0.0107	2.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	1.5956	1.5956	4.8000e-004	0.0000	1.6057
Paving	3.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1300e-003**	**0.0169**	**0.0107**	**2.0000e-005**		**8.4000e-004**	**8.4000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**1.5956**	**1.5956**	**4.8000e-004**	**0.0000**	**1.6057**

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	7.6000e-004	0.0131	7.6900e-003	4.0000e-005	1.0700e-003	2.4000e-004	1.3000e-003	3.0000e-004	2.2000e-004	5.2000e-004	0.0000	3.2226	3.2226	2.0000e-005	0.0000	3.2230
Worker	4.9000e-004	6.9000e-004	7.2000e-003	2.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1993	1.1993	6.0000e-005	0.0000	1.2006
Total	**1.2500e-003**	**0.0138**	**0.0149**	**6.0000e-005**	**2.3500e-003**	**2.5000e-004**	**2.5900e-003**	**6.4000e-004**	**2.3000e-004**	**8.7000e-004**	**0.0000**	**4.4219**	**4.4219**	**8.0000e-005**	**0.0000**	**4.4237**

3.13 6C_Substation Demolition - 2016

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					1.0300e-003	0.0000	1.0300e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2526	0.2001	3.0000e-004		0.0136	0.0136		0.0127	0.0127	0.0000	27.3899	27.3899	8.0900e-003	0.0000	27.5597
Total	**0.0264**	**0.2526**	**0.2001**	**3.0000e-004**	**1.0300e-003**	**0.0136**	**0.0146**	**1.6000e-004**	**0.0127**	**0.0128**	**0.0000**	**27.3899**	**27.3899**	**8.0900e-003**	**0.0000**	**27.5597**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-004	2.1400e-003	1.2900e-003	1.0000e-005	1.3000e-004	3.0000e-005	1.6000e-004	4.0000e-005	3.0000e-005	6.0000e-005	0.0000	0.5018	0.5018	0.0000	0.0000	0.5019
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	2.4600e-003	3.4800e-003	0.0363	8.0000e-005	6.4400e-003	6.0000e-005	6.5000e-003	1.7100e-003	5.0000e-005	1.7600e-003	0.0000	6.0443	6.0443	3.3000e-004	0.0000	6.0512
Total	**2.5800e-003**	**5.6200e-003**	**0.0376**	**9.0000e-005**	**6.5700e-003**	**9.0000e-005**	**6.6600e-003**	**1.7500e-003**	**8.0000e-005**	**1.8200e-003**	**0.0000**	**6.5461**	**6.5461**	**3.3000e-004**	**0.0000**	**6.5530**

3.13 6C_Substation Demolition - 2016

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					4.7000e-004	0.0000	4.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2526	0.2001	3.0000e-004		0.0136	0.0136		0.0127	0.0127	0.0000	27.3898	27.3898	8.0900e-003	0.0000	27.5597
Total	**0.0264**	**0.2526**	**0.2001**	**3.0000e-004**	**4.7000e-004**	**0.0136**	**0.0141**	**7.0000e-005**	**0.0127**	**0.0128**	**0.0000**	**27.3898**	**27.3898**	**8.0900e-003**	**0.0000**	**27.5597**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-004	2.1400e-003	1.2900e-003	1.0000e-005	1.3000e-004	3.0000e-005	1.6000e-004	4.0000e-005	3.0000e-005	6.0000e-005	0.0000	0.5018	0.5018	0.0000	0.0000	0.5019
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	2.4600e-003	3.4800e-003	0.0363	8.0000e-005	6.4400e-003	6.0000e-005	6.5000e-003	1.7100e-003	5.0000e-005	1.7600e-003	0.0000	6.0443	6.0443	3.3000e-004	0.0000	6.0512
Total	**2.5800e-003**	**5.6200e-003**	**0.0376**	**9.0000e-005**	**6.5700e-003**	**9.0000e-005**	**6.6600e-003**	**1.7500e-003**	**8.0000e-005**	**1.8200e-003**	**0.0000**	**6.5461**	**6.5461**	**3.3000e-004**	**0.0000**	**6.5530**

3.14 4A_Equipment Installation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2243	2.6591	1.0238	1.8700e-003		0.1227	0.1227		0.1129	0.1129	0.0000	176.0905	176.0905	0.0531	0.0000	177.2059
Total	**0.2243**	**2.6591**	**1.0238**	**1.8700e-003**		**0.1227**	**0.1227**		**0.1129**	**0.1129**	**0.0000**	**176.0905**	**176.0905**	**0.0531**	**0.0000**	**177.2059**

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	0.0238	0.0336	0.3506	7.7000e-004	0.0623	5.3000e-004	0.0628	0.0165	4.9000e-004	0.0170	0.0000	58.4284	58.4284	3.1500e-003	0.0000	58.4946
Total	**0.0238**	**0.0336**	**0.3506**	**7.7000e-004**	**0.0623**	**5.3000e-004**	**0.0628**	**0.0165**	**4.9000e-004**	**0.0170**	**0.0000**	**58.4284**	**58.4284**	**3.1500e-003**	**0.0000**	**58.4946**

3.14 4A_Equipment Installation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2243	2.6591	1.0238	1.8700e-003		0.1227	0.1227		0.1129	0.1129	0.0000	176.0903	176.0903	0.0531	0.0000	177.2057
Total	**0.2243**	**2.6591**	**1.0238**	**1.8700e-003**		**0.1227**	**0.1227**		**0.1129**	**0.1129**	**0.0000**	**176.0903**	**176.0903**	**0.0531**	**0.0000**	**177.2057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0238	0.0336	0.3506	7.7000e-004	0.0623	5.3000e-004	0.0628	0.0165	4.9000e-004	0.0170	0.0000	58.4284	58.4284	3.1500e-003	0.0000	58.4946
Total	**0.0238**	**0.0336**	**0.3506**	**7.7000e-004**	**0.0623**	**5.3000e-004**	**0.0628**	**0.0165**	**4.9000e-004**	**0.0170**	**0.0000**	**58.4284**	**58.4284**	**3.1500e-003**	**0.0000**	**58.4946**

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	0.1202	0.4350	1.5845	4.2000e-003	0.2895	6.0500e-003	0.2955	0.0775	5.5700e-003	0.0830	0.0000	325.0446	325.0446	0.0126	0.0000	325.3086
Unmitigated	0.1202	0.4350	1.5845	4.2000e-003	0.2895	6.0500e-003	0.2955	0.0775	5.5700e-003	0.0830	0.0000	325.0446	325.0446	0.0126	0.0000	325.3086

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	172.50	172.50	172.50	763,878	763,878
Parking Lot	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	172.50	172.50	172.50	763,878	763,878

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	426.9009	426.9009	0.0196	4.0600e-003	428.5716
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	426.9009	426.9009	0.0196	4.0600e-003	428.5716
NaturalGas Mitigated	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	115.4339	115.4339	2.2100e-003	2.1200e-003	116.1364
NaturalGas Unmitigated	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	115.4339	115.4339	2.2100e-003	2.1200e-003	116.1364

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Heavy Industry	2.16315e+006	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	115.4339	115.4339	2.2100e-003	2.1200e-003	116.1364
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0117**	**0.1060**	**0.0891**	**6.4000e-004**		**8.0600e-003**	**8.0600e-003**		**8.0600e-003**	**8.0600e-003**	**0.0000**	**115.4339**	**115.4339**	**2.2100e-003**	**2.1200e-003**	**116.1364**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	2.16315e+006	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	115.4339	115.4339	2.2100e-003	2.1200e-003	116.1364
Total		**0.0117**	**0.1060**	**0.0891**	**6.4000e-004**		**8.0600e-003**	**8.0600e-003**		**8.0600e-003**	**8.0600e-003**	**0.0000**	**115.4339**	**115.4339**	**2.2100e-003**	**2.1200e-003**	**116.1364**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	1.38575e+006	396.5558	0.0182	3.7700e-003	398.1077
Parking Lot	106040	30.3451	1.3900e-003	2.9000e-004	30.4639
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**426.9009**	**0.0196**	**4.0600e-003**	**428.5716**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	1.38575e+006	396.5558	0.0182	3.7700e-003	398.1077
Parking Lot	106040	30.3451	1.3900e-003	2.9000e-004	30.4639
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**426.9009**	**0.0196**	**4.0600e-003**	**428.5716**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9594**					**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9594**					**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	107.5300	0.8710	0.0214	132.4451
Unmitigated	107.5300	0.8711	0.0214	132.4586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	26.5938 / 0	107.5300	0.8711	0.0214	132.4586
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**107.5300**	**0.8711**	**0.0214**	**132.4586**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	26.5938 / 0	107.5300	0.8710	0.0214	132.4451
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**107.5300**	**0.8710**	**0.0214**	**132.4451**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	28.9465	1.7107	0.0000	64.8710
Unmitigated	28.9465	1.7107	0.0000	64.8710

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	142.6	28.9465	1.7107	0.0000	64.8710
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**28.9465**	**1.7107**	**0.0000**	**64.8710**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	142.6	28.9465	1.7107	0.0000	64.8710
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**28.9465**	**1.7107**	**0.0000**	**64.8710**

9.0 Operational Offroad

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

10.0 Vegetation

CALEEMOD Summer Results

Weber Metals

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	115.00	1000sqft	2.64	115,000.00	0
User Defined Industrial	30.00	User Defined Unit	0.69	30,000.00	0
Parking Lot	120.50	1000sqft	2.77	120,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Footprint of substation is 30,000 SF. Total paving area is 120,500 SF

Construction Phase - Based on construction schedule provided by Weber Metals; 4B expected to occur in one day in the month of June

Off-road Equipment - 1 dozers and 2 loader

Off-road Equipment - 1 drill rig, 4 excavators, 2 loaders, 1 dozer, 2 rollers

Off-road Equipment - 3 cranes, 6 rough terrain forklifts, 9 lifts (5 aerial, 4 scissor), 2 welders, 2 air compressors, 2 pumps

Off-road Equipment - one paver

Off-road Equipment - 1 forklift, 9 cranes, 3 lifts

Off-road Equipment - 9 cranes, 3 aerial lifts, 1 forklift

Off-road Equipment - 35 trucks to haul new press; no on-site off road equipment

Off-road Equipment - 2 rough terrain forklifts, 10 lifts (2 aerial, 8 scissor), 4 welders, 2 air compressors

Off-road Equipment - 1 dozer, 2 loaders

Off-road Equipment - 1 crane, 6 rough terrain forklifts, 2 welders, 4 aerial lifts

Off-road Equipment - 4 lifts, 6 rough terrain forklifts, 2 welders, 1 crane

Trips and VMT - excavation/dewatering - 6,876 trips; press facility construction - 470 vehicles, 12 concrete trucks; substation construction - 60 vehicles; utility connections - 75 vehicles; equipment installation - 140 vehicles

Demolition - demolition of old substation. footprint ~ 35' x 60'

Grading - pit estimated to be 190' by 150' and 85' deep, up to 120,000 SF disturbed per day during site prep, up to 30,000 SF disturbed during Substation site prep

Architectural Coating -

Road Dust -

Area Coating - no architectural coating

Landscape Equipment - no landscaping

Energy Use - Electricity to be calculated outside of CalEEMod

Construction Off-road Equipment Mitigation - dust mitigation, Tier 2 dozers in Phase 1 and 2

Operational Off-Road Equipment - No Offroad Equiipment

Off-road Equipment - 2 rough terrain forklifts

Off-road Equipment - 1 aerial lift

Off-road Equipment - one aerial lift, one rough terrain forklift

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	74308	0
tblAreaCoating	Area_Nonresidential_Interior	222923	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	216.00
tblConstructionPhase	NumDays	230.00	196.00
tblConstructionPhase	NumDays	230.00	131.00

tblConstructionPhase	NumDays	230.00	87.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	230.00	43.00
tblConstructionPhase	NumDays	230.00	22.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	PhaseEndDate	12/30/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/29/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/2/2016	6/2/2016
tblConstructionPhase	PhaseEndDate	7/13/2016	7/31/2016
tblConstructionPhase	PhaseEndDate	7/14/2016	6/14/2016
tblConstructionPhase	PhaseEndDate	9/30/2015	7/31/2015
tblConstructionPhase	PhaseEndDate	6/29/2016	9/30/2015
tblConstructionPhase	PhaseEndDate	8/30/2016	5/31/2016
tblConstructionPhase	PhaseEndDate	7/4/2016	6/30/2016
tblConstructionPhase	PhaseEndDate	8/1/2016	6/30/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	5/1/2016
tblConstructionPhase	PhaseStartDate	8/1/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	11/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	5/1/2015
tblConstructionPhase	PhaseStartDate	5/31/2016	9/1/2015
tblConstructionPhase	PhaseStartDate	7/1/2016	4/1/2016

tblConstructionPhase	PhaseStartDate	6/3/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/1/2016	5/1/2016
tblGrading	AcresOfGrading	0.00	0.65
tblGrading	AcresOfGrading	0.00	2.75
tblGrading	AcresOfGrading	0.00	0.69
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	HorsePower	62.00	46.00
tblOffRoadEquipment	LoadFactor	0.31	0.45
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts

tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	PhaseName		4A_Equipment Installation
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		3A_Adjusted
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections

tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		4A_Adjusted
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00

tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripNumber	0.00	35.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripNumber	44.00	12.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00

tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	33.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	8.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	75.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00
tblTripsAndVMT	WorkerTripNumber	112.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	25.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00

tblTripsAndVMT	WorkerTripNumber	5.00	60.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	11.4396	104.1606	94.8871	0.1701	14.7211	4.8960	18.6025	6.4317	4.6250	10.0025	0.0000	17,385.6835	17,385.6835	2.6845	0.0000	17,442.0581
2016	16.7356	115.9514	156.9045	0.2913	12.6928	6.2272	18.9200	3.3618	5.9028	9.2646	0.0000	26,693.0769	26,693.0769	4.1117	0.0000	26,779.4235
Total	**28.1752**	**220.1120**	**251.7916**	**0.4614**	**27.4139**	**11.1231**	**37.5225**	**9.7935**	**10.5278**	**19.2671**	**0.0000**	**44,078.7604**	**44,078.7604**	**6.7962**	**0.0000**	**44,221.4816**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	11.4396	97.3086	94.8871	0.1701	9.6679	4.8960	13.6045	3.6893	4.6250	6.9379	0.0000	17,385.6835	17,385.6835	2.6845	0.0000	17,442.0581
2016	16.7356	115.9514	156.9045	0.2913	12.6928	6.2272	18.9200	3.3618	5.9028	9.2646	0.0000	26,693.0768	26,693.0768	4.1117	0.0000	26,779.4235
Total	**28.1752**	**213.2599**	**251.7916**	**0.4614**	**22.3607**	**11.1231**	**32.5245**	**7.0511**	**10.5278**	**16.2025**	**0.0000**	**44,078.7604**	**44,078.7604**	**6.7962**	**0.0000**	**44,221.4816**

	ROG	NOx	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	3.11	0.00	0.00	18.43	0.00	13.32	28.00	0.00	15.91	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Energy	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Mobile	0.6728	2.2246	8.9041	0.0241	1.6199	0.0332	1.6531	0.4328	0.0306	0.4634		2,046.2441	2,046.2441	0.0762		2,047.8448
Total	**5.9963**	**2.8059**	**9.4198**	**0.0275**	**1.6199**	**0.0775**	**1.6974**	**0.4328**	**0.0749**	**0.5077**		**2,743.5303**	**2,743.5303**	**0.0897**	**0.0128**	**2,749.3775**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Energy	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Mobile	0.6728	2.2246	8.9041	0.0241	1.6199	0.0332	1.6531	0.4328	0.0306	0.4634		2,046.2441	2,046.2441	0.0762		2,047.8448
Total	**5.9963**	**2.8059**	**9.4198**	**0.0275**	**1.6199**	**0.0775**	**1.6974**	**0.4328**	**0.0749**	**0.5077**		**2,743.5303**	**2,743.5303**	**0.0897**	**0.0128**	**2,749.3775**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1_Site Preparation	Site Preparation	5/1/2015	6/30/2015	5	43	
2	2_Excavation/Dewatering	Site Preparation	5/1/2015	7/31/2015	5	66	
3	3A_Press Facility Construction	Building Construction	8/1/2015	5/30/2016	5	216	
4	6A_Site Prep	Site Preparation	9/1/2015	9/30/2015	5	22	
5	6B_Substation Construction	Building Construction	10/1/2015	6/30/2016	5	196	
6	3A_Adjusted	Building Construction	4/1/2016	5/31/2016	5	43	
7	6A_Adjusted	Site Preparation	5/1/2016	6/30/2016	5	44	
8	5_Utility and Electrical Connections	Building Construction	5/1/2016	10/31/2016	5	131	
9	4B_Press Installaion	Building Construction	6/1/2016	6/2/2016	5	2	
10	4A_Adjusted	Building Construction	6/1/2016	6/30/2016	5	22	
11	3B_Paving	Paving	6/1/2016	6/14/2016	5	10	
12	6C_Substation Demolition	Demolition	7/1/2016	7/31/2016	5	21	
13	4A_Equipment Installation	Building Construction	7/1/2016	10/31/2016	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1_Site Preparation	Rubber Tired Dozers	1	6.00	255	0.40
1_Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
4A_Equipment Installation	Aerial Lifts	3	6.00	62	0.31
6C_Substation Demolition	Aerial Lifts	4	6.00	62	0.31
6A_Adjusted	Aerial Lifts	1	8.00	62	0.31
2_Excavation/Dewatering	Rubber Tired Dozers	1	6.00	255	0.40
2_Excavation/Dewatering	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6C_Substation Demolition	Rough Terrain Forklifts	6	6.00	100	0.40
6C_Substation Demolition	Welders	2	6.00	46	0.45
3A_Press Facility Construction	Cranes	3	6.00	226	0.29
6C_Substation Demolition	Cranes	1	6.00	226	0.29
3A_Press Facility Construction	Welders	2	6.00	46	0.45
6A_Site Prep	Rubber Tired Dozers	1	6.00	255	0.40
6A_Site Prep	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6B_Substation Construction	Rough Terrain Forklifts	6	6.00	100	0.40
6B_Substation Construction	Cranes	1	6.00	226	0.29
3A_Adjusted	Rough Terrain Forklifts	2	8.00	100	0.40
6B_Substation Construction	Welders	2	6.00	46	0.45
6A_Adjusted	Rough Terrain Forklifts	1	8.00	100	0.40
5_Utility and Electrical Connections	Welders	4	6.00	46	0.45
4A_Equipment Installation	Cranes	9	6.00	226	0.29
4A_Equipment Installation	Forklifts	1	6.00	89	0.20
3B_Paving	Pavers	1	6.00	125	0.42
6B_Substation Construction	Aerial Lifts	4	6.00	62	0.31
5_Utility and Electrical Connections	Rough Terrain Forklifts	2	6.00	100	0.40
5_Utility and Electrical Connections	Aerial Lifts	10	6.00	62	0.31

5_Utility and Electrical Connections	Air Compressors	2	6.00	78	0.48
4A_Adjusted	Aerial Lifts	1	8.00	46	0.45
2_Excavation/Dewatering	Bore/Drill Rigs	1	6.00	205	0.50
2_Excavation/Dewatering	Excavators	4	6.00	162	0.38
2_Excavation/Dewatering	Rollers	2	6.00	80	0.38
3A_Press Facility Construction	Rough Terrain Forklifts	6	6.00	100	0.40
3A_Press Facility Construction	Aerial Lifts	9	6.00	62	0.31
3A_Press Facility Construction	Air Compressors	2	6.00	78	0.48
3A_Press Facility Construction	Pumps	2	6.00	84	0.74
4B_Press Installaion	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1_Site Preparation	3	25.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
2_Excavation/Dewatering	10	25.00	0.00	6,875.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Press Facility Construction	24	470.00	12.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Site Prep	3	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6B_Substation Construction	13	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
5_Utility and Electrical Connections	18	75.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Equipment Installation	13	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4B_Press Installaion	0	0.00	0.00	35.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3B_Paving	1	25.00	8.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6C_Substation Demolition	13	60.00	0.00	10.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Adjusted	2	470.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Adjusted	1	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Adjusted	2	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 1_Site Preparation - 2015

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					4.5326	0.0000	4.5326	2.4844	0.0000	2.4844			0.0000			0.0000
Off-Road	1.4954	15.9385	11.8708	0.0113		0.9064	0.9064		0.8339	0.8339		1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**1.4954**	**15.9385**	**11.8708**	**0.0113**	**4.5326**	**0.9064**	**5.4390**	**2.4844**	**0.8339**	**3.3183**		**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.2 1_Site Preparation - 2015

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	0.1123	0.1354	1.6800	3.3100e-003	0.2605	2.3100e-003	0.2628	0.0691	2.1100e-003	0.0712		287.4726	287.4726	0.0155		287.7982
Total	**0.1123**	**0.1354**	**1.6800**	**3.3100e-003**	**0.2605**	**2.3100e-003**	**0.2628**	**0.0691**	**2.1100e-003**	**0.0712**		**287.4726**	**287.4726**	**0.0155**		**287.7982**

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					2.0397	0.0000	2.0397	1.1180	0.0000	1.1180			0.0000			0.0000
Off-Road	0.9721	12.5124	8.7527	0.0113		0.6525	0.6525		0.6066	0.6066	0.0000	1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**0.9721**	**12.5124**	**8.7527**	**0.0113**	**2.0397**	**0.6525**	**2.6922**	**1.1180**	**0.6066**	**1.7245**	**0.0000**	**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.2 1_Site Preparation - 2015

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	0.1123	0.1354	1.6800	3.3100e-003	0.2605	2.3100e-003	0.2628	0.0691	2.1100e-003	0.0712		287.4726	287.4726	0.0155		287.7982
Total	**0.1123**	**0.1354**	**1.6800**	**3.3100e-003**	**0.2605**	**2.3100e-003**	**0.2628**	**0.0691**	**2.1100e-003**	**0.0712**		**287.4726**	**287.4726**	**0.0155**		**287.7982**

3.3 2_Excavation/Dewatering - 2015

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					4.6550	0.0000	4.6550	2.5017	0.0000	2.5017			0.0000			0.0000
Off-Road	3.5838	40.0844	26.8493	0.0377		2.1376	2.1376		1.9666	1.9666		3,958.0706	3,958.0706	1.1817		3,982.8852
Total	**3.5838**	**40.0844**	**26.8493**	**0.0377**	**4.6550**	**2.1376**	**6.7926**	**2.5017**	**1.9666**	**4.4683**		**3,958.0706**	**3,958.0706**	**1.1817**		**3,982.8852**

3.3 2_Excavation/Dewatering - 2015

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	2.6728	47.8670	26.4242	0.1144	4.7862	0.8328	5.6190	1.2518	0.7661	2.0179		11,660.9879	11,660.9879	0.0901		11,662.8793
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	0.1123	0.1354	1.6800	3.3100e-003	0.4869	2.3100e-003	0.4892	0.1247	2.1100e-003	0.1268		287.4726	287.4726	0.0155		287.7982
Total	**2.7851**	**48.0024**	**28.1041**	**0.1177**	**5.2730**	**0.8351**	**6.1082**	**1.3765**	**0.7682**	**2.1447**		**11,948.4605**	**11,948.4605**	**0.1056**		**11,950.6776**

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					2.0948	0.0000	2.0948	1.1258	0.0000	1.1258			0.0000			0.0000
Off-Road	3.0605	36.6584	23.7312	0.0377		1.8837	1.8837		1.7393	1.7393	0.0000	3,958.0706	3,958.0706	1.1817		3,982.8852
Total	**3.0605**	**36.6584**	**23.7312**	**0.0377**	**2.0948**	**1.8837**	**3.9785**	**1.1258**	**1.7393**	**2.8651**	**0.0000**	**3,958.0706**	**3,958.0706**	**1.1817**		**3,982.8852**

3.3 2_Excavation/Dewatering - 2015

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	2.6728	47.8670	26.4242	0.1144	4.7862	0.8328	5.6190	1.2518	0.7661	2.0179		11,660.9879	11,660.9879	0.0901		11,662.8793
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	0.1123	0.1354	1.6800	3.3100e-003	0.4869	2.3100e-003	0.4892	0.1247	2.1100e-003	0.1268		287.4726	287.4726	0.0155		287.7982
Total	**2.7851**	**48.0024**	**28.1041**	**0.1177**	**5.2730**	**0.8351**	**6.1082**	**1.3765**	**0.7682**	**2.1447**		**11,948.4605**	**11,948.4605**	**0.1056**		**11,950.6776**

3.4 3A_Press Facility Construction - 2015

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	6.0473	56.4372	37.6441	0.0590		3.2936	3.2936		3.1321	3.1321		5,937.4409	5,937.4409	1.4906		5,968.7426
Total	**6.0473**	**56.4372**	**37.6441**	**0.0590**		**3.2936**	**3.2936**		**3.1321**	**3.1321**		**5,937.4409**	**5,937.4409**	**1.4906**		**5,968.7426**

3.4 3A_Press Facility Construction - 2015

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	0.2502	4.2739	2.3228	0.0106	0.3250	0.0855	0.4105	0.0924	0.0786	0.1711		1,078.5155	1,078.5155	7.6200e-003		1,078.6755
Worker	2.1109	2.5452	31.5833	0.0622	4.8964	0.0434	4.9398	1.2986	0.0397	1.3383		5,404.4850	5,404.4850	0.2915		5,410.6070
Total	**2.3610**	**6.8190**	**33.9061**	**0.0728**	**5.2214**	**0.1288**	**5.3503**	**1.3910**	**0.1184**	**1.5094**		**6,483.0004**	**6,483.0004**	**0.2992**		**6,489.2825**

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	6.0473	56.4372	37.6441	0.0590		3.2936	3.2936		3.1321	3.1321	0.0000	5,937.4409	5,937.4409	1.4906		5,968.7426
Total	**6.0473**	**56.4372**	**37.6441**	**0.0590**		**3.2936**	**3.2936**		**3.1321**	**3.1321**	**0.0000**	**5,937.4409**	**5,937.4409**	**1.4906**		**5,968.7426**

3.4 3A_Press Facility Construction - 2015

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	0.2502	4.2739	2.3228	0.0106	0.3250	0.0855	0.4105	0.0924	0.0786	0.1711		1,078.5155	1,078.5155	7.6200e-003		1,078.6755
Worker	2.1109	2.5452	31.5833	0.0622	4.8964	0.0434	4.9398	1.2986	0.0397	1.3383		5,404.4850	5,404.4850	0.2915		5,410.6070
Total	**2.3610**	**6.8190**	**33.9061**	**0.0728**	**5.2214**	**0.1288**	**5.3503**	**1.3910**	**0.1184**	**1.5094**		**6,483.0004**	**6,483.0004**	**0.2992**		**6,489.2825**

3.4 3A_Press Facility Construction - 2016

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	5.5397	52.4270	37.1648	0.0590		2.9444	2.9444		2.8001	2.8001		5,895.7320	5,895.7320	1.4652		5,926.5009
Total	**5.5397**	**52.4270**	**37.1648**	**0.0590**		**2.9444**	**2.9444**		**2.8001**	**2.8001**		**5,895.7320**	**5,895.7320**	**1.4652**		**5,926.5009**

3.4 3A_Press Facility Construction - 2016

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	0.2214	3.7342	2.1117	0.0106	0.3251	0.0712	0.3963	0.0925	0.0655	0.1580		1,066.6149	1,066.6149	6.8100e-003		1,066.7580
Worker	1.9079	2.2958	28.5985	0.0621	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		5,218.2934	5,218.2934	0.2682		5,223.9257
Total	**2.1293**	**6.0301**	**30.7101**	**0.0727**	**5.2215**	**0.1124**	**5.3339**	**1.3911**	**0.1034**	**1.4944**		**6,284.9083**	**6,284.9083**	**0.2750**		**6,290.6837**

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	5.5397	52.4270	37.1648	0.0590		2.9444	2.9444		2.8001	2.8001	0.0000	5,895.7320	5,895.7320	1.4652		5,926.5009
Total	**5.5397**	**52.4270**	**37.1648**	**0.0590**		**2.9444**	**2.9444**		**2.8001**	**2.8001**	**0.0000**	**5,895.7320**	**5,895.7320**	**1.4652**		**5,926.5009**

3.4 3A_Press Facility Construction - 2016

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	0.2214	3.7342	2.1117	0.0106	0.3251	0.0712	0.3963	0.0925	0.0655	0.1580		1,066.6149	1,066.6149	6.8100e-003		1,066.7580
Worker	1.9079	2.2958	28.5985	0.0621	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		5,218.2934	5,218.2934	0.2682		5,223.9257
Total	**2.1293**	**6.0301**	**30.7101**	**0.0727**	**5.2215**	**0.1124**	**5.3339**	**1.3911**	**0.1034**	**1.4944**		**6,284.9083**	**6,284.9083**	**0.2750**		**6,290.6837**

3.5 6A_Site Prep - 2015

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					4.5498	0.0000	4.5498	2.4863	0.0000	2.4863			0.0000			0.0000
Off-Road	1.4954	15.9385	11.8708	0.0113		0.9064	0.9064		0.8339	0.8339		1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**1.4954**	**15.9385**	**11.8708**	**0.0113**	**4.5498**	**0.9064**	**5.4562**	**2.4863**	**0.8339**	**3.3201**		**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.5 6A_Site Prep - 2015

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	0.2695	0.3249	4.0319	7.9300e-003	2.2552	5.5300e-003	2.2608	0.5659	5.0700e-003	0.5710		689.9343	689.9343	0.0372		690.7158
Total	**0.2695**	**0.3249**	**4.0319**	**7.9300e-003**	**2.2552**	**5.5300e-003**	**2.2608**	**0.5659**	**5.0700e-003**	**0.5710**		**689.9343**	**689.9343**	**0.0372**		**690.7158**

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					2.0474	0.0000	2.0474	1.1188	0.0000	1.1188			0.0000			0.0000
Off-Road	0.9721	12.5124	8.7527	0.0113		0.6525	0.6525		0.6066	0.6066	0.0000	1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**0.9721**	**12.5124**	**8.7527**	**0.0113**	**2.0474**	**0.6525**	**2.6999**	**1.1188**	**0.6066**	**1.7254**	**0.0000**	**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.5 6A_Site Prep - 2015

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	0.2695	0.3249	4.0319	7.9300e-003	2.2552	5.5300e-003	2.2608	0.5659	5.0700e-003	0.5710		689.9343	689.9343	0.0372		690.7158
Total	**0.2695**	**0.3249**	**4.0319**	**7.9300e-003**	**2.2552**	**5.5300e-003**	**2.2608**	**0.5659**	**5.0700e-003**	**0.5710**		**689.9343**	**689.9343**	**0.0372**		**690.7158**

3.6 6B_Substation Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7618	26.1613	19.3051	0.0285		1.4680	1.4680		1.3694	1.3694		2,901.3045	2,901.3045	0.8576		2,919.3138
Total	**2.7618**	**26.1613**	**19.3051**	**0.0285**		**1.4680**	**1.4680**		**1.3694**	**1.3694**		**2,901.3045**	**2,901.3045**	**0.8576**		**2,919.3138**

3.6 6B_Substation Construction - 2015

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	0.2695	0.3249	4.0319	7.9300e-003	1.1685	5.5300e-003	1.1740	0.2992	5.0700e-003	0.3042		689.9343	689.9343	0.0372		690.7158
Total	**0.2695**	**0.3249**	**4.0319**	**7.9300e-003**	**1.1685**	**5.5300e-003**	**1.1740**	**0.2992**	**5.0700e-003**	**0.3042**		**689.9343**	**689.9343**	**0.0372**		**690.7158**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7618	26.1613	19.3051	0.0285		1.4680	1.4680		1.3694	1.3694	0.0000	2,901.3045	2,901.3045	0.8576		2,919.3138
Total	**2.7618**	**26.1613**	**19.3051**	**0.0285**		**1.4680**	**1.4680**		**1.3694**	**1.3694**	**0.0000**	**2,901.3045**	**2,901.3045**	**0.8576**		**2,919.3138**

3.6 6B_Substation Construction - 2015

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	0.2695	0.3249	4.0319	7.9300e-003	1.1685	5.5300e-003	1.1740	0.2992	5.0700e-003	0.3042		689.9343	689.9343	0.0372		690.7158
Total	**0.2695**	**0.3249**	**4.0319**	**7.9300e-003**	**1.1685**	**5.5300e-003**	**1.1740**	**0.2992**	**5.0700e-003**	**0.3042**		**689.9343**	**689.9343**	**0.0372**		**690.7158**

3.6 6B_Substation Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073		2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**		**1.2938**	**1.2938**		**1.2073**	**1.2073**		**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.6 6B_Substation Construction - 2016

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	0.2436	0.2931	3.6509	7.9300e-003	1.1685	5.2600e-003	1.1737	0.2992	4.8300e-003	0.3040		666.1651	666.1651	0.0342		666.8841
Total	**0.2436**	**0.2931**	**3.6509**	**7.9300e-003**	**1.1685**	**5.2600e-003**	**1.1737**	**0.2992**	**4.8300e-003**	**0.3040**		**666.1651**	**666.1651**	**0.0342**		**666.8841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073	0.0000	2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**		**1.2938**	**1.2938**		**1.2073**	**1.2073**	**0.0000**	**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.6 6B_Substation Construction - 2016

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	0.2436	0.2931	3.6509	7.9300e-003	1.1685	5.2600e-003	1.1737	0.2992	4.8300e-003	0.3040		666.1651	666.1651	0.0342		666.8841
Total	**0.2436**	**0.2931**	**3.6509**	**7.9300e-003**	**1.1685**	**5.2600e-003**	**1.1737**	**0.2992**	**4.8300e-003**	**0.3040**		**666.1651**	**666.1651**	**0.0342**		**666.8841**

3.7 3A_Adjusted - 2016

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	0.4255	5.4181	4.7150	6.8900e-003		0.3007	0.3007		0.2767	0.2767		715.4489	715.4489	0.2158		719.9808
Total	**0.4255**	**5.4181**	**4.7150**	**6.8900e-003**		**0.3007**	**0.3007**		**0.2767**	**0.2767**		**715.4489**	**715.4489**	**0.2158**		**719.9808**

3.7 3A_Adjusted - 2016

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	1.9079	2.2958	28.5985	0.0621	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		5,218.2934	5,218.2934	0.2682		5,223.9257
Total	**1.9079**	**2.2958**	**28.5985**	**0.0621**	**4.8964**	**0.0412**	**4.9376**	**1.2986**	**0.0379**	**1.3365**		**5,218.2934**	**5,218.2934**	**0.2682**		**5,223.9257**

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	0.4255	5.4181	4.7150	6.8900e-003		0.3007	0.3007		0.2767	0.2767	0.0000	715.4489	715.4489	0.2158		719.9808
Total	**0.4255**	**5.4181**	**4.7150**	**6.8900e-003**		**0.3007**	**0.3007**		**0.2767**	**0.2767**	**0.0000**	**715.4489**	**715.4489**	**0.2158**		**719.9808**

3.7 3A_Adjusted - 2016

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	1.9079	2.2958	28.5985	0.0621	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		5,218.2934	5,218.2934	0.2682		5,223.9257
Total	**1.9079**	**2.2958**	**28.5985**	**0.0621**	**4.8964**	**0.0412**	**4.9376**	**1.2986**	**0.0379**	**1.3365**		**5,218.2934**	**5,218.2934**	**0.2682**		**5,223.9257**

3.8 6A_Adjusted - 2016

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	0.2689	3.6319	3.4426	5.1000e-003		0.1883	0.1883		0.1732	0.1732		529.3214	529.3214	0.1597		532.6743
Total	**0.2689**	**3.6319**	**3.4426**	**5.1000e-003**		**0.1883**	**0.1883**		**0.1732**	**0.1732**		**529.3214**	**529.3214**	**0.1597**		**532.6743**

3.8 6A_Adjusted - 2016

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	0.2436	0.2931	3.6509	7.9300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		666.1651	666.1651	0.0342		666.8841
Total	**0.2436**	**0.2931**	**3.6509**	**7.9300e-003**	**0.6251**	**5.2600e-003**	**0.6303**	**0.1658**	**4.8300e-003**	**0.1706**		**666.1651**	**666.1651**	**0.0342**		**666.8841**

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	0.2689	3.6319	3.4426	5.1000e-003		0.1883	0.1883		0.1732	0.1732	0.0000	529.3214	529.3214	0.1597		532.6743
Total	**0.2689**	**3.6319**	**3.4426**	**5.1000e-003**		**0.1883**	**0.1883**		**0.1732**	**0.1732**	**0.0000**	**529.3214**	**529.3214**	**0.1597**		**532.6743**

3.8 6A_Adjusted - 2016

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	0.2436	0.2931	3.6509	7.9300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		666.1651	666.1651	0.0342		666.8841
Total	**0.2436**	**0.2931**	**3.6509**	**7.9300e-003**	**0.6251**	**5.2600e-003**	**0.6303**	**0.1658**	**4.8300e-003**	**0.1706**		**666.1651**	**666.1651**	**0.0342**		**666.8841**

3.9 5_Utility and Electrical Connections - 2016

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	3.1636	21.1351	21.3512	0.0312		1.3293	1.3293		1.2885	1.2885		3,008.8929	3,008.8929	0.7676		3,025.0116
Total	**3.1636**	**21.1351**	**21.3512**	**0.0312**		**1.3293**	**1.3293**		**1.2885**	**1.2885**		**3,008.8929**	**3,008.8929**	**0.7676**		**3,025.0116**

3.9 5_Utility and Electrical Connections - 2016

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	0.3045	0.3664	4.5636	9.9100e-003	0.7813	6.5700e-003	0.7879	0.2072	6.0400e-003	0.2133		832.7064	832.7064	0.0428		833.6052
Total	**0.3045**	**0.3664**	**4.5636**	**9.9100e-003**	**0.7813**	**6.5700e-003**	**0.7879**	**0.2072**	**6.0400e-003**	**0.2133**		**832.7064**	**832.7064**	**0.0428**		**833.6052**

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	3.1636	21.1351	21.3512	0.0312		1.3293	1.3293		1.2885	1.2885	0.0000	3,008.8929	3,008.8929	0.7676		3,025.0116
Total	**3.1636**	**21.1351**	**21.3512**	**0.0312**		**1.3293**	**1.3293**		**1.2885**	**1.2885**	**0.0000**	**3,008.8929**	**3,008.8929**	**0.7676**		**3,025.0116**

3.9 5_Utility and Electrical Connections - 2016

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	0.3045	0.3664	4.5636	9.9100e-003	0.7813	6.5700e-003	0.7879	0.2072	6.0400e-003	0.2133		832.7064	832.7064	0.0428		833.6052
Total	**0.3045**	**0.3664**	**4.5636**	**9.9100e-003**	**0.7813**	**6.5700e-003**	**0.7879**	**0.2072**	**6.0400e-003**	**0.2133**		**832.7064**	**832.7064**	**0.0428**		**833.6052**

3.10 4B_Press Installaion - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.10 4B_Press Installaion - 2016

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	0.3975	7.0869	4.1005	0.0192	0.4571	0.1119	0.5690	0.1252	0.1030	0.2281		1,937.2332	1,937.2332	0.0136		1,937.5179
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	**0.3975**	**7.0869**	**4.1005**	**0.0192**	**0.4571**	**0.1119**	**0.5690**	**0.1252**	**0.1030**	**0.2281**		**1,937.2332**	**1,937.2332**	**0.0136**		**1,937.5179**

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.10 4B_Press Installaion - 2016

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	0.3975	7.0869	4.1005	0.0192	0.4571	0.1119	0.5690	0.1252	0.1030	0.2281		1,937.2332	1,937.2332	0.0136		1,937.5179
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	**0.3975**	**7.0869**	**4.1005**	**0.0192**	**0.4571**	**0.1119**	**0.5690**	**0.1252**	**0.1030**	**0.2281**		**1,937.2332**	**1,937.2332**	**0.0136**		**1,937.5179**

3.11 4A_Adjusted - 2016

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	0.0832	1.3420	1.1673	1.9800e-003		0.0382	0.0382		0.0351	0.0351		205.5418	205.5418	0.0620		206.8438
Total	**0.0832**	**1.3420**	**1.1673**	**1.9800e-003**		**0.0382**	**0.0382**		**0.0351**	**0.0351**		**205.5418**	**205.5418**	**0.0620**		**206.8438**

3.11 4A_Adjusted - 2016

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	0.5683	0.6839	8.5187	0.0185	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,554.3853	1,554.3853	0.0799		1,556.0630
Total	**0.5683**	**0.6839**	**8.5187**	**0.0185**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,554.3853**	**1,554.3853**	**0.0799**		**1,556.0630**

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	0.0832	1.3420	1.1673	1.9800e-003		0.0382	0.0382		0.0351	0.0351	0.0000	205.5418	205.5418	0.0620		206.8438
Total	**0.0832**	**1.3420**	**1.1673**	**1.9800e-003**		**0.0382**	**0.0382**		**0.0351**	**0.0351**	**0.0000**	**205.5418**	**205.5418**	**0.0620**		**206.8438**

3.11 4A_Adjusted - 2016

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	0.5683	0.6839	8.5187	0.0185	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,554.3853	1,554.3853	0.0799		1,556.0630
Total	**0.5683**	**0.6839**	**8.5187**	**0.0185**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,554.3853**	**1,554.3853**	**0.0799**		**1,556.0630**

3.12 3B_Paving - 2016

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	0.3009	3.3848	2.1391	3.3900e-003		0.1682	0.1682		0.1547	0.1547		351.7699	351.7699	0.1061		353.9981
Paving	0.7257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0266**	**3.3848**	**2.1391**	**3.3900e-003**		**0.1682**	**0.1682**		**0.1547**	**0.1547**		**351.7699**	**351.7699**	**0.1061**		**353.9981**

3.12 3B_Paving - 2016

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	0.1476	2.4895	1.4078	7.0600e-003	0.2167	0.0475	0.2642	0.0617	0.0437	0.1053		711.0766	711.0766	4.5400e-003		711.1720
Worker	0.1015	0.1221	1.5212	3.3000e-003	0.2605	2.1900e-003	0.2626	0.0691	2.0100e-003	0.0711		277.5688	277.5688	0.0143		277.8684
Total	**0.2491**	**2.6116**	**2.9290**	**0.0104**	**0.4772**	**0.0497**	**0.5268**	**0.1307**	**0.0457**	**0.1764**		**988.6454**	**988.6454**	**0.0188**		**989.0404**

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	0.3009	3.3848	2.1391	3.3900e-003		0.1682	0.1682		0.1547	0.1547	0.0000	351.7699	351.7699	0.1061		353.9981
Paving	0.7257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0266**	**3.3848**	**2.1391**	**3.3900e-003**		**0.1682**	**0.1682**		**0.1547**	**0.1547**	**0.0000**	**351.7699**	**351.7699**	**0.1061**		**353.9981**

3.12 3B_Paving - 2016

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	0.1476	2.4895	1.4078	7.0600e-003	0.2167	0.0475	0.2642	0.0617	0.0437	0.1053		711.0766	711.0766	4.5400e-003		711.1720
Worker	0.1015	0.1221	1.5212	3.3000e-003	0.2605	2.1900e-003	0.2626	0.0691	2.0100e-003	0.0711		277.5688	277.5688	0.0143		277.8684
Total	**0.2491**	**2.6116**	**2.9290**	**0.0104**	**0.4772**	**0.0497**	**0.5268**	**0.1307**	**0.0457**	**0.1764**		**988.6454**	**988.6454**	**0.0188**		**989.0404**

3.13 6C_Substation Demolition - 2016

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					0.0984	0.0000	0.0984	0.0149	0.0000	0.0149			0.0000			0.0000
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073		2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**	**0.0984**	**1.2938**	**1.3922**	**0.0149**	**1.2073**	**1.2222**		**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.13 6C_Substation Demolition - 2016

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	0.0108	0.1928	0.1116	5.2000e-004	0.0124	3.0500e-003	0.0155	3.4100e-003	2.8000e-003	6.2100e-003		52.7138	52.7138	3.7000e-004		52.7216
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	0.2436	0.2931	3.6509	7.9300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		666.1651	666.1651	0.0342		666.8841
Total	**0.2544**	**0.4859**	**3.7625**	**8.4500e-003**	**0.6375**	**8.3100e-003**	**0.6458**	**0.1692**	**7.6300e-003**	**0.1768**		**718.8789**	**718.8789**	**0.0346**		**719.6057**

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					0.0443	0.0000	0.0443	6.7100e-003	0.0000	6.7100e-003			0.0000			0.0000
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073	0.0000	2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**	**0.0443**	**1.2938**	**1.3381**	**6.7100e-003**	**1.2073**	**1.2140**	**0.0000**	**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.13 6C_Substation Demolition - 2016

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	0.0108	0.1928	0.1116	5.2000e-004	0.0124	3.0500e-003	0.0155	3.4100e-003	2.8000e-003	6.2100e-003		52.7138	52.7138	3.7000e-004		52.7216
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	0.2436	0.2931	3.6509	7.9300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		666.1651	666.1651	0.0342		666.8841
Total	**0.2544**	**0.4859**	**3.7625**	**8.4500e-003**	**0.6375**	**8.3100e-003**	**0.6458**	**0.1692**	**7.6300e-003**	**0.1768**		**718.8789**	**718.8789**	**0.0346**		**719.6057**

3.14 4A_Equipment Installation - 2016

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	5.1566	61.1291	23.5364	0.0429		2.8210	2.8210		2.5953	2.5953		4,462.2191	4,462.2191	1.3460		4,490.4843
Total	**5.1566**	**61.1291**	**23.5364**	**0.0429**		**2.8210**	**2.8210**		**2.5953**	**2.5953**		**4,462.2191**	**4,462.2191**	**1.3460**		**4,490.4843**

3.14 4A_Equipment Installation - 2016

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	0.5683	0.6839	8.5187	0.0185	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,554.3853	1,554.3853	0.0799		1,556.0630
Total	**0.5683**	**0.6839**	**8.5187**	**0.0185**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,554.3853**	**1,554.3853**	**0.0799**		**1,556.0630**

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	5.1566	61.1291	23.5364	0.0429		2.8210	2.8210		2.5953	2.5953	0.0000	4,462.2191	4,462.2191	1.3460		4,490.4843
Total	**5.1566**	**61.1291**	**23.5364**	**0.0429**		**2.8210**	**2.8210**		**2.5953**	**2.5953**	**0.0000**	**4,462.2191**	**4,462.2191**	**1.3460**		**4,490.4843**

3.14 4A_Equipment Installation - 2016

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	0.5683	0.6839	8.5187	0.0185	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,554.3853	1,554.3853	0.0799		1,556.0630
Total	**0.5683**	**0.6839**	**8.5187**	**0.0185**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,554.3853**	**1,554.3853**	**0.0799**		**1,556.0630**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6728	2.2246	8.9041	0.0241	1.6199	0.0332	1.6531	0.4328	0.0306	0.4634		2,046.2441	2,046.2441	0.0762		2,047.8448
Unmitigated	0.6728	2.2246	8.9041	0.0241	1.6199	0.0332	1.6531	0.4328	0.0306	0.4634		2,046.2441	2,046.2441	0.0762		2,047.8448

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	172.50	172.50	172.50	763,878	763,878
Parking Lot	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	172.50	172.50	172.50	763,878	763,878

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
NaturalGas Unmitigated	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	5926.44	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0639**	**0.5810**	**0.4881**	**3.4900e-003**		**0.0442**	**0.0442**		**0.0442**	**0.0442**		**697.2280**	**697.2280**	**0.0134**	**0.0128**	**701.4713**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	5.92644	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Total		**0.0639**	**0.5810**	**0.4881**	**3.4900e-003**		**0.0442**	**0.0442**		**0.0442**	**0.0442**		**697.2280**	**697.2280**	**0.0134**	**0.0128**	**701.4713**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Unmitigated	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6700e-003	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Total	**5.2596**	**2.6000e-004**	**0.0276**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0581**	**0.0581**	**1.6000e-004**		**0.0615**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6700e-003	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Total	**5.2596**	**2.6000e-004**	**0.0276**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0581**	**0.0581**	**1.6000e-004**		**0.0615**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

CALEEMOD Winter Results

Weber Metals

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	115.00	1000sqft	2.64	115,000.00	0
User Defined Industrial	30.00	User Defined Unit	0.69	30,000.00	0
Parking Lot	120.50	1000sqft	2.77	120,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Footprint of substation is 30,000 SF. Total paving area is 120,500 SF

Construction Phase - Based on construction schedule provided by Weber Metals; 4B expected to occur in one day in the month of June

Off-road Equipment - 1 dozers and 2 loader

Off-road Equipment - 1 drill rig, 4 excavators, 2 loaders, 1 dozer, 2 rollers

Off-road Equipment - 3 cranes, 6 rough terrain forklifts, 9 lifts (5 aerial, 4 scissor), 2 welders, 2 air compressors, 2 pumps

Off-road Equipment - one paver

Off-road Equipment - 1 forklift, 9 cranes, 3 lifts

Off-road Equipment - 9 cranes, 3 aerial lifts, 1 forklift

Off-road Equipment - 35 trucks to haul new press; no on-site off road equipment

Off-road Equipment - 2 rough terrain forklifts, 10 lifts (2 aerial, 8 scissor), 4 welders, 2 air compressors

Off-road Equipment - 1 dozer, 2 loaders

Off-road Equipment - 1 crane, 6 rough terrain forklifts, 2 welders, 4 aerial lifts

Off-road Equipment - 4 lifts, 6 rough terrain forklifts, 2 welders, 1 crane

Trips and VMT - excavation/dewatering - 6,876 trips; press facility construction - 470 vehicles, 12 concrete trucks; substation construction - 60 vehicles; utility connections - 75 vehicles; equipment installation - 140 vehicles

Demolition - demolition of old substation. footprint ~ 35' x 60'

Grading - pit estimated to be 190' by 150' and 85' deep, up to 120,000 SF disturbed per day during site prep, up to 30,000 SF disturbed during Substation site prep

Architectural Coating -

Road Dust -

Area Coating - no architectural coating

Landscape Equipment - no landscaping

Energy Use - Electricity to be calculated outside of CalEEMod

Construction Off-road Equipment Mitigation - dust mitigation, Tier 2 dozers in Phase 1 and 2

Operational Off-Road Equipment - No Offroad Equiipment

Off-road Equipment - 2 rough terrain forklifts

Off-road Equipment - 1 aerial lift

Off-road Equipment - one aerial lift, one rough terrain forklift

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	74308	0
tblAreaCoating	Area_Nonresidential_Interior	222923	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	216.00
tblConstructionPhase	NumDays	230.00	196.00
tblConstructionPhase	NumDays	230.00	131.00

tblConstructionPhase	NumDays	230.00	87.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	230.00	43.00
tblConstructionPhase	NumDays	230.00	22.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	PhaseEndDate	12/30/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/29/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/2/2016	6/2/2016
tblConstructionPhase	PhaseEndDate	7/13/2016	7/31/2016
tblConstructionPhase	PhaseEndDate	7/14/2016	6/14/2016
tblConstructionPhase	PhaseEndDate	9/30/2015	7/31/2015
tblConstructionPhase	PhaseEndDate	6/29/2016	9/30/2015
tblConstructionPhase	PhaseEndDate	8/30/2016	5/31/2016
tblConstructionPhase	PhaseEndDate	7/4/2016	6/30/2016
tblConstructionPhase	PhaseEndDate	8/1/2016	6/30/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	5/1/2016
tblConstructionPhase	PhaseStartDate	8/1/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	11/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	5/1/2015
tblConstructionPhase	PhaseStartDate	5/31/2016	9/1/2015
tblConstructionPhase	PhaseStartDate	7/1/2016	4/1/2016

tblConstructionPhase	PhaseStartDate	6/3/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/1/2016	5/1/2016
tblGrading	AcresOfGrading	0.00	0.65
tblGrading	AcresOfGrading	0.00	2.75
tblGrading	AcresOfGrading	0.00	0.69
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	HorsePower	62.00	46.00
tblOffRoadEquipment	LoadFactor	0.31	0.45
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts

tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	PhaseName		4A_Equipment Installation
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		3A_Adjusted
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections

tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		4A_Adjusted
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00

tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripNumber	0.00	35.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripNumber	44.00	12.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00

tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	33.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	8.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	75.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00
tblTripsAndVMT	WorkerTripNumber	112.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	25.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00

tblTripsAndVMT	WorkerTripNumber	5.00	60.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	11.5127	105.9895	92.5305	0.1695	14.7211	4.8962	18.6044	6.4317	4.6252	10.0042	0.0000	17,331.5107	17,331.5107	2.6846	0.0000	17,387.8864
2016	16.8565	116.6355	151.9065	0.2819	12.6928	6.2274	18.9202	3.3618	5.9030	9.2648	0.0000	25,908.9242	25,908.9242	4.1118	0.0000	25,995.2720
Total	**28.3693**	**222.6250**	**244.4370**	**0.4514**	**27.4139**	**11.1236**	**37.5246**	**9.7935**	**10.5282**	**19.2690**	**0.0000**	**43,240.4349**	**43,240.4349**	**6.7964**	**0.0000**	**43,383.1585**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	11.5127	99.1375	92.5305	0.1695	9.6679	4.8962	13.6048	3.6893	4.6252	6.9381	0.0000	17,331.5107	17,331.5107	2.6846	0.0000	17,387.8864
2016	16.8565	116.6355	151.9065	0.2819	12.6928	6.2274	18.9202	3.3618	5.9030	9.2648	0.0000	25,908.9242	25,908.9242	4.1118	0.0000	25,995.2720
Total	**28.3693**	**215.7729**	**244.4370**	**0.4514**	**22.3607**	**11.1236**	**32.5250**	**7.0511**	**10.5282**	**16.2029**	**0.0000**	**43,240.4349**	**43,240.4349**	**6.7964**	**0.0000**	**43,383.1585**

	ROG	NOx	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	3.08	0.00	0.00	18.43	0.00	13.32	28.00	0.00	15.91	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Energy	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Mobile	0.6899	2.3430	8.5886	0.0228	1.6199	0.0333	1.6532	0.4328	0.0307	0.4635		1,947.3393	1,947.3393	0.0763		1,948.9409
Total	**6.0134**	**2.9243**	**9.1043**	**0.0263**	**1.6199**	**0.0776**	**1.6975**	**0.4328**	**0.0749**	**0.5078**		**2,644.6255**	**2,644.6255**	**0.0898**	**0.0128**	**2,650.4737**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Energy	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Mobile	0.6899	2.3430	8.5886	0.0228	1.6199	0.0333	1.6532	0.4328	0.0307	0.4635		1,947.3393	1,947.3393	0.0763		1,948.9409
Total	**6.0134**	**2.9243**	**9.1043**	**0.0263**	**1.6199**	**0.0776**	**1.6975**	**0.4328**	**0.0749**	**0.5078**		**2,644.6255**	**2,644.6255**	**0.0898**	**0.0128**	**2,650.4737**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1_Site Preparation	Site Preparation	5/1/2015	6/30/2015	5	43	
2	2_Excavation/Dewatering	Site Preparation	5/1/2015	7/31/2015	5	66	
3	3A_Press Facility Construction	Building Construction	8/1/2015	5/30/2016	5	216	
4	6A_Site Prep	Site Preparation	9/1/2015	9/30/2015	5	22	
5	6B_Substation Construction	Building Construction	10/1/2015	6/30/2016	5	196	
6	3A_Adjusted	Building Construction	4/1/2016	5/31/2016	5	43	
7	6A_Adjusted	Site Preparation	5/1/2016	6/30/2016	5	44	
8	5_Utility and Electrical Connections	Building Construction	5/1/2016	10/31/2016	5	131	
9	4B_Press Installaion	Building Construction	6/1/2016	6/2/2016	5	2	
10	4A_Adjusted	Building Construction	6/1/2016	6/30/2016	5	22	
11	3B_Paving	Paving	6/1/2016	6/14/2016	5	10	
12	6C_Substation Demolition	Demolition	7/1/2016	7/31/2016	5	21	
13	4A_Equipment Installation	Building Construction	7/1/2016	10/31/2016	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1_Site Preparation	Rubber Tired Dozers	1	6.00	255	0.40
1_Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
4A_Equipment Installation	Aerial Lifts	3	6.00	62	0.31
6C_Substation Demolition	Aerial Lifts	4	6.00	62	0.31
6A_Adjusted	Aerial Lifts	1	8.00	62	0.31
2_Excavation/Dewatering	Rubber Tired Dozers	1	6.00	255	0.40
2_Excavation/Dewatering	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6C_Substation Demolition	Rough Terrain Forklifts	6	6.00	100	0.40
6C_Substation Demolition	Welders	2	6.00	46	0.45
3A_Press Facility Construction	Cranes	3	6.00	226	0.29
6C_Substation Demolition	Cranes	1	6.00	226	0.29
3A_Press Facility Construction	Welders	2	6.00	46	0.45
6A_Site Prep	Rubber Tired Dozers	1	6.00	255	0.40
6A_Site Prep	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6B_Substation Construction	Rough Terrain Forklifts	6	6.00	100	0.40
6B_Substation Construction	Cranes	1	6.00	226	0.29
3A_Adjusted	Rough Terrain Forklifts	2	8.00	100	0.40
6B_Substation Construction	Welders	2	6.00	46	0.45
6A_Adjusted	Rough Terrain Forklifts	1	8.00	100	0.40
5_Utility and Electrical Connections	Welders	4	6.00	46	0.45
4A_Equipment Installation	Cranes	9	6.00	226	0.29
4A_Equipment Installation	Forklifts	1	6.00	89	0.20
3B_Paving	Pavers	1	6.00	125	0.42
6B_Substation Construction	Aerial Lifts	4	6.00	62	0.31
5_Utility and Electrical Connections	Rough Terrain Forklifts	2	6.00	100	0.40
5_Utility and Electrical Connections	Aerial Lifts	10	6.00	62	0.31

5_Utility and Electrical Connections	Air Compressors	2	6.00	78	0.48
4A_Adjusted	Aerial Lifts	1	8.00	46	0.45
2_Excavation/Dewatering	Bore/Drill Rigs	1	6.00	205	0.50
2_Excavation/Dewatering	Excavators	4	6.00	162	0.38
2_Excavation/Dewatering	Rollers	2	6.00	80	0.38
3A_Press Facility Construction	Rough Terrain Forklifts	6	6.00	100	0.40
3A_Press Facility Construction	Aerial Lifts	9	6.00	62	0.31
3A_Press Facility Construction	Air Compressors	2	6.00	78	0.48
3A_Press Facility Construction	Pumps	2	6.00	84	0.74
4B_Press Installaion	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1_Site Preparation	3	25.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
2_Excavation/Dewatering	10	25.00	0.00	6,875.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Press Facility Construction	24	470.00	12.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Site Prep	3	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6B_Substation Construction	13	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
5_Utility and Electrical Connections	18	75.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Equipment Installation	13	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4B_Press Installaion	0	0.00	0.00	35.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3B_Paving	1	25.00	8.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6C_Substation Demolition	13	60.00	0.00	10.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Adjusted	2	470.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Adjusted	1	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Adjusted	2	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 1_Site Preparation - 2015

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					4.5326	0.0000	4.5326	2.4844	0.0000	2.4844			0.0000			0.0000
Off-Road	1.4954	15.9385	11.8708	0.0113		0.9064	0.9064		0.8339	0.8339		1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**1.4954**	**15.9385**	**11.8708**	**0.0113**	**4.5326**	**0.9064**	**5.4390**	**2.4844**	**0.8339**	**3.3183**		**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.2 1_Site Preparation - 2015

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	0.1152	0.1487	1.5577	3.1000e-003	0.2605	2.3100e-003	0.2628	0.0691	2.1100e-003	0.0712		269.6659	269.6659	0.0155		269.9916
Total	**0.1152**	**0.1487**	**1.5577**	**3.1000e-003**	**0.2605**	**2.3100e-003**	**0.2628**	**0.0691**	**2.1100e-003**	**0.0712**		**269.6659**	**269.6659**	**0.0155**		**269.9916**

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					2.0397	0.0000	2.0397	1.1180	0.0000	1.1180			0.0000			0.0000
Off-Road	0.9721	12.5124	8.7527	0.0113		0.6525	0.6525		0.6066	0.6066	0.0000	1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**0.9721**	**12.5124**	**8.7527**	**0.0113**	**2.0397**	**0.6525**	**2.6922**	**1.1180**	**0.6066**	**1.7245**	**0.0000**	**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.2 1_Site Preparation - 2015

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	0.1152	0.1487	1.5577	3.1000e-003	0.2605	2.3100e-003	0.2628	0.0691	2.1100e-003	0.0712		269.6659	269.6659	0.0155		269.9916
Total	**0.1152**	**0.1487**	**1.5577**	**3.1000e-003**	**0.2605**	**2.3100e-003**	**0.2628**	**0.0691**	**2.1100e-003**	**0.0712**		**269.6659**	**269.6659**	**0.0155**		**269.9916**

3.3 2_Excavation/Dewatering - 2015

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					4.6550	0.0000	4.6550	2.5017	0.0000	2.5017			0.0000			0.0000
Off-Road	3.5838	40.0844	26.8493	0.0377		2.1376	2.1376		1.9666	1.9666		3,958.0706	3,958.0706	1.1817		3,982.8852
Total	**3.5838**	**40.0844**	**26.8493**	**0.0377**	**4.6550**	**2.1376**	**6.7926**	**2.5017**	**1.9666**	**4.4683**		**3,958.0706**	**3,958.0706**	**1.1817**		**3,982.8852**

3.3 2_Excavation/Dewatering - 2015

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	2.7913	49.6692	29.3359	0.1143	4.7862	0.8347	5.6209	1.2518	0.7679	2.0197		11,642.4283	11,642.4283	0.0908		11,644.3360
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	0.1152	0.1487	1.5577	3.1000e-003	0.4869	2.3100e-003	0.4892	0.1247	2.1100e-003	0.1268		269.6659	269.6659	0.0155		269.9916
Total	**2.9065**	**49.8179**	**30.8936**	**0.1174**	**5.2730**	**0.8371**	**6.1101**	**1.3765**	**0.7700**	**2.1464**		**11,912.0942**	**11,912.0942**	**0.1064**		**11,914.3276**

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					2.0948	0.0000	2.0948	1.1258	0.0000	1.1258			0.0000			0.0000
Off-Road	3.0605	36.6584	23.7312	0.0377		1.8837	1.8837		1.7393	1.7393	0.0000	3,958.0706	3,958.0706	1.1817		3,982.8852
Total	**3.0605**	**36.6584**	**23.7312**	**0.0377**	**2.0948**	**1.8837**	**3.9785**	**1.1258**	**1.7393**	**2.8651**	**0.0000**	**3,958.0706**	**3,958.0706**	**1.1817**		**3,982.8852**

3.3 2_Excavation/Dewatering - 2015

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	2.7913	49.6692	29.3359	0.1143	4.7862	0.8347	5.6209	1.2518	0.7679	2.0197		11,642.4283	11,642.4283	0.0908		11,644.3360
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	0.1152	0.1487	1.5577	3.1000e-003	0.4869	2.3100e-003	0.4892	0.1247	2.1100e-003	0.1268		269.6659	269.6659	0.0155		269.9916
Total	**2.9065**	**49.8179**	**30.8936**	**0.1174**	**5.2730**	**0.8371**	**6.1101**	**1.3765**	**0.7700**	**2.1464**		**11,912.0942**	**11,912.0942**	**0.1064**		**11,914.3276**

3.4 3A_Press Facility Construction - 2015

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	6.0473	56.4372	37.6441	0.0590		3.2936	3.2936		3.1321	3.1321		5,937.4409	5,937.4409	1.4906		5,968.7426
Total	**6.0473**	**56.4372**	**37.6441**	**0.0590**		**3.2936**	**3.2936**		**3.1321**	**3.1321**		**5,937.4409**	**5,937.4409**	**1.4906**		**5,968.7426**

3.4 3A_Press Facility Construction - 2015

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	0.2610	4.4336	2.5579	0.0106	0.3250	0.0857	0.4107	0.0924	0.0789	0.1713		1,076.3071	1,076.3071	7.6800e-003		1,076.4684
Worker	2.1661	2.7962	29.2850	0.0583	4.8964	0.0434	4.9398	1.2986	0.0397	1.3383		5,069.7197	5,069.7197	0.2915		5,075.8417
Total	**2.4271**	**7.2298**	**31.8429**	**0.0689**	**5.2214**	**0.1291**	**5.3505**	**1.3910**	**0.1186**	**1.5096**		**6,146.0267**	**6,146.0267**	**0.2992**		**6,152.3100**

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	6.0473	56.4372	37.6441	0.0590		3.2936	3.2936		3.1321	3.1321	0.0000	5,937.4409	5,937.4409	1.4906		5,968.7426
Total	**6.0473**	**56.4372**	**37.6441**	**0.0590**		**3.2936**	**3.2936**		**3.1321**	**3.1321**	**0.0000**	**5,937.4409**	**5,937.4409**	**1.4906**		**5,968.7426**

3.4 3A_Press Facility Construction - 2015

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	0.2610	4.4336	2.5579	0.0106	0.3250	0.0857	0.4107	0.0924	0.0789	0.1713		1,076.3071	1,076.3071	7.6800e-003		1,076.4684
Worker	2.1661	2.7962	29.2850	0.0583	4.8964	0.0434	4.9398	1.2986	0.0397	1.3383		5,069.7197	5,069.7197	0.2915		5,075.8417
Total	**2.4271**	**7.2298**	**31.8429**	**0.0689**	**5.2214**	**0.1291**	**5.3505**	**1.3910**	**0.1186**	**1.5096**		**6,146.0267**	**6,146.0267**	**0.2992**		**6,152.3100**

3.4 3A_Press Facility Construction - 2016

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	5.5397	52.4270	37.1648	0.0590		2.9444	2.9444		2.8001	2.8001		5,895.7320	5,895.7320	1.4652		5,926.5009
Total	**5.5397**	**52.4270**	**37.1648**	**0.0590**		**2.9444**	**2.9444**		**2.8001**	**2.8001**		**5,895.7320**	**5,895.7320**	**1.4652**		**5,926.5009**

3.4 3A_Press Facility Construction - 2016

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	0.2308	3.8729	2.3443	0.0106	0.3251	0.0714	0.3965	0.0925	0.0657	0.1581		1,064.4207	1,064.4207	6.8700e-003		1,064.5650
Worker	1.9541	2.5217	26.4325	0.0582	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		4,894.4868	4,894.4868	0.2682		4,900.1191
Total	**2.1849**	**6.3946**	**28.7768**	**0.0688**	**5.2215**	**0.1126**	**5.3341**	**1.3911**	**0.1035**	**1.4946**		**5,958.9075**	**5,958.9075**	**0.2751**		**5,964.6841**

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	5.5397	52.4270	37.1648	0.0590		2.9444	2.9444		2.8001	2.8001	0.0000	5,895.7320	5,895.7320	1.4652		5,926.5009
Total	**5.5397**	**52.4270**	**37.1648**	**0.0590**		**2.9444**	**2.9444**		**2.8001**	**2.8001**	**0.0000**	**5,895.7320**	**5,895.7320**	**1.4652**		**5,926.5009**

3.4 3A_Press Facility Construction - 2016

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	0.2308	3.8729	2.3443	0.0106	0.3251	0.0714	0.3965	0.0925	0.0657	0.1581		1,064.4207	1,064.4207	6.8700e-003		1,064.5650
Worker	1.9541	2.5217	26.4325	0.0582	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		4,894.4868	4,894.4868	0.2682		4,900.1191
Total	**2.1849**	**6.3946**	**28.7768**	**0.0688**	**5.2215**	**0.1126**	**5.3341**	**1.3911**	**0.1035**	**1.4946**		**5,958.9075**	**5,958.9075**	**0.2751**		**5,964.6841**

3.5 6A_Site Prep - 2015

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					4.5498	0.0000	4.5498	2.4863	0.0000	2.4863			0.0000			0.0000
Off-Road	1.4954	15.9385	11.8708	0.0113		0.9064	0.9064		0.8339	0.8339		1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**1.4954**	**15.9385**	**11.8708**	**0.0113**	**4.5498**	**0.9064**	**5.4562**	**2.4863**	**0.8339**	**3.3201**		**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.5 6A_Site Prep - 2015

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	0.2765	0.3570	3.7385	7.4400e-003	2.2552	5.5300e-003	2.2608	0.5659	5.0700e-003	0.5710		647.1983	647.1983	0.0372		647.9798
Total	**0.2765**	**0.3570**	**3.7385**	**7.4400e-003**	**2.2552**	**5.5300e-003**	**2.2608**	**0.5659**	**5.0700e-003**	**0.5710**		**647.1983**	**647.1983**	**0.0372**		**647.9798**

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					2.0474	0.0000	2.0474	1.1188	0.0000	1.1188			0.0000			0.0000
Off-Road	0.9721	12.5124	8.7527	0.0113		0.6525	0.6525		0.6066	0.6066	0.0000	1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**0.9721**	**12.5124**	**8.7527**	**0.0113**	**2.0474**	**0.6525**	**2.6999**	**1.1188**	**0.6066**	**1.7254**	**0.0000**	**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.5 6A_Site Prep - 2015

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	0.2765	0.3570	3.7385	7.4400e-003	2.2552	5.5300e-003	2.2608	0.5659	5.0700e-003	0.5710		647.1983	647.1983	0.0372		647.9798
Total	**0.2765**	**0.3570**	**3.7385**	**7.4400e-003**	**2.2552**	**5.5300e-003**	**2.2608**	**0.5659**	**5.0700e-003**	**0.5710**		**647.1983**	**647.1983**	**0.0372**		**647.9798**

3.6 6B_Substation Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7618	26.1613	19.3051	0.0285		1.4680	1.4680		1.3694	1.3694		2,901.3045	2,901.3045	0.8576		2,919.3138
Total	**2.7618**	**26.1613**	**19.3051**	**0.0285**		**1.4680**	**1.4680**		**1.3694**	**1.3694**		**2,901.3045**	**2,901.3045**	**0.8576**		**2,919.3138**

3.6 6B_Substation Construction - 2015

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	0.2765	0.3570	3.7385	7.4400e-003	1.1685	5.5300e-003	1.1740	0.2992	5.0700e-003	0.3042		647.1983	647.1983	0.0372		647.9798
Total	**0.2765**	**0.3570**	**3.7385**	**7.4400e-003**	**1.1685**	**5.5300e-003**	**1.1740**	**0.2992**	**5.0700e-003**	**0.3042**		**647.1983**	**647.1983**	**0.0372**		**647.9798**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7618	26.1613	19.3051	0.0285		1.4680	1.4680		1.3694	1.3694	0.0000	2,901.3045	2,901.3045	0.8576		2,919.3138
Total	**2.7618**	**26.1613**	**19.3051**	**0.0285**		**1.4680**	**1.4680**		**1.3694**	**1.3694**	**0.0000**	**2,901.3045**	**2,901.3045**	**0.8576**		**2,919.3138**

3.6 6B_Substation Construction - 2015

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	0.2765	0.3570	3.7385	7.4400e-003	1.1685	5.5300e-003	1.1740	0.2992	5.0700e-003	0.3042		647.1983	647.1983	0.0372		647.9798
Total	**0.2765**	**0.3570**	**3.7385**	**7.4400e-003**	**1.1685**	**5.5300e-003**	**1.1740**	**0.2992**	**5.0700e-003**	**0.3042**		**647.1983**	**647.1983**	**0.0372**		**647.9798**

3.6 6B_Substation Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073		2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**		**1.2938**	**1.2938**		**1.2073**	**1.2073**		**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.6 6B_Substation Construction - 2016

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	0.2495	0.3219	3.3744	7.4300e-003	1.1685	5.2600e-003	1.1737	0.2992	4.8300e-003	0.3040		624.8281	624.8281	0.0342		625.5471
Total	**0.2495**	**0.3219**	**3.3744**	**7.4300e-003**	**1.1685**	**5.2600e-003**	**1.1737**	**0.2992**	**4.8300e-003**	**0.3040**		**624.8281**	**624.8281**	**0.0342**		**625.5471**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073	0.0000	2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**		**1.2938**	**1.2938**		**1.2073**	**1.2073**	**0.0000**	**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.6 6B_Substation Construction - 2016

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	0.2495	0.3219	3.3744	7.4300e-003	1.1685	5.2600e-003	1.1737	0.2992	4.8300e-003	0.3040		624.8281	624.8281	0.0342		625.5471
Total	**0.2495**	**0.3219**	**3.3744**	**7.4300e-003**	**1.1685**	**5.2600e-003**	**1.1737**	**0.2992**	**4.8300e-003**	**0.3040**		**624.8281**	**624.8281**	**0.0342**		**625.5471**

3.7 3A_Adjusted - 2016

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	0.4255	5.4181	4.7150	6.8900e-003		0.3007	0.3007		0.2767	0.2767		715.4489	715.4489	0.2158		719.9808
Total	**0.4255**	**5.4181**	**4.7150**	**6.8900e-003**		**0.3007**	**0.3007**		**0.2767**	**0.2767**		**715.4489**	**715.4489**	**0.2158**		**719.9808**

3.7 3A_Adjusted - 2016

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	1.9541	2.5217	26.4325	0.0582	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		4,894.4868	4,894.4868	0.2682		4,900.1191
Total	**1.9541**	**2.5217**	**26.4325**	**0.0582**	**4.8964**	**0.0412**	**4.9376**	**1.2986**	**0.0379**	**1.3365**		**4,894.4868**	**4,894.4868**	**0.2682**		**4,900.1191**

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	0.4255	5.4181	4.7150	6.8900e-003		0.3007	0.3007		0.2767	0.2767	0.0000	715.4489	715.4489	0.2158		719.9808
Total	**0.4255**	**5.4181**	**4.7150**	**6.8900e-003**		**0.3007**	**0.3007**		**0.2767**	**0.2767**	**0.0000**	**715.4489**	**715.4489**	**0.2158**		**719.9808**

3.7 3A_Adjusted - 2016

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	1.9541	2.5217	26.4325	0.0582	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		4,894.4868	4,894.4868	0.2682		4,900.1191
Total	**1.9541**	**2.5217**	**26.4325**	**0.0582**	**4.8964**	**0.0412**	**4.9376**	**1.2986**	**0.0379**	**1.3365**		**4,894.4868**	**4,894.4868**	**0.2682**		**4,900.1191**

3.8 6A_Adjusted - 2016

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	0.2689	3.6319	3.4426	5.1000e-003		0.1883	0.1883		0.1732	0.1732		529.3214	529.3214	0.1597		532.6743
Total	**0.2689**	**3.6319**	**3.4426**	**5.1000e-003**		**0.1883**	**0.1883**		**0.1732**	**0.1732**		**529.3214**	**529.3214**	**0.1597**		**532.6743**

3.8 6A_Adjusted - 2016

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	0.2495	0.3219	3.3744	7.4300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		624.8281	624.8281	0.0342		625.5471
Total	**0.2495**	**0.3219**	**3.3744**	**7.4300e-003**	**0.6251**	**5.2600e-003**	**0.6303**	**0.1658**	**4.8300e-003**	**0.1706**		**624.8281**	**624.8281**	**0.0342**		**625.5471**

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	0.2689	3.6319	3.4426	5.1000e-003		0.1883	0.1883		0.1732	0.1732	0.0000	529.3214	529.3214	0.1597		532.6743
Total	**0.2689**	**3.6319**	**3.4426**	**5.1000e-003**		**0.1883**	**0.1883**		**0.1732**	**0.1732**	**0.0000**	**529.3214**	**529.3214**	**0.1597**		**532.6743**

3.8 6A_Adjusted - 2016

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	0.2495	0.3219	3.3744	7.4300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		624.8281	624.8281	0.0342		625.5471
Total	**0.2495**	**0.3219**	**3.3744**	**7.4300e-003**	**0.6251**	**5.2600e-003**	**0.6303**	**0.1658**	**4.8300e-003**	**0.1706**		**624.8281**	**624.8281**	**0.0342**		**625.5471**

3.9 5_Utility and Electrical Connections - 2016

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	3.1636	21.1351	21.3512	0.0312		1.3293	1.3293		1.2885	1.2885		3,008.8929	3,008.8929	0.7676		3,025.0116
Total	**3.1636**	**21.1351**	**21.3512**	**0.0312**		**1.3293**	**1.3293**		**1.2885**	**1.2885**		**3,008.8929**	**3,008.8929**	**0.7676**		**3,025.0116**

3.9 5_Utility and Electrical Connections - 2016

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	0.3118	0.4024	4.2180	9.2900e-003	0.7813	6.5700e-003	0.7879	0.2072	6.0400e-003	0.2133		781.0351	781.0351	0.0428		781.9339
Total	**0.3118**	**0.4024**	**4.2180**	**9.2900e-003**	**0.7813**	**6.5700e-003**	**0.7879**	**0.2072**	**6.0400e-003**	**0.2133**		**781.0351**	**781.0351**	**0.0428**		**781.9339**

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	3.1636	21.1351	21.3512	0.0312		1.3293	1.3293		1.2885	1.2885	0.0000	3,008.8929	3,008.8929	0.7676		3,025.0116
Total	**3.1636**	**21.1351**	**21.3512**	**0.0312**		**1.3293**	**1.3293**		**1.2885**	**1.2885**	**0.0000**	**3,008.8929**	**3,008.8929**	**0.7676**		**3,025.0116**

3.9 5_Utility and Electrical Connections - 2016

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	0.3118	0.4024	4.2180	9.2900e-003	0.7813	6.5700e-003	0.7879	0.2072	6.0400e-003	0.2133		781.0351	781.0351	0.0428		781.9339
Total	**0.3118**	**0.4024**	**4.2180**	**9.2900e-003**	**0.7813**	**6.5700e-003**	**0.7879**	**0.2072**	**6.0400e-003**	**0.2133**		**781.0351**	**781.0351**	**0.0428**		**781.9339**

3.10 4B_Press Installaion - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.10 4B_Press Installaion - 2016

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	0.4143	7.3534	4.5916	0.0192	0.4571	0.1121	0.5692	0.1252	0.1031	0.2283		1,934.1409	1,934.1409	0.0137		1,934.4282
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	**0.4143**	**7.3534**	**4.5916**	**0.0192**	**0.4571**	**0.1121**	**0.5692**	**0.1252**	**0.1031**	**0.2283**		**1,934.1409**	**1,934.1409**	**0.0137**		**1,934.4282**

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.10 4B_Press Installaion - 2016

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	0.4143	7.3534	4.5916	0.0192	0.4571	0.1121	0.5692	0.1252	0.1031	0.2283		1,934.1409	1,934.1409	0.0137		1,934.4282
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	**0.4143**	**7.3534**	**4.5916**	**0.0192**	**0.4571**	**0.1121**	**0.5692**	**0.1252**	**0.1031**	**0.2283**		**1,934.1409**	**1,934.1409**	**0.0137**		**1,934.4282**

3.11 4A_Adjusted - 2016

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	0.0832	1.3420	1.1673	1.9800e-003		0.0382	0.0382		0.0351	0.0351		205.5418	205.5418	0.0620		206.8438
Total	**0.0832**	**1.3420**	**1.1673**	**1.9800e-003**		**0.0382**	**0.0382**		**0.0351**	**0.0351**		**205.5418**	**205.5418**	**0.0620**		**206.8438**

3.11 4A_Adjusted - 2016

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	0.5821	0.7511	7.8735	0.0174	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,457.9323	1,457.9323	0.0799		1,459.6100
Total	**0.5821**	**0.7511**	**7.8735**	**0.0174**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,457.9323**	**1,457.9323**	**0.0799**		**1,459.6100**

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	0.0832	1.3420	1.1673	1.9800e-003		0.0382	0.0382		0.0351	0.0351	0.0000	205.5418	205.5418	0.0620		206.8438
Total	**0.0832**	**1.3420**	**1.1673**	**1.9800e-003**		**0.0382**	**0.0382**		**0.0351**	**0.0351**	**0.0000**	**205.5418**	**205.5418**	**0.0620**		**206.8438**

3.11 4A_Adjusted - 2016

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	0.5821	0.7511	7.8735	0.0174	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,457.9323	1,457.9323	0.0799		1,459.6100
Total	**0.5821**	**0.7511**	**7.8735**	**0.0174**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,457.9323**	**1,457.9323**	**0.0799**		**1,459.6100**

3.12 3B_Paving - 2016

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	0.3009	3.3848	2.1391	3.3900e-003		0.1682	0.1682		0.1547	0.1547		351.7699	351.7699	0.1061		353.9981
Paving	0.7257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0266**	**3.3848**	**2.1391**	**3.3900e-003**		**0.1682**	**0.1682**		**0.1547**	**0.1547**		**351.7699**	**351.7699**	**0.1061**		**353.9981**

3.12 3B_Paving - 2016

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	0.1538	2.5820	1.5629	7.0500e-003	0.2167	0.0476	0.2643	0.0617	0.0438	0.1054		709.6138	709.6138	4.5800e-003		709.7100
Worker	0.1039	0.1341	1.4060	3.1000e-003	0.2605	2.1900e-003	0.2626	0.0691	2.0100e-003	0.0711		260.3450	260.3450	0.0143		260.6446
Total	**0.2578**	**2.7161**	**2.9688**	**0.0102**	**0.4772**	**0.0498**	**0.5270**	**0.1307**	**0.0458**	**0.1765**		**969.9588**	**969.9588**	**0.0189**		**970.3546**

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	0.3009	3.3848	2.1391	3.3900e-003		0.1682	0.1682		0.1547	0.1547	0.0000	351.7699	351.7699	0.1061		353.9981
Paving	0.7257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0266**	**3.3848**	**2.1391**	**3.3900e-003**		**0.1682**	**0.1682**		**0.1547**	**0.1547**	**0.0000**	**351.7699**	**351.7699**	**0.1061**		**353.9981**

3.12 3B_Paving - 2016

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	0.1538	2.5820	1.5629	7.0500e-003	0.2167	0.0476	0.2643	0.0617	0.0438	0.1054		709.6138	709.6138	4.5800e-003		709.7100
Worker	0.1039	0.1341	1.4060	3.1000e-003	0.2605	2.1900e-003	0.2626	0.0691	2.0100e-003	0.0711		260.3450	260.3450	0.0143		260.6446
Total	**0.2578**	**2.7161**	**2.9688**	**0.0102**	**0.4772**	**0.0498**	**0.5270**	**0.1307**	**0.0458**	**0.1765**		**969.9588**	**969.9588**	**0.0189**		**970.3546**

3.13 6C_Substation Demolition - 2016

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					0.0984	0.0000	0.0984	0.0149	0.0000	0.0149			0.0000			0.0000
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073		2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**	**0.0984**	**1.2938**	**1.3922**	**0.0149**	**1.2073**	**1.2222**		**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.13 6C_Substation Demolition - 2016

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	0.0113	0.2001	0.1249	5.2000e-004	0.0124	3.0500e-003	0.0155	3.4100e-003	2.8100e-003	6.2100e-003		52.6297	52.6297	3.7000e-004		52.6375
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	0.2495	0.3219	3.3744	7.4300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		624.8281	624.8281	0.0342		625.5471
Total	**0.2607**	**0.5220**	**3.4993**	**7.9500e-003**	**0.6375**	**8.3100e-003**	**0.6458**	**0.1692**	**7.6400e-003**	**0.1768**		**677.4578**	**677.4578**	**0.0346**		**678.1846**

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					0.0443	0.0000	0.0443	6.7100e-003	0.0000	6.7100e-003			0.0000			0.0000
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073	0.0000	2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**	**0.0443**	**1.2938**	**1.3381**	**6.7100e-003**	**1.2073**	**1.2140**	**0.0000**	**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.13 6C_Substation Demolition - 2016

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	0.0113	0.2001	0.1249	5.2000e-004	0.0124	3.0500e-003	0.0155	3.4100e-003	2.8100e-003	6.2100e-003		52.6297	52.6297	3.7000e-004		52.6375
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	0.2495	0.3219	3.3744	7.4300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		624.8281	624.8281	0.0342		625.5471
Total	**0.2607**	**0.5220**	**3.4993**	**7.9500e-003**	**0.6375**	**8.3100e-003**	**0.6458**	**0.1692**	**7.6400e-003**	**0.1768**		**677.4578**	**677.4578**	**0.0346**		**678.1846**

3.14 4A_Equipment Installation - 2016

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	5.1566	61.1291	23.5364	0.0429		2.8210	2.8210		2.5953	2.5953		4,462.2191	4,462.2191	1.3460		4,490.4843
Total	**5.1566**	**61.1291**	**23.5364**	**0.0429**		**2.8210**	**2.8210**		**2.5953**	**2.5953**		**4,462.2191**	**4,462.2191**	**1.3460**		**4,490.4843**

3.14 4A_Equipment Installation - 2016

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	0.5821	0.7511	7.8735	0.0174	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,457.9323	1,457.9323	0.0799		1,459.6100
Total	**0.5821**	**0.7511**	**7.8735**	**0.0174**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,457.9323**	**1,457.9323**	**0.0799**		**1,459.6100**

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	5.1566	61.1291	23.5364	0.0429		2.8210	2.8210		2.5953	2.5953	0.0000	4,462.2191	4,462.2191	1.3460		4,490.4843
Total	**5.1566**	**61.1291**	**23.5364**	**0.0429**		**2.8210**	**2.8210**		**2.5953**	**2.5953**	**0.0000**	**4,462.2191**	**4,462.2191**	**1.3460**		**4,490.4843**

3.14 4A_Equipment Installation - 2016

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	0.5821	0.7511	7.8735	0.0174	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,457.9323	1,457.9323	0.0799		1,459.6100
Total	**0.5821**	**0.7511**	**7.8735**	**0.0174**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,457.9323**	**1,457.9323**	**0.0799**		**1,459.6100**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6899	2.3430	8.5886	0.0228	1.6199	0.0333	1.6532	0.4328	0.0307	0.4635		1,947.3393	1,947.3393	0.0763		1,948.9409
Unmitigated	0.6899	2.3430	8.5886	0.0228	1.6199	0.0333	1.6532	0.4328	0.0307	0.4635		1,947.3393	1,947.3393	0.0763		1,948.9409

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	172.50	172.50	172.50	763,878	763,878
Parking Lot	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	172.50	172.50	172.50	763,878	763,878

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
NaturalGas Unmitigated	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	5926.44	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0639**	**0.5810**	**0.4881**	**3.4900e-003**		**0.0442**	**0.0442**		**0.0442**	**0.0442**		**697.2280**	**697.2280**	**0.0134**	**0.0128**	**701.4713**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	5.92644	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0639**	**0.5810**	**0.4881**	**3.4900e-003**		**0.0442**	**0.0442**		**0.0442**	**0.0442**		**697.2280**	**697.2280**	**0.0134**	**0.0128**	**701.4713**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Unmitigated	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6700e-003	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Total	**5.2596**	**2.6000e-004**	**0.0276**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0581**	**0.0581**	**1.6000e-004**		**0.0615**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6700e-003	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Total	**5.2596**	**2.6000e-004**	**0.0276**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0581**	**0.0581**	**1.6000e-004**		**0.0615**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

Appendix E

Health Risk Assessment Files

Note: Appendix to be provided in supplemental CD

Appendix F

Ambient Modeling Files

Note: Appendix to be provided in supplemental CD

Table A.1 Construction Emissions without Mitigation

Phase	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
Maximum Daily Emissions	12	97	95	0.2	19	10
Significant Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Table A.2 Construction Schedule by Project Phase

Construction Phase	Phase Description	2015								2016											
		May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
1	Site Preparation	X	X																		
2	Excavation/Dewatering	X	X	X																	
3A	Press Facility Construction				X	X	X	X	X	X	X	X	X	X							
3B	Paving														X						
4A	Equipment Installation														X	X	X	X	X		
4B	Final Equipment Installation														X						
5	Utility/Electrical Connections													X	X	X	X	X	X		
6A	Substation Site Prep					X															
6B	Substation Construction						X	X	X	X	X	X	X	X	X						
6C	Substation Demo															X					

Table A.3 CalEEMOD Outputs

Phase I - Site Preparation (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	1.4954	12.5124	11.8708	0.0113	5.5618	3.3316	1.4954	12.5124	11.8708	0.0113	5.5618	3.3316
Off-site	0.1123	0.1354	1.68	3.31E-03	0.2628	0.0712	0.1152	0.1487	1.5577	3.10E-03	0.2628	0.0712
Total	1.6077	12.6478	13.5508	0.01461	5.8246	3.4028	1.6106	12.6611	13.4285	0.0144	5.8246	3.4028

Note: Dozers used in Phase 1 will be equipped with Tier 2 engines.

Phase 2 - Excavation/Dewatering (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	3.5838	36.6584	26.8493	0.0377	6.7589	4.4647	3.5838	36.6584	26.8493	0.0377	6.7589	4.4647
Off-site	2.7854	48.0093	28.108	1.18E-01	6.109	2.145	2.9069	49.8251	30.8979	0.1174	6.1109	2.1467
Total	6.3692	84.6677	54.9573	0.1555	12.8679	6.6097	6.4907	86.4835	57.7472	0.1551	12.8698	6.6114

Note: Dozers used in Phase 2 will be equipped with Tier 2 engines.

Phase 3A - Press Facility Construction (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	6.0473	56.4372	37.6441	0.059	3.2936	3.1321	6.0473	56.4372	37.6441	0.059	3.2936	3.1321
Off-site	2.361	6.819	33.9061	0.0728	5.3503	1.5094	2.4271	7.2298	31.8429	0.0689	5.3505	1.5096
Total	8.4083	63.2562	71.5502	0.1318	8.6439	4.6415	8.4744	63.667	69.487	0.1279	8.6441	4.6417

Phase 3A - Press Facility Construction (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	5.5397	52.427	37.1648	0.059	2.9444	2.8001	5.5397	52.427	37.1648	0.059	2.9444	2.8001
Off-site	2.1293	6.0301	30.7101	0.0727	5.3339	1.4944	2.1849	6.3946	28.7768	0.0688	5.3341	1.4946
Total	7.669	58.4571	67.8749	0.1317	8.2783	4.2945	7.7246	58.8216	65.9416	0.1278	8.2785	4.2947

Phase 3B -Paving (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	1.0266	3.3848	2.1391	3.90E-03	0.1682	0.1547	1.0266	3.3848	2.1391	3.90E-03	0.1682	0.1547
Off-site	0.2491	2.6116	2.929	0.0104	0.5268	0.1764	0.2578	2.7161	2.9688	0.0102	0.527	0.1765
Total	1.2757	5.9964	5.0681	0.0143	0.695	0.3311	1.2844	6.1009	5.1079	0.0141	0.6952	0.3312

Phase 4A - Equipment Installation (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	5.1566	61.1291	23.5364	0.0429	2.821	2.5953	5.1566	91.1291	23.5364	0.0429	2.821	2.5953
Off-site	0.5683	0.6839	8.5187	1.85E-02	1.4708	0.3981	0.5821	0.7511	7.8735	0.0174	1.4708	0.3981
Total	5.7249	61.813	32.0551	0.0614	4.2918	2.9934	5.7387	91.8802	31.4099	0.0603	4.2918	2.9934

Phase 4B - Equipment Installation (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	-	-	-	-	-	-	-	-	-	-	-	-
Off-site	0.0361	0.6443	0.3728	0.00175	0.0517	0.0207	0.0377	0.6685	0.4174	0.00174	0.0518	0.0208
Total	0.0361	0.6443	0.3728	0.00175	0.0517	0.0207	0.0377	0.6685	0.4174	0.00174	0.0518	0.0208

Phase 5 - Utility/Electrical Connections (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	3.1636	21.1351	21.3512	0.0312	1.3293	1.2885	3.1636	21.1351	21.3512	0.0312	1.3293	1.2885
Off-site	0.3045	0.3664	4.5636	9.91E-03	0.7879	0.2133	0.3118	0.4024	4.218	9.29E-03	0.7879	0.2133
Total	3.4681	21.5015	25.9148	0.04111	2.1172	1.5018	3.4754	21.5375	25.5692	0.04049	2.1172	1.5018

Phase 6A - Substation Site Preparation (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	1.4954	15.9385	11.8708	0.0113	5.4578	3.3203	1.4954	15.9385	11.8708	0.0113	5.4578	3.3203
Off-site	0.0449	0.0542	0.672	1.32E-03	0.3768	0.0952	0.0461	0.0595	0.6231	1.24E-03	0.3768	0.0952
Total	1.5403	15.9927	12.5428	0.01262	5.8346	3.4155	1.5415	15.998	12.4939	0.01254	5.8346	3.4155

Phase 6B - Substation Construction (2015)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	2.27618	26.1613	19.3051	0.0285	1.468	1.394	2.7618	26.1613	19.3051	0.0285	1.1468	1.3694
Off-site	0.2695	0.3249	4.0319	7.93E-03	1.174	0.3042	0.2765	0.357	3.7385	0.00744	1.174	0.3042
Total	2.54568	26.4862	23.337	0.03643	2.642	1.6982	3.0383	26.5183	23.0436	0.03594	2.3208	1.6736

Phase 6B - Substation Construction (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	2.5092	24.0609	19.0571	0.0285	1.2938	1.2073	2.5092	24.0609	19.0571	0.0285	1.2938	1.2073
Off-site	0.2436	0.2931	3.6509	7.93E-03	1.1737	0.304	0.2495	0.3219	3.3744	7.43E-03	1.1737	0.304
Total	2.7528	24.354	22.708	0.03643	2.4675	1.5113	2.7587	24.3828	22.4315	0.03593	2.4675	1.5113

Phase 6C - Substation Demolition (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	2.5092	24.0609	19.0571	0.0285	1.3922	1.2222	2.5092	24.0609	19.0571	0.0285	1.3922	1.2222
Off-site	0.2544	0.4859	3.7625	0.00845	0.6458	0.1768	0.2607	0.522	3.4993	7.95E-03	0.6458	0.1768
Total	2.7636	24.5468	22.8196	0.03695	2.038	1.399	2.7699	24.5829	22.5564	0.03645	2.038	1.399

Table A.4 CalEEMOD Outputs

Phase 3A - Press Facility Construction (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	0.3192	4.0636	5.5362	0.00517	0.2255	0.2075	0.3192	4.0636	3.5362	0.00517	0.2255	0.2075
Off-site	2.1293	6.0301	30.7101	0.0727	5.3339	1.4944	2.1849	6.3946	28.7768	0.0688	5.3341	1.4946
Total	2.4485	10.0937	36.2463	0.07787	5.5594	1.7019	2.5041	10.4582	32.313	0.07397	5.5596	1.7021

Phase 4A - Equipment Installation (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	0.0421	0.6921	0.8138	0.00124	0.0285	0.0262	0.0421	0.6921	0.8138	0.00124	0.0285	0.0262
Off-site	0.5683	0.6839	8.5187	1.85E-02	1.4708	0.3981	0.2765	0.357	3.7385	0.00744	1.174	0.3042
Total	0.6104	1.376	9.3325	0.01974	1.4993	0.4243	0.3186	1.0491	4.5523	0.00868	1.2025	0.3304

Phase 6B - Substation Construction (2016)

Category	Summer						Winter					
	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
On-site	0.2017	2.7239	2.5819	3.82E-03	0.1412	0.1299	0.2017	2.7239	2.5819	0.00382	0.1412	0.1299
Off-site	0.2436	0.2931	3.6509	7.93E-03	1.1737	0.304	0.2495	0.3219	3.3744	0.00743	1.737	0.304
Total	0.4453	3.017	6.2328	0.01175	1.3149	0.4339	0.4512	3.0458	5.9563	0.01125	1.8782	0.4339

Table A.5-1 Construction Phase 1: Site Preparation (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC					1.61	1.61																		
NOx					12.65	12.65																		
CO					13.55	13.55																		
SOx					0.01	0.01																		
PM10					5.82	5.82																		
PM2.5					3.40	3.40																		

Table A.5-2 Construction Phase 2: Excavation/Dewatering (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC					6.37	6.37	6.37																	
NOx					84.67	84.67	84.67																	
CO					54.96	54.96	54.96																	
SOx					0.16	0.16	0.16																	
PM10					12.87	12.87	12.87																	
PM2.5					6.61	6.61	6.61																	

Table A.5-3 Construction Phase 3A: Press/Facility Construction (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC								8.41	8.41	8.41	8.47	8.47	7.72	7.72	7.72	2.50	2.45							
NOx								63.26	63.26	63.26	63.67	63.67	58.82	58.82	58.82	10.46	10.09							
CO								71.55	71.55	71.55	69.49	69.49	65.94	65.94	65.94	32.31	36.25							
SOx								0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.07	0.08							
PM10								8.64	8.64	8.64	8.64	8.64	8.28	8.28	8.28	5.56	5.56							
PM2.5								4.64	4.64	4.64	4.64	4.64	4.29	4.29	4.29	1.70	1.70							

Table A.5-4 Construction Phase 3B: Paving (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																		1.28						
NOx																		6.00						
CO																		5.07						
SOx																		0.01						
PM10																		0.70						
PM2.5																		0.33						

Table A.5-5 Construction Phase 4A: Equipment Installations (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																		0.04	5.72	5.72	5.72	5.72		
NOx																		0.69	61.81	61.81	61.81	61.81		
CO																		0.81	32.06	32.06	32.06	32.06		
SOx																		1.24E-03	0.06	0.06	0.06	0.06		
PM10																		0.03	4.29	4.29	4.29	4.29		
PM2.5																		0.03	2.99	2.99	2.99	2.99		

Table A.5-6 Construction Phase 4B: Press Installation (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																		0.04						
NOx																		0.64						
CO																		0.37						
SOx																		1.75E-03						
PM10																		0.05						
PM2.5																		0.02						

Table A.5-7 Construction Phase 5: Utility/Electrical Connections (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																	3.47	3.47	3.47	3.47	3.47	3.47		
NOx																	21.50	21.50	21.50	21.50	21.50	21.50		
CO																	25.91	25.91	25.91	25.91	25.91	25.91		
SOx																	0.04	0.04	0.04	0.04	0.04	0.04		
PM10																	2.12	2.12	2.12	2.12	2.12	2.12		
PM2.5																	1.50	1.50	1.50	1.50	1.50	1.50		

Table A.5-8 Construction Phase 6A: Substation Site Preparation (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC									1.54															
NOx									15.99															
CO									12.54															
SOx									0.01															
PM10									5.83															
PM2.5									3.42															

Table A.5-9 Construction Phase 6B: Substation Construction (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC										2.55	3.04	3.04	2.76	2.76	2.76	2.76	0.45	0.45						
NOx										26.49	26.52	26.52	24.38	24.38	24.38	24.38	3.02	3.02						
CO										23.34	23.04	23.04	22.43	22.43	22.43	22.43	6.23	6.23						
SOx										0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.01						
PM10										2.64	2.32	2.32	2.47	2.47	2.47	2.47	1.31	1.31						
PM2.5										1.70	1.67	1.67	1.51	1.51	1.51	1.51	0.43	0.43						

Table A.5-10 Construction Phase 6C: Substation Demolition (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC																			2.76					
NOx																			24.55					
CO																			22.82					
SOx																			0.04					
PM10																			2.04					
PM2.5																			1.40					

Table A.5-11 Total From All Phases (Peak Daily Emissions)

	2015												2016											
Pollutant	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September	October	November	December
VOC	0.00	0.00	0.00	0.00	7.98	7.98	6.37	8.41	9.95	10.95	11.51	11.51	10.48	10.48	10.48	5.26	6.36	5.23	9.19	9.19	9.19	9.19	0.00	0.00
NOx	0.00	0.00	0.00	0.00	97.32	97.32	84.67	63.26	79.25	89.74	90.19	90.19	83.20	83.20	83.20	34.84	34.61	31.21	83.31	83.31	83.31	83.31	0.00	0.00
CO	0.00	0.00	0.00	0.00	68.51	68.51	54.96	71.55	84.09	94.89	92.53	92.53	88.37	88.37	88.37	54.74	68.39	38.03	57.97	57.97	57.97	57.97	0.00	0.00
SOx	0.00	0.00	0.00	0.00	0.17	0.17	0.16	0.13	0.14	0.17	0.16	0.16	0.16	0.16	0.16	0.11	0.13	0.07	0.10	0.10	0.10	0.10	0.00	0.00
PM10	0.00	0.00	0.00	0.00	18.69	18.69	12.87	8.64	14.48	11.29	10.96	10.96	10.75	10.75	10.75	8.03	8.99	4.16	6.41	6.41	6.41	6.41	0.00	0.00
PM2.5	0.00	0.00	0.00	0.00	10.01	10.01	6.61	4.64	8.06	6.34	6.32	6.32	5.81	5.81	5.81	3.21	3.64	2.29	4.50	4.50	4.50	4.50	0.00	0.00

* Summer season is May through October and winter season is November through April.

Table A.6 Construction Equipment by Phase

	Phase 1		Phase 2		Phase 3A		Phase 3B		Phase 4A		Phase 4B		Phase 5		Phase 6A		Phase 6B		Phase 6C	
Equipment	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**
Drill Rig			1	6																
Water Truck																				
Forklift									1	6										
Excavator			4	6																
Cranes Composite					3	6			9	6							1	6	1	6
Paving Equipment							1	6												
Pickup Trucks					120				110				25				30		30	
Passenger Vehicles					350				30				50		10		30		30	
HHDT											35									
Dump Truck			8	6																
Concrete Truck					10	6														
Front End Loader	2	6	2	6											2	6				
Bulldozer	1	6	1	6											1	6				
Rolling Compactor			2	6																
Rough Terrain Forklift					6	6							2	6			6	6	6	6
Aerial Lift Composite					5	6			3	6			2	6			2	6	2	6
Welders Composite					2	6							4	6			2	6	2	6
Air compressor composite					2	6							2	6						
Scissor Lift					4	6							8	6			2	6	2	6
Concrete Pump Truck					2	6														

Note:

1. Days of operation based on construction schedule of 7am to 7pm and assumption of 5 days of construction per week.
2. Equipment expected to operate 6 hours per day.
3. Paving to occur during new press facility construction phase (Phase 3). However, paving is only scheduled for 10 days during the end of Phase 3 and is modeled as a separate phase to accurately represent emissions.

Table A.7 Construction Equipment Refined

	Phase 3A		Phase 4A		Phase 6A	
Duration	**April 2016 to May 2016**		**June 2016**		**May 2016 to June 2016**	
Equipment	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**	**Quantity**	**Hour/Day**
Drill Rig						
Water Truck						
Forklift			0	8		
Excavator						
Cranes Composite	0	8	0	8	0	8
Paving Equipment						
Pickup Trucks	120		110		30	
Passenger Vehicles	350		30		30	
Dump Truck						
Concrete Truck	0	8				
Front End Loader						
Bulldozer						
Rolling Compactor						
Rough Terrain Forklift	2	8			1	8
Aerial Lift Composite	0	8	1	8	1	8
Welders Composite	0	8			0	8
Air compressor composite	0	8				
Scissor Lift	0	8			0	8
Concrete Pump Truck	0	8				

Note:

1. Days of operation based on construction schedule of 7am to 7pm and assumption of 5 days of construction per week.
2. Equipment expected to operate 6 hours per day.
3. Paving to occur during new press facility construction phase (Phase 3). However, paving is only scheduled for 10 days during the end of Phase 3 and is modeled as a separate phase to accurately represent emissions.

Table B.1 Operational Project Impacts from Criteria Emissions

Criterial Pollutants	VOC	NOx	SOx	CO	PM10	PM2.5
Total (lbs/day)	53.39	220.66	1.68	154.88	36.69	36.69
Significance Thresholds	55	55	150	550	150	55
Exceeds (Yes/No)	No	Yes	No	No	No	No

Note: PM2.5 is assumed to be conservatively equal to PM10

B.2 Project Criteria Emissions

Project emissions include emissions from proposed emission units and emission increases from existing emission units. Project emissions are summarized in Table B.5-1.

B.2-1 - Summary of Emissions from Proposed Project

	Daily Emissions (lbs/day)					Annual Emissions (tons/yr)				
Device	VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
Large Rotary Furnace	3.52	39.07	0.30	17.60	3.77	0.64	7.13	0.06	3.21	0.69
Medium Rotary Furnace #1	2.24	24.86	0.19	11.20	2.40	0.41	4.54	0.04	2.04	0.44
Medium Rotary Furnace #2	2.24	24.86	0.19	11.20	2.40	0.41	4.54	0.04	2.04	0.44
Chain Conveyor Furnace #1	2.08	23.09	0.18	10.40	2.23	0.38	4.21	0.03	1.90	0.41
Chain Conveyor Furnace #2	2.08	23.09	0.18	10.40	2.23	0.38	4.21	0.03	1.90	0.41
Pedestal Die Heating Furnace #1	1.28	14.21	0.11	6.40	1.37	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #2	1.28	14.21	0.11	6.40	1.37	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #3	1.28	14.21	0.11	6.40	1.37	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #4	1.28	14.21	0.11	6.40	1.37	0.23	2.59	0.02	1.17	0.25
Abrasive Blasting	-	-	-	-	0.31	-	-	-	-	0.06
Cooling Towers	-	-	-	-	0.17	-	-	-	-	0.03
New Press	34.99	-	-	-	-	6.39	-	-	-	-
Sludge Dryer	1.77E-03	0.03	1.52E-04	8.86E-03	1.90E-03	3.23E-04	6.00E-03	2.77E-05	1.62E-03	3.46E-04
Thorpe Furnace	0.01	0.08	1.20E-03	0.12	0.02	2.56E-03	0.01	2.19E-04	0.02	2.74E-03
No. 1 Furnace	0.01	0.08	1.01E-03	0.07	0.01	2.14E-03	0.02	1.83E-04	0.01	2.29E-03
No. 2 Furnace	0.02	0.11	1.30E-03	0.08	0.02	2.76E-03	0.02	2.36E-04	0.02	2.96E-03
Rotary Furnace	0.06	0.46	5.53E-03	0.36	0.07	0.01	0.08	1.01E-03	0.07	0.01
Lindberg Furnace	0.07	0.40	6.39E-03	0.62	0.08	0.01	0.07	1.17E-03	0.11	0.01
Car Bottom Furnace	0.05	0.27	4.33E-03	0.42	0.05	9.22E-03	0.05	7.90E-04	0.08	9.87E-03
AOV Furnace	7.31E-03	0.04	6.27E-04	0.06	7.84E-03	1.33E-03	7.14E-03	1.14E-04	0.01	1.43E-03
#1 Car Bottom Furnace	0.04	0.20	3.13E-03	0.30	0.04	6.67E-03	0.04	5.72E-04	0.06	7.15E-03
Exempt Oven	0.80	14.86	0.07	4.00	0.86	0.15	2.71	0.01	0.73	0.16
CEC Furnaces	0.04	0.75	3.45E-03	0.20	0.04	7.35E-03	0.14	6.30E-04	0.04	7.87E-03
Manipulators	-	9.56	0.04	10.10	0.06	-	1.74	8.20E-03	1.84	0.01
Forklifts	-	2.03	0.06	52.15	0.83	-	0.37	0.01	9.52	0.15
Grinding/Sawing	0.00E+00	0.00E+00	0.00E+00	0.00E+00	15.62	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94
Total	53.39	220.66	1.68	154.88	36.69	9.74	40.27	0.31	28.27	5.79

Emissions from Proposed Combustion Sources

Emissions of criteria pollutants from combustion sources were calculated based on the following equation. The proposed equipment is expected to operate up to 24 hours per day and 365 days per year:
Daily Emissions = Max heat rating (MMBtu/hr)/HHV (mmbtu/mmscf) x Hours of operation per day (hr/day) x Emission Factor (lb/mmscf)
Annual Emissions = Daily Emissions x Days of operation per year (day/yr)

B.2-2 - Emissions from Proposed Combustion Sources

	Heat Rating	Heat Rating	Emission Factor (lbs/mmscf)					Daily Emissions (lbs/day)					Annual Emissions (lbs/yr)					Annual Emissions (tons/yr)				
Device	(MMBtu/hr)	(MMscf/hr)	VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
Large Rotary Furnace	22	0.0210	7	77.70	0.6	35	7.5	3.52	39.07	0.30	17.60	3.77	1,284.80	14,261.28	110.13	6,424.00	1,376.57	0.64	7.13	0.06	3.21	0.69
Medium Rotary Furnace #1	14	0.0133	7	77.70	0.6	35	7.5	2.24	24.86	0.19	11.20	2.40	817.60	9,075.36	70.08	4,088.00	876.00	0.41	4.54	0.04	2.04	0.44
Medium Rotary Furnace #2	14	0.0133	7	77.70	0.6	35	7.5	2.24	24.86	0.19	11.20	2.40	817.60	9,075.36	70.08	4,088.00	876.00	0.41	4.54	0.04	2.04	0.44
Chain Conveyor Furnance #1	13	0.0124	7	77.70	0.6	35	7.5	2.08	23.09	0.18	10.40	2.23	759.20	8,427.12	65.07	3,796.00	813.43	0.38	4.21	0.03	1.90	0.41
Chain Conveyor Furnance #2	13	0.0124	7	77.70	0.6	35	7.5	2.08	23.09	0.18	10.40	2.23	759.20	8,427.12	65.07	3,796.00	813.43	0.38	4.21	0.03	1.90	0.41
Pedestal Die Heating Furnace #1	8	0.0076	7	77.70	0.6	35	7.5	1.28	14.21	0.11	6.40	1.37	467.20	5,185.92	40.05	2,336.00	500.57	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #2	8	0.0076	7	77.70	0.6	35	7.5	1.28	14.21	0.11	6.40	1.37	467.20	5,185.92	40.05	2,336.00	500.57	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #3	8	0.0076	7	77.70	0.6	35	7.5	1.28	14.21	0.11	6.40	1.37	467.20	5,185.92	40.05	2,336.00	500.57	0.23	2.59	0.02	1.17	0.25
Pedestal Die Heating Furnace #4	8	0.0076	7	77.70	0.6	35	7.5	1.28	14.21	0.11	6.40	1.37	467.20	5,185.92	40.05	2,336.00	500.57	0.23	2.59	0.02	1.17	0.25

Note:
1. Medium Rotary Furnace #2 to be installed and operated in 2019 and expected to be identical to Medium Furnace #1.
2. CO, SOx, PM10, VOC Emission Factors are SCAQMD Emission Factors.
3. NOx Emission Factor was calculated using the F Factor for natural gas, 60 ppmv for NOx, the conversion factor of 379.5 standard cubic feet per pound mole, the correction to 3% oxygen and the molecular weight for NO_2.

Emissions from Proposed Abrasive Blasting Cabinet

Emission of PM from the Abrasive Blasting Cabinet vented to a baghouse were estimated based on the following equation:
Hourly Emissions = F (lbs/hr) x N x EF (lb PM/lb abrasive media) x FR x (1-C)
Daily Emissions = Hourly Emissions x Operating hours per day (hr/day)
Annual Emissions = Daily Emissions x Days of operation per year (day/yr)

F = Flow Rate of Nozzle =	6223
N = Number of Nozzles =	1
EF = Emission Factor =	0.0041
FR = Fraction of PM_{10} =	0.5
C = control efficiency =	0.999
Hours of Operation =	24
Days of Operation =	365

B.2-3 - PM10 emissions from Abrasive Blasting Cabinet

Pollutant	Hourly Emissions (lbs/hr)	Daily Emissions (lbs/day)	Annual Emission (lb/yr)	Annual Emissions (ton/yr)
PM10	0.01	0.31	111.75	0.06

1. Control efficiency is SCAQMD default for indoor blasting with a baghouse.
2. Flow rate from Table 2-2 of U.S.E.P.A. Emission Factor Determination for AP-42, Section 13.2.6, Abrasive Blasting, for flow rate of abrasive through a 1/2-inch nozzle and pressure of 100 psig.
3. EF is SCAQMD default emission factor for abrasive blasting, uncontrolled for shot.
4. There are two nozzles in the blasting room, but only one nozzle will be used at any given time.

Emissions from Proposed Cooling Towers

Emissions of PM10 are expected from the proposed cooling towers and were calculated using the following equation:
Drift (gal/day) = Circulation Rate (gal/min) x Operating Hours (hrs/day) x TDS (ppm) x Drift Factor (%)
Daily Emissions = drift (gal/yr) x density of water (lb/gal) x TDS (lb/MMlb) / 1,000,000 (lb)
Annual Emissions = drift (gal/yr) x density of water (lb/gal) x TDS (lb/MMlb) ÷ 1,000,000 (lb)

B.2-4 - PM10

Source	Circulation Rate (gpm)	Operating Hours (hr/day)	Days of Operation (days/yr)	TDS	Drift Factor	Drift (gal/day)	PM10 (lb/day)	PM10 (ton/yr)
60K Press	1000	24	365	1010	0.00001	14.4	0.12	0.02
Quench Tank	400	24	365	1010	0.00001	5.76	0.05	0.01
						Total	0.17	0.03

1. Default emission factor of 0.02% for drift eliminator
2. TDS value based on 3 cycles of concentration and onsite sample value with contingency added

Emissions from Onsite Mobile Equipment

Emissions from mobile equipment are estimated using the following equations:
Hourly Emissions = BHP x LF x EF; or
Hourly Emissions = Fuel Consumption x LF x EF
Daily Emissions = hourly emissions x operating hours
Annual Emissions = daily emissions x operating days

where,
BHP = rated capacity, bhp
LF = load factor
EF = emission factor, g/bhp-hr or lbs/Mgal

B.2-5 - Emissions from Proposed Mobile Equipment

				Operating Hours		Emission Factors[2,3]				Emission (lbs/hr)				Emission (lbs/day)				Emission (tons/yr)			
Source	BHP	Load Factor	Fuel Rate (gal/hr)[1]	hours per day	days per year	NOx+NMHC	CO	PM	SOx	NOx+NMHC	CO	PM	SOx	NOx+NMHC	CO	PM	SOx	NOx+NMHC	CO	PM	SOx
Manipulator_1	60	0.43	4.46	24	365	3.5	3.7	0.022	0.21	0.199	0.210	1.25E-03	9.36E-04	4.778	5.051	0.030	0.022	0.872	0.922	0.005	0.004
Manipulator_2	60	0.43	4.46	24	365	3.5	3.7	0.022	0.21	0.199	0.210	1.25E-03	9.36E-04	4.778	5.051	0.030	0.022	0.872	0.922	0.005	0.004
Forklift_1	100	0.2	10.83	24	365	0.6	15.4	5	0.35	0.026	0.679	1.08E-02	7.58E-04	0.635	16.296	0.260	0.018	0.116	2.974	0.047	0.003
Forklift_2	100	0.2	10.83	24	365	0.6	15.4	5	0.35	0.026	0.679	1.08E-02	7.58E-04	0.635	16.296	0.260	0.018	0.116	2.974	0.047	0.003
Forklift_3	60	0.2	6.50	24	365	0.6	15.4	5	0.35	0.016	0.407	6.50E-03	4.55E-04	0.381	9.778	0.156	0.011	0.070	1.784	0.028	0.002
Forklift_4	60	0.2	6.50	24	365	0.6	15.4	5	0.35	0.016	0.407	6.50E-03	4.55E-04	0.381	9.778	0.156	0.011	0.070	1.784	0.028	0.002

1. Fuel consumption rate calculated per RECLAIM Rule 2012 Protocol, Chapter 4, Equation 8 and adjusted by the load factor
2. Emission factors for diesel powered manipulators for NOx+NMHC, CO, and PM based on Tier 4 standards and are in units of g/bhp-hr. SOx emission factor based on SCAQMD default for diesel powered ICEs and is uniits of lb/Mgal.
3. Emission factors for forklifts for NOx+NMHC and CO are based on LSI standards and are in units of g/bhp-hr. PM, and SOx emission factor based on SCAQMD default for propane powered ICEs and is in units of lb/Mgal.
4. NOx+NHMC assumed to be all NOx.

Emission Increases from Existing Equipment

Increase in emissions of criteria pollutants from existing equipment are expected from increased operated due to the proposed project. Emission increased are estimated from baseline emissions and the expected increase in operations.

B.2-6 - Emissions Increases from Existing Combustion Equipment

Permit Number	Device	Expected Increase in Operations (%)	Increase in Daily Emissions (lbs/day)*					Increase in Annual Emissions (lbs/yr)					Annual Emissions (tons/yr)				
			VOC	NOx	SOx	CO	PM10	VOC	NOx	SOx	CO	PM10	VOC	NOx	SOx	CO	PM10
F73290	Sludge Dryer	25	1.77E-03	0.03	1.52E-04	8.86E-03	1.90E-03	0.65	12.01	0.06	3.23	0.69	3.23E-04	6.00E-03	2.77E-05	1.62E-03	3.46E-04
G26779	Thorpe Furnace	20	0.01	0.08	1.20E-03	0.12	0.02	5.12	27.39	0.44	42.42	5.49	2.56E-03	0.014	2.19E-04	0.021	2.74E-03
G26775	No. 1 Furnace	5	0.01	0.08	1.01E-03	0.07	0.01	4.28	30.53	0.37	23.73	4.59	2.14E-03	0.015	1.83E-04	0.012	2.29E-03
G26776	No. 2 Furnace	5	0.02	0.11	1.30E-03	0.08	0.02	5.52	39.35	0.47	30.58	5.91	2.76E-03	0.020	2.36E-04	0.015	2.96E-03
G26557	Rotary Furnace	20	0.06	0.46	5.53E-03	0.36	0.07	23.55	167.99	2.02	130.54	25.23	0.012	0.084	1.01E-03	0.065	0.013
G26560	Lindberg Furnace	30	0.07	0.40	6.39E-03	0.62	0.08	27.19	145.47	2.33	225.30	29.13	0.014	0.073	1.17E-03	0.113	0.015
G26558	Car Bottom Furnace	20	0.05	0.27	4.33E-03	0.42	0.05	18.43	98.64	1.58	152.73	19.75	9.22E-03	0.049	7.90E-04	0.076	9.87E-03
G26561	AOV Furnace	20	7.31E-03	0.04	6.27E-04	0.06	7.84E-03	2.67	14.28	0.23	22.12	2.86	1.33E-03	7.14E-03	1.14E-04	0.011	1.43E-03
R219	#1 Car Bottom Furnace	30	0.04	0.20	3.13E-03	0.30	0.04	13.34	71.41	1.14	110.57	14.30	6.67E-03	0.036	5.72E-04	0.055	7.15E-03
R219	Exempt Ovens	20	0.80	14.86	0.07	4.00	0.86	292.03	5,423.35	25.03	1,460.13	312.89	0.146	2.712	0.013	0.730	0.156
R219	CEC Furnaces	20	0.04	0.75	3.45E-03	0.20	0.04	14.69	272.89	1.26	73.47	15.74	7.35E-03	0.136	6.30E-04	0.037	7.87E-03

Note: Emission units are expected to operate up to 365 days per year

B.2-7 - Emissions Increases from Existing Process Tanks

Permit Number	Device	Expected Increase in Operations (%)	Increase in Daily Emissions (lbs/day)*					Increase in Annual Emissions (lbs/yr)					Annual Emissions (tons/yr)				
			VOC	NOx	SOx	CO	PM10	VOC	NOx	SOx	CO	PM10	VOC	NOx	SOx	CO	PM10
G26562	Aqueous Solution Line	20	-	-	-	-	-	-	-	-	-	9.54	-	-	-	-	4.77E-03
D79100	Surface Prep Line	20	-	-	-	-	-	-	-	-	-	22.45	-	-	-	-	0.011224

Emissions from Grinding Operations

PM10 emissions increases were calculated by subtracting baseline emissions from expected PM10 emissions from increased operations from the project. Emissions from grinding operations are vented to baghouses with a control efficiency of 99%. Emissions of PM10 from grinding operations were calculated based on site specific measurements of controlled and uncontrolled emissions from the grinding and sawing operation centers in Building A1, Building H, Building M and Building P.

Table B.2-7 - Post-Project Emissions from Grinding/Sawing Operations

Work Center	Hourly Emissions (lbs/day)[1]		Daily Emissions (lbs/day)		Annual Emissions (lbs/yr)[2]		Annual Emissions (tons/yr)[2]	
Bldg. H Baghouse	PM	6.35E-02	PM	1.52E+00	PM	3.79E+02	PM	1.90E-01
Bldg. P Baghouse	PM	1.36E-01	PM	3.27E+00	PM	8.14E+02	PM	4.07E-01
Bldg. M Baghouse	PM	1.56E+00	PM	3.75E+01	PM	9.35E+03	PM	4.67E+00
Bldg. A1 Fugitives	PM	1.28E-01	PM	3.06E+00	PM	7.62E+02	PM	3.81E-01
Bldg. M Fugitives	PM	9.64E-03	PM	2.31E-01	PM	5.76E+01	PM	2.88E-02
Bldg. H Fugitives	PM	1.24E-02	PM	2.97E-01	PM	7.41E+01	PM	3.70E-02
Bldg. P Fugitives	PM	3.82E-02	PM	9.17E-01	PM	2.28E+02	PM	1.14E-01
Total	1.95E+00		4.68E+01		1.17E+04		5.83E+00	

1. Based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.
2. Based on potential increase in grinding/sawing operations of +50% in the four operation centers

Table B.2-8 - PM10 Emission Increases from Grinding/Sawing Operations

Work Center	Hourly Emissions (lbs/day)[1]		Daily Emissions (lbs/day)		Annual Emissions (lbs/yr)[2]		Annual Emissions (tons/yr)[2]	
Bldg. H Baghouse	PM	2.12E-02	PM	5.08E-01	PM	1.26E+02	PM	6.32E-02
Bldg. P Baghouse	PM	4.54E-02	PM	1.09E+00	PM	2.71E+02	PM	1.36E-01
Bldg. M Baghouse	PM	5.22E-01	PM	1.25E+01	PM	3.12E+03	PM	1.56E+00
Bldg. A1 Fugitives	PM	4.25E-02	PM	1.02E+00	PM	2.54E+02	PM	1.27E-01
Bldg. M Fugitives	PM	3.21E-03	PM	7.71E-02	PM	1.92E+01	PM	9.60E-03
Bldg. H Fugitives	PM	4.13E-03	PM	9.91E-02	PM	2.47E+01	PM	1.23E-02
Bldg. P Fugitives	PM	1.27E-02	PM	3.06E-01	PM	7.61E+01	PM	3.80E-02
Total	6.51E-01		1.56E+01		3.89E+03		1.94E+00	

1. Based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.
2. Based on potential increase in grinding/sawing operations of +50% in the four operation centers

B.3 - Baseline Emissions

Table B.3-1 - Baseline Usage

A/N	Permit Number	Device	2013 Usage (mmscf/yr)[1]	2014 Usage (mmscf/yr)[2]	2013/2014 Average (mmscf/yr)
437120	F73290	Sludge Dryer	0.30	0.44	0.37
544934	G26779	Thorpe Furnace	0	3.66	3.66
544939	G26775	No. 1 Furnace	12.51	11.95	12.23
544940	G26776	No. 2 Furnace	15.15	16.38	15.76
544941	G26557	Rotary Furnace	16.25	17.39	16.82
544942	G26559	A&A Furnace	6.53	7.70	7.12
544943	G26560	Lindberg Furnace	14.00	11.90	12.95
544944	G26558	Car Bottom Furnace	12.88	13.45	13.17
544945	G26561	AOV Furnace	1.90	1.91	1.91
NA	R219	Exempt Boilers	5.13	5.33	5.23
NA	R219	AgingFurnace	1.83	1.85	1.84
NA	R219	#1 Car Bottom Furnace	11.04	1.67	6.35
NA	R219	Exempt Ovens	210.32	206.86	208.59
NA	R219	CEC Furnace	10.37	10.63	10.50

Notes:

1. Usage from 2013 Recordkeeping
2. Usage from 2014 Recordkeeping. December not available at the time this report was prepared. December usage is assumed to be the average from usage reported for January 2014 through November 2014.
3. Thorpe Furnace was installed and operated in 2014.

B.4 - Baseline Criteria Emissions

Table B.4-1 -Baseline Criteria Emissions Summary

Permit Number	Device	Annual Emissions (lbs/yr)					Annual Emissions (tons/yr)				
		VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
F73290	Sludge Dryer	2.59	48.03	0.2	12.93	2.77	1.29E-03	0.02	1.11E-04	6.47E-03	1.39E-03
G26779	Thorpe Furnace	25.60	136.96	2.2	212.12	27.43	0.01	0.07	1.10E-03	0.11	0.01
G26775	No. 1 Furnace	85.61	610.62	7.3	474.51	91.72	0.04	0.31	3.67E-03	0.24	0.05
G26776	No. 2 Furnace	110.35	787.08	9.5	611.63	118.23	0.06	0.39	4.73E-03	0.31	0.06
G26557	Rotary Furnace	117.76	839.94	10.1	652.70	126.17	0.06	0.42	5.05E-03	0.33	0.06
G26559	A&A Furnace	49.81	266.54	4.3	412.68	53.36	0.02	0.13	2.13E-03	0.21	0.03
G26560	Lindberg Furnace	90.64	484.91	7.8	751.00	97.11	0.05	0.24	3.88E-03	0.38	0.05
G26558	Car Bottom Furnace	92.16	493.21	7.9	763.65	98.75	0.05	0.25	3.95E-03	0.38	0.05
G26561	AOV Furnace	13.35	71.41	1.1	110.60	14.30	6.67E-03	0.04	5.72E-04	0.06	7.15E-03
R219	Exempt Boiler	28.78	196.02	3.1	439.56	39.77	0.01	0.10	1.57E-03	0.22	0.02
R219	AgingFurnace	12.86	68.80	1.1	106.53	13.78	6.43E-03	0.03	5.51E-04	0.05	6.89E-03
R219	#1 Car Bottom Furnace	44.48	238.04	3.8	368.56	47.66	0.02	0.12	1.91E-03	0.18	0.02
R219	Exempt Ovens	1,460.13	27,116.77	125.2	7,300.67	1,564.43	0.73	13.56	0.06	3.65	0.78
R219	CEC Furnace	73.47	1,364.44	6.3	367.35	78.72	0.04	0.68	3.15E-03	0.18	0.04
R219	Cooling Towers	-	-	-	-	14,693.97	-	-	-	-	7.35
G26562	Aqueous Solution Line	-	-	-	-	9.54	-	-	-	-	4.77E-03
D79100	Surface Prep Line	-	-	-	-	22.45	-	-	-	-	0.01
R219	Grinding/Sawing	-	-	-	-	7,776.44	-	-	-	-	3.89
Total		2,207.57	32,722.78	189.89	12,584.48	24,876.58	1.10	16.36	0.09	6.29	12.44

Note:
1. Baseline emissions for Thorpe furnace is based on emissions from 2013. Thorpe Furnace was installed and operated in 2013.
2. Emissions from open process tank lines are assumed to be identical for 2012 and 2013 since there are no changes to operating conditions and operating hours.

Emissions from Combustion Sources

Emissions of criteria pollutants from combustion sources were calculated based on the following equation:
Annual Emissions = Throughput (mmscf) x Emission factor (lb/mmscf)

Table B. 4-2 - 2013 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factor (lbs/mmscf)					Annual Emissions (lbs/yr)				
			VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
F73290	Sludge Dryer	0.30	7	130.0	0.6	35	7.5	2.07	38.35	0.18	10.33	2.21
G26779	Thorpe Furnace	0	7	37.5	0.6	58	7.5	0	0	0	0	0
G26775	No. 1 Furnace	12.51	7	49.9	0.6	38.8	7.5	87.54	624.41	7.50	485.23	93.79
G26776	No. 2 Furnace	15.15	7	49.9	0.6	38.8	7.5	106.03	756.28	9.09	587.70	113.60
G26557	Rotary Furnace	16.25	7	49.9	0.6	38.8	7.5	113.78	811.54	9.75	630.64	121.90
G26559	A&A Furnace	6.53	7	37.5	0.6	58	7.5	45.68	244.46	3.92	378.50	48.94
G26560	Lindberg Furnace	14.00	7	37.5	0.6	58	7.5	98.00	524.28	8.40	811.97	105.00
G26558	Car Bottom Furnace	12.88	7	37.5	0.6	58	7.5	90.18	482.58	7.73	747.19	96.62
G26561	AOV Furnace	1.90	7	37.5	0.6	58	7.5	13.33	71.32	1.14	110.46	14.28
R219	Exempt Boiler	5.13	5.5	37.5	0.6	84	7.6	28.23	192.26	3.08	431.11	39.01
R219	AgingFurnace	1.83	7	37.5	0.6	58	7.5	12.78	68.38	1.10	105.87	13.69
R219	#1 Car Bottom Furnace	11.04	7	37.5	0.6	58	7.5	77.30	413.67	6.63	640.49	82.82
R219	Exempt Ovens	210.32	7	130.0	0.6	35	7.5	1,472.23	27,341.47	126.19	7,361.17	1,577.39
R219	CEC Furnace	10.37	7	130.0	0.6	35	7.5	72.57	1,347.64	6.22	362.83	77.75

Table B.4-3 - 2014 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factor (lbs/mmscf)					Annual Emissions (lbs/yr)				
			VOC	NOx	SOx	CO	PM	VOC	NOx	SOx	CO	PM
F73290	Sludge Dryer	0.44	7	130.0	0.6	35	7.5	3.11	57.71	0.27	15.54	3.33
G26779	Thorpe Furnace	3.66	7	37.5	0.6	58	7.5	25.60	136.96	2.19	212.12	27.43
G26775	No. 1 Furnace	11.95	7	49.9	0.6	38.8	7.5	83.67	596.83	7.17	463.79	89.65
G26776	No. 2 Furnace	16.38	7	49.9	0.6	38.8	7.5	114.66	817.88	9.83	635.57	122.85
G26557	Rotary Furnace	17.39	7	49.9	0.6	38.8	7.5	121.74	868.33	10.43	674.77	130.43
G26559	A&A Furnace	7.70	7	37.5	0.6	58	7.5	53.93	288.62	4.62	446.87	57.78
G26560	Lindberg Furnace	11.90	7	37.5	0.6	58	7.5	83.28	445.54	7.14	690.03	89.23
G26558	Car Bottom Furnace	13.45	7	37.5	0.6	58	7.5	94.15	503.85	8.07	780.11	100.88
G26561	AOV Furnace	1.91	7	37.5	0.6	58	7.5	13.36	71.50	1.15	110.73	14.32
R219	Exempt Boiler	5.33	5.5	37.5	0.6	84	7.6	29.33	199.79	3.20	448.00	40.53
R219	Aging Furnace	1.85	7	37.5	0.6	58	7.5	12.94	69.23	1.11	107.18	13.86
R219	#1 Car Bottom Furnace	1.67	7	37.5	0.6	58	7.5	11.66	62.41	1.00	96.63	12.50
R219	Exempt Oven	206.86	7	130.0	0.6	35	7.5	1,448.03	26,892.08	124.12	7,240.17	1,551.47
R219	CEC Furnace	10.63	7	130.0	0.6	35	7.5	74.38	1,381.25	6.38	371.88	79.69

Notes:
1. VOC, SOx, and PM emissions for all units are based on SCAQMD AER values for natural gas fired external combustion sources.
2. NOx and CO emission factors used in 2013 AER were derived based on permitted emissions limits.
3. NOx and CO emission factors for all other listed sources were based on SCAQMD AER values for natural gas fired external combustion sources.

Emissions from Cooling Towers

Emissions of PM emissions from Cooling Towers were calculated based on the following equation:
Annual Emission = Throughput (MMgal/yr) x Emisson factor (lb/MMgal)

Table B.4-4 - 2012 Emissions

Permit Number	Device	Throughput (MMgal/day)	Emission Factor (lb/MMgal)-day	Annual Emissions (lb/yr)	Annual Emissions (ton/yr)
R219	Cooling Towers	817.27	19	15,528.07	7.76

Table B.4-5 - 2013 Emissions

Permit Number	Device	Throughput (MMgal/yr)	Emission Factor (lb/MMgal)	Annual Emissions (lb/yr)	Annual Emissions (ton/yr)
R219	Cooling Towers	729.47	19	13,859.87	6.93

Note: Emission factor based on SCAQMD value for PM emissions from cooling towers used in "other" type of industry.

Emissions from Grinding/Sawing Operations

Baseline PM10 emissions were calculated based on 2015 measurements. Emissions from grinding/sawing operations are vented to baghouses with a control efficiency of 99%.

Table B.4-6 - Baseline PM10 Emissions from Grinding & Sawing Operations

Work Center	Hourly Emissions (lbs/day)[1]		Daily Emissions (lbs/day)		Annual Emissions (lbs/yr)[2]		Annual Emissions (tons/yr)[2]	
Bldg. H Baghouse	PM	4.23E-02	PM	1.02E+00	PM	2.53E+02	PM	1.26E-01
Bldg. P Baghouse	PM	9.08E-02	PM	2.18E+00	PM	5.42E+02	PM	2.71E-01
Bldg. M Baghouse	PM	1.04E+00	PM	2.50E+01	PM	6.23E+03	PM	3.12E+00
Bldg. A1 Fugitives	PM	8.50E-02	PM	2.04E+00	PM	5.08E+02	PM	2.54E-01
Bldg. M Fugitives	PM	6.43E-03	PM	1.54E-01	PM	3.84E+01	PM	1.92E-02
Bldg. H Fugitives	PM	8.26E-03	PM	1.98E-01	PM	4.94E+01	PM	2.47E-02
Bldg. P Fugitives	PM	2.55E-02	PM	6.11E-01	PM	1.52E+02	PM	7.61E-02
Total	1.30E+00		3.12E+01		7.78E+03		3.89E+00	

1. Based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.

Table B.5 - EMISSIONS FROM OPEN PROCESS TANKS DUE TO ELECTROLYSIS AND EVAPORATION (Aqueous Solution Line)

TOTAL						
R1(EVAP)=	0.031	LB/HR	(vaporized acids and/or ammonia--these are reported as total PM)	R1(EVAP) =	38.147300	lb/yr
R1(PLAT)=	0.000	LB/HR	(Total PM)	R1(PLAT)=	0.000000	lb/yr
				Total =	38.147300	lb/yr
R2(EVAP)=	0.008	LB/HR	(vaporized acids and/or ammonia--these are reported as total PM)	R2(EVAP) =	9.536800	lb/yr
R2(PLAT)=	0.000	LB/HR	(Total PM)	R2(PLAT)=	0.000000	lb/yr
				Total =	**9.536800**	**lb/yr**
Hours per year =	8760					

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
ambiant temp=	77	F																		air	air				
TANK No.	Chemical	WT %	OPER. T Deg F	V.P. mm HG	MW	VENT RATE CFM	Surface W x L ft x ft	I amps	CATHODE PLATING EFF. %	EVAP APCS EFF. %	PLATING APCS EFF. %	||	EVAP R1 lb/hr	EVAP R2 lb/hr	PLATING R1 lb/hr	PLATING R2 lb/hr	||	Conc. lb/cu.ft	Dab ft^2/sec	u lb/ft-sec	p lb/ft^3	Re	Sc	Sh	k ft/sec
Etch Tank 6	HNO3	45.0	77.0	0.23000	63.01	1405	31.95		0	75.00	0.00	||	0.015283	0.003821	0.000000	0.000E+00	||	4.86E-05	0.0001	1.242E-05	0.0738734	24640	1.46	134.20	0.0027
Etch Tank 4	HNO3	45.0	77.0	0.23000	63.01	1405	31.95		0	75.00	0.00	||	0.015283	0.003821	0.000000	0.000E+00	||	4.86E-05	0.0001	1.242E-05	0.0738734	24640	1.46	134.20	0.0027

For cases where there is no ventilation, use assumed ventilation rate = 44 CFM per square foot of tank area.

Copy each entire line to increase the number of compounds.

Enter data only in columns A through L.

Notes: R1 = uncontrolled emissions.
R2 = controlled emissions -- This means the emission rate after applying the control efficiency.

Table B.6 - EMISSIONS FROM OPEN PROCESS TANKS DUE TO ELECTROLYSIS AND EVAPORATION

TOTAL						
R1(EVAP)=	0.072	LB/HR	(vaporized acids and/or ammonia--these are reported as total PM)	R1(EVAP) =	89.791400	lb/yr
R1(PLAT)=	0.000	LB/HR	(Total PM)	R1(PLAT)=	0.000000	lb/yr
				Total =	89.791400	lb/yr
R2(EVAP)=	0.018	LB/HR	(vaporized acids and/or ammonia--these are reported as total PM)	R2(EVAP) =	22.447900	lb/yr
R2(PLAT)=	0.000	LB/HR	(Total PM)	R2(PLAT)=	0.000000	lb/yr
				Total =	**22.447900**	**lb/yr**
Hours per year =	8760					

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
ambiant temp=	77	F																		air	air				
TANK No.	Chemical	WT %	OPER. T Deg F	V.P. mm HG	MW	VENT RATE CFM	Surface W x L ft x ft	I amps	CATHODE PLATING EFF. %	EVAP APCS EFF. %	PLATING APCS EFF. %	||	EVAP R1 lb/hr	EVAP R2 lb/hr	PLATING R1 lb/hr	PLATING R2 lb/hr	||	Conc. lb/cu.ft	Dab ft^2/sec	u lb/ft-sec	p lb/ft^3	Re	Sc	Sh	k ft/sec
Tank 5	HNO3	45.0	77.0	0.23000	63.01	4400	100.00		0	75.00	0.00	||	0.035974	0.008994	0.000000	0.000E+00	||	0.0000	0.0001	1.2421E-05	0.07387337	43616	1.46	178.54	0.0021
Tank 8	HNO3	45.0	77.0	0.23000	63.01	4400	100.00		0	75.00	0.00	||	0.035974	0.008994	0.000000	0.000E+00	||	0.0000	0.0001	1.2421E-05	0.07387337	43616	1.46	178.54	0.0021

For cases where there is no ventilation, use assumed ventilation rate = 44 CFM per square foot of tank area.

Copy each entire line to increase the number of compounds.

Enter data only in columns A through L.

Notes: R1 = uncontrolled emissions.
R2 = controlled emissions -- This means the emission rate after applying the control efficiency.

B.7 Project TAC Emissions

Project TAC emissions include emissions from proposed emission units and emission increases from existing emission units. Project emissions are summarized in Table B.7-1.

B.7-1 - Proposed Project Hourly TAC Emissions Summary

	Hourly Emissions (lb/hr)																															
Device	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Hexavalent Chromium	Manganese	Nickel	DPM	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Methylene Chloride	Vinyl Chloride	Tetrachloroethane, 1,1	Trichloroethane, 1,1,2	Chloroform	Methanol	Styrene	Arsenic	Beryllium	Cadmium	Copper	Lead	Selenium
Large Rotary Furnace	1.22E-04	2.58E-04	2.10E-06	6.29E-06	6.50E-05	5.66E-05	6.70E-02	1.45E-04	9.64E-05	5.55E-04	4.13E-04	1.11E-02	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Rotary Furnace #1	7.73E-05	1.64E-04	1.33E-06	4.00E-06	4.13E-05	3.60E-05	4.27E-02	9.20E-05	6.13E-05	3.53E-04	2.63E-04	7.07E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Rotary Furnace #2	7.73E-05	1.64E-04	1.33E-06	4.00E-06	4.13E-05	3.60E-05	4.27E-02	9.20E-05	6.13E-05	3.53E-04	2.63E-04	7.07E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chain Conveyor Furnance #1	7.18E-05	1.52E-04	1.24E-06	3.71E-06	3.84E-05	3.34E-05	3.96E-02	8.54E-05	5.70E-05	3.28E-04	2.44E-04	6.56E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chain Conveyor Furnance #2	7.18E-05	1.52E-04	1.24E-06	3.71E-06	3.84E-05	3.34E-05	3.96E-02	8.54E-05	5.70E-05	3.28E-04	2.44E-04	6.56E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #1	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #2	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #3	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #4	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrasive Blasting	-	-	-	-	-	-	-	-	-	-	-	-	3.70E-11	1.08E-04	1.15E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sludge Dryer	8.43E-08	1.79E-07	1.05E-09	3.16E-09	4.53E-08	2.85E-08	3.37E-05	1.00E-07	6.64E-08	3.86E-07	2.87E-07	7.71E-06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thorpe Furnace	6.68E-07	1.42E-06	8.35E-09	2.50E-08	3.59E-07	2.25E-07	2.67E-04	7.93E-07	5.26E-07	3.06E-06	2.27E-06	6.10E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 1 Furnace	5.58E-07	1.19E-06	6.98E-09	2.09E-08	3.00E-07	1.88E-07	2.23E-04	6.63E-07	4.40E-07	2.55E-06	1.90E-06	5.10E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 2 Furnace	7.20E-07	1.53E-06	9.00E-09	2.70E-08	3.87E-07	2.43E-07	2.88E-04	8.55E-07	5.67E-07	3.29E-06	2.45E-06	6.58E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rotary Furnace	2.23E-06	4.72E-06	3.84E-08	1.15E-07	1.19E-06	1.04E-06	1.23E-03	2.65E-06	1.77E-06	1.02E-05	7.57E-06	2.04E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lindberg Furnace	3.55E-06	7.54E-06	4.43E-08	1.33E-07	1.91E-06	1.20E-06	1.42E-03	4.21E-06	2.79E-06	1.62E-05	1.21E-05	3.24E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Car Bottom Furnace	1.74E-06	3.70E-06	3.01E-08	9.02E-08	9.32E-07	8.12E-07	9.62E-04	2.07E-06	1.38E-06	7.97E-06	5.92E-06	1.59E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOV Furnace	3.48E-07	7.40E-07	4.35E-09	1.31E-08	1.87E-07	1.18E-07	1.39E-04	4.14E-07	2.74E-07	1.59E-06	1.18E-06	3.18E-05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#1 Car Bottom Furnace	1.74E-06	3.70E-06	2.18E-08	6.53E-08	9.36E-07	5.88E-07	6.96E-04	2.07E-06	1.37E-06	7.96E-06	5.92E-06	1.59E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exempt Oven	3.81E-05	8.10E-05	4.76E-07	1.43E-06	2.05E-05	1.29E-05	1.52E-02	4.52E-05	3.00E-05	1.74E-04	1.30E-04	3.48E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CEC Furnaces	1.92E-06	4.07E-06	2.40E-08	7.19E-08	1.03E-06	6.47E-07	7.67E-04	2.28E-06	1.51E-06	8.77E-06	6.52E-06	1.75E-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manipulators	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.50E-03	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Forklifts	9.91E-04	1.29E-02	-	6.09E-05	1.75E-03	1.65E-03	2.08E-03	1.55E-05	-	3.50E-04	1.22E-04	-	-	-	-	-	4.16E-04	1.11E-05	1.34E-05	7.07E-06	2.59E-05	4.51E-06	1.59E-05	9.56E-06	8.59E-06	1.92E-03	7.49E-06	-	-	-	-	-
Grinding / Sawing	-	-	-	-	-	-	-	-	-	-	-	-	-	4.17E-04	2.74E-04	-	-	-	-	-	-	-	-	-	-	-	-	7.53E-07	6.26E-08	6.64E-07	2.03E-03	8.04E-06	0.00E+00

B.7-2 - Proposed Project Annual TAC Emissions Summary

	Annual Emissions (lb/yr)																															
Device	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Hexavalent Chromium	Manganese	Nickel	DPM	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Methylene Chloride	Vinyl Chloride	Tetrachloroethane, 1,1	Trichloroethane, 1,1,2	Chloroform	Methanol	Styrene	Arsenic	Beryllium	Cadmium	Copper	Lead	Selenium
Large Rotary Furnace	1.06	2.26	0.02	0.06	0.57	0.50	587.34	1.27	0.84	4.86	3.62	97.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Rotary Furnace #1	0.68	1.44	0.01	0.04	0.36	0.32	373.76	0.81	0.54	3.10	2.30	61.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medium Rotary Furnace #2	0.68	1.44	0.01	0.04	0.36	0.32	373.76	0.81	0.54	3.10	2.30	61.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chain Conveyor Furnace #1	0.63	1.33	0.01	0.03	0.34	0.29	347.06	0.75	0.50	2.87	2.14	57.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chain Conveyor Furnace #2	0.63	1.33	0.01	0.03	0.34	0.29	347.06	0.75	0.50	2.87	2.14	57.48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #1	0.53	1.13	6.67E-03	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #2	0.53	1.13	6.67E-03	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #3	0.53	1.13	6.67E-03	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestal Die Heating Furnace #4	0.53	1.13	6.67E-03	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Abrasive Blasting	-	-	-	-	-	-	-	-	-	-	-	-	3.24E-07	0.95	1.01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sludge Dryer	7.39E-04	1.57E-03	9.24E-06	2.77E-05	3.97E-04	2.49E-04	0.30	8.77E-04	5.82E-04	3.38E-03	2.51E-03	0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thorpe Furnace	5.85E-03	0.01	7.31E-05	2.19E-04	3.15E-03	1.97E-03	2.34	6.95E-03	4.61E-03	0.03	0.02	0.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 1 Furnace	4.89E-03	0.01	6.11E-05	1.83E-04	2.63E-03	1.65E-03	1.96	5.81E-03	3.85E-03	0.02	0.02	0.45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
No. 2 Furnace	6.31E-03	0.01	7.88E-05	2.36E-04	3.39E-03	2.13E-03	2.52	7.49E-03	4.97E-03	0.03	0.02	0.58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rotary Furnace	0.02	0.04	3.36E-04	1.01E-03	0.01	9.08E-03	10.77	0.02	0.02	0.09	0.07	1.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lindberg Furnace	0.03	0.07	3.88E-04	1.17E-03	0.02	0.01	12.43	0.04	0.02	0.14	0.11	2.84	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Car Bottom Furnace	0.02	0.03	2.63E-04	7.90E-04	8.16E-03	7.11E-03	8.43	0.02	0.01	0.07	0.05	1.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AOV Furnace	3.05E-03	6.48E-03	3.81E-05	1.14E-04	1.64E-03	1.03E-03	1.22	3.62E-03	2.40E-03	0.01	0.01	0.28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
#1 Car Bottom Furnace	0.02	0.03	1.91E-04	5.72E-04	8.20E-03	5.15E-03	6.10	0.02	0.01	0.07	0.05	1.39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exempt Oven	0.33	0.71	4.17E-03	0.01	0.18	0.11	133.50	0.40	0.26	1.53	1.13	30.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CEC Furnaces	0.02	0.04	2.10E-04	6.30E-04	9.03E-03	5.67E-03	6.72	0.02	0.01	0.08	0.06	1.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manipulators	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Forklifts	8.68	112.93	-	0.53	15.30	14.45	18.21	0.14	-	3.07	1.07	-	-	-	-	-	3.64	0.10	0.12	0.06	0.23	0.04	0.14	0.08	0.08	16.82	0.07	-	-	-	-	-	-
Grinding / Sawing	-	-	-	-	-	-	-	-	-	-	-	-	-	1.25	0.82	-	-	-	-	-	-	-	-	-	-	-	-	2.25E-03	1.87E-04	1.98E-03	6.06E+00	2.40E-02	0.00E+00
Total	14.95	126.23	0.10	0.82	18.66	17.04	3,087.78	7.58	4.96	31.71	22.36	572.55	3.24E-07	2.20	1.83	21.92	3.64	0.10	0.12	0.06	0.23	0.04	0.14	0.08	0.08	16.82	0.07	2.25E-03	1.87E-04	1.98E-03	6.06	0.02	0.00E+00

Emissions from Proposed Combustion Sources

Emissions of TACs from combustion sources were calculated based on the following equation. The proposed equipment is expected to operate up to 24 hours per day and 365 days per year.

Hourly Emissions = Max heat rating (MMBtu/hr)/HHV (mmbtu/mmscf) x Emission Factor (lb/mmscf)

Annual Emissions = Hourly Emissions x Hours of operation per day x Operating days per year

B.7-3 - Hourly Emissions from Proposed Combustion Sources

Device	Heat Rating (MMBtu/hr)	Heat Rating (MMscf/hr)	Emission Factors (lb/mmscf)												Hourly Emissions (lb/hr)											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
Large Rotary Furnace	22	0.0210	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	1.22E-04	2.58E-04	2.10E-06	6.29E-06	6.50E-05	5.66E-05	6.70E-02	1.45E-04	9.64E-05	5.55E-04	4.13E-04	1.11E-02
Medium Rotary Furnace #1	14	0.0133	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	7.73E-05	1.64E-04	1.33E-06	4.00E-06	4.13E-05	3.60E-05	4.27E-02	9.20E-05	6.13E-05	3.53E-04	2.63E-04	7.07E-03
Medium Rotary Furnace #2	14	0.0133	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	7.73E-05	1.64E-04	1.33E-06	4.00E-06	4.13E-05	3.60E-05	4.27E-02	9.20E-05	6.13E-05	3.53E-04	2.63E-04	7.07E-03
Chain Conveyor Furnace #1	13	0.0124	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	7.18E-05	1.52E-04	1.24E-06	3.71E-06	3.84E-05	3.34E-05	3.96E-02	8.54E-05	5.70E-05	3.28E-04	2.44E-04	6.56E-03
Chain Conveyor Furnace #2	13	0.0124	0.0058	0.0123	0.0001	0.0003	0.0031	0.0027	3.2	0.0069	0.0046	0.0265	0.0197	0.53	7.18E-05	1.52E-04	1.24E-06	3.71E-06	3.84E-05	3.34E-05	3.96E-02	8.54E-05	5.70E-05	3.28E-04	2.44E-04	6.56E-03
Pedestal Die Heating Furnace #1	8	0.0076	0.008	0.017	0.0001	0.0003	0.0043	0.0027	3.2	0.0095	0.0063	0.0366	0.0272	0.731	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03
Pedestal Die Heating Furnace #2	8	0.0076	0.008	0.017	0.0001	0.0003	0.0043	0.0027	3.2	0.0095	0.0063	0.0366	0.0272	0.731	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03
Pedestal Die Heating Furnace #3	8	0.0076	0.008	0.017	0.0001	0.0003	0.0043	0.0027	3.2	0.0095	0.0063	0.0366	0.0272	0.731	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03
Pedestal Die Heating Furnace #4	8	0.0076	0.008	0.017	0.0001	0.0003	0.0043	0.0027	3.2	0.0095	0.0063	0.0366	0.0272	0.731	6.10E-05	1.30E-04	7.62E-07	2.29E-06	3.28E-05	2.06E-05	2.44E-02	7.24E-05	4.80E-05	2.79E-04	2.07E-04	5.57E-03

Note:
1. Medium Rotary Furnace #2 to be installed and operated in 2019 and expected to be identical to Medium Furnace #1.
2. Emission factors were based on AB2588 emission factors.
3. Ammonia emission factor is based on SCAQMD AER value for sources not equipped with an NSCR or SCR.

B.7-4 - Annual Emissions from Proposed Combustion Sources

Device	Heat Rating (MMBtu/hr)	Heat Rating (MMscf/hr)	Annual Emissions (lb/yr)												Annual Emissions (ton/yr)											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
Large Rotary Furnace	22	0.0210	1.06	2.26	0.02	0.06	0.57	0.50	587.34	1.27	0.84	4.86	3.62	97.28	5.32E-04	1.13E-03	9.18E-06	2.75E-05	2.84E-04	2.48E-04	0.29	6.33E-04	4.22E-04	2.43E-03	1.81E-03	0.05
Medium Rotary Furnace #1	14	0.0133	0.68	1.44	0.01	0.04	0.36	0.32	373.76	0.81	0.54	3.10	2.30	61.90	3.39E-04	7.18E-04	5.84E-06	1.75E-05	1.81E-04	1.58E-04	0.19	4.03E-04	2.69E-04	1.55E-03	1.15E-03	0.03
Medium Rotary Furnace #2	14	0.0133	0.68	1.44	0.01	0.04	0.36	0.32	373.76	0.81	0.54	3.10	2.30	61.90	3.39E-04	7.18E-04	5.84E-06	1.75E-05	1.81E-04	1.58E-04	0.19	4.03E-04	2.69E-04	1.55E-03	1.15E-03	0.03
Chain Conveyor Furnance #1	13	0.0124	0.63	1.33	0.01	0.03	0.34	0.29	347.06	0.75	0.50	2.87	2.14	57.48	3.15E-04	6.67E-04	5.42E-06	1.63E-05	1.68E-04	1.46E-04	0.17	3.74E-04	2.49E-04	1.44E-03	1.07E-03	0.03
Chain Conveyor Furnance #2	13	0.0124	0.63	1.33	0.01	0.03	0.34	0.29	347.06	0.75	0.50	2.87	2.14	57.48	3.15E-04	6.67E-04	5.42E-06	1.63E-05	1.68E-04	1.46E-04	0.17	3.74E-04	2.49E-04	1.44E-03	1.07E-03	0.03
Pedestal Die Heater #1	8	0.0076	0.53	1.13	0.01	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	2.67E-04	5.67E-04	3.34E-06	1.00E-05	1.43E-04	9.01E-05	0.11	3.17E-04	2.10E-04	1.22E-03	9.08E-04	0.02
Pedestal Die Heater #2	8	0.0076	0.53	1.13	0.01	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	2.67E-04	5.67E-04	3.34E-06	1.00E-05	1.43E-04	9.01E-05	0.11	3.17E-04	2.10E-04	1.22E-03	9.08E-04	0.02
Pedestal Die Heater #3	8	0.0076	0.53	1.13	0.01	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	2.67E-04	5.67E-04	3.34E-06	1.00E-05	1.43E-04	9.01E-05	0.11	3.17E-04	2.10E-04	1.22E-03	9.08E-04	0.02
Pedestal Die Heater #4	8	0.0076	0.53	1.13	0.01	0.02	0.29	0.18	213.58	0.63	0.42	2.44	1.82	48.79	2.67E-04	5.67E-04	3.34E-06	1.00E-05	1.43E-04	9.01E-05	0.11	3.17E-04	2.10E-04	1.22E-03	9.08E-04	0.02

Emissions from Abrasive Blasting Cabinet

Emission of PM from the Abrasive Blasting Cabinet vented to a baghouse were estimated based on the following equation:
Hourly Emissions = Hourly PM Emissions x Weight Proportion of TAC (lb TAC/lb PM)
Daily Emissions = Hourly Emissions x Operating hours per day (hr/day)
Annual Emissions = Daily Emissions x Days of operation per year (day/yr)

Hours of Operation = 24
Days of Operation = 365

B.7-5 - TAC Emissions from Abrasive Blasting Cabinet

Pollutant	Hourly PM Emissions (lbs/hr)	Emission Factors (lb/lb)	Hourly Emissions (lb/hr)	Annual Emissions (lb/yr)	Annual Emissions (ton/yr)
Hexavent Chromium	0.01	2.90E-09	3.70E-11	3.24E-07	1.62E-10
Manganese	0.01	8.50E-03	1.08E-04	0.95	4.75E-04
Nickel	0.01	9.00E-03	1.15E-04	1.01	5.03E-04

Emissions from Onsite Mobile Equipment

Diesel Manipulators

Diesel manipulators are expected to emit diesel particulate matter (DPM). All PM10 emitted from diesel fired manipulators are assumed to be DPM.

B.7-6 - TAC Emissions from Abrasive Blasting Cabinet

Source	DPM (lb/hr)	DPM (lb/yr)
Diesel Manipulators	1.25E-03	10.96
Diesel Manipulators	1.25E-03	10.96
Total	2.50E-03	21.92

Propane Fired Forklifts

Emissions from mobile equipment are estimated using the following equations:
Hourly Emissions = Fuel Consumption x LF x EF
Annual Emissions = daily emissions x operating hours per day x operating days per year

where,
BHP = rated capacity, bhp
LF = load factor
EF = emission factor, g/bhp-hr or lbs/Mgal

B.7-7 - Emissions Factors from Propane Combustion

Source	Emission Factors, lbs/Mgal																			
	Benzene	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Formaldehyde	Methylene Chloride	Naphthalene	Vinyl Chloride	Ammonia	Tetrachloroethane, 1,1	Trichloroethane, 1,1,2	Acetaldehyde	Acrolein	Chloroform	Ethyl benzene	Methanol	Styrene	Toluene	Xylene
Forklift_1	0.143	0.06	0.0016	0.00193	0.00102	1.86	0.00373	0.00879	0.00065	0.3	0.00229	0.00138	0.252	0.238	0.00124	0.00224	0.277	0.00108	0.0505	0.0176
Forklift_2	0.143	0.06	0.0016	0.00193	0.00102	1.86	0.00373	0.00879	0.00065	0.3	0.00229	0.00138	0.252	0.238	0.00124	0.00224	0.277	0.00108	0.0505	0.0176
Forklift_3	0.143	0.06	0.0016	0.00193	0.00102	1.86	0.00373	0.00879	0.00065	0.3	0.00229	0.00138	0.252	0.238	0.00124	0.00224	0.277	0.00108	0.0505	0.0176
Forklift_4	0.143	0.06	0.0016	0.00193	0.00102	1.86	0.00373	0.00879	0.00065	0.3	0.00229	0.00138	0.252	0.238	0.00124	0.00224	0.277	0.00108	0.0505	0.0176

Note: Emission factors based on SCAQMD AB2588 Emission factors for propane combustion for 4 stroke rich burn engines.

B.7-8 - Hourly Emissions from Proposed Forklifts

Source	BHP	Load Factor	Fuel Rate (gal/hr)[1]	Hourly Emissions (lbs/hr)																			
				Benzene	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Formaldehyde	Methylene Chloride	Naphthalene	Vinyl Chloride	Ammonia	Tetrachloroethane, 1,1	Trichloroethane, 1,1,2	Acetaldehyde	Acrolein	Chloroform	Ethyl benzene	Methanol	Styrene	Toluene	Xylene
Forklift_1	100	0.2	10.83	3.10E-04	1.30E-04	3.47E-06	4.18E-06	2.21E-06	4.03E-03	8.08E-06	1.90E-05	1.41E-06	6.50E-04	4.96E-06	2.99E-06	5.46E-04	5.15E-04	2.69E-06	4.85E-06	6.00E-04	2.34E-06	1.09E-04	3.81E-05
Forklift_2	100	0.2	10.83	3.10E-04	1.30E-04	3.47E-06	4.18E-06	2.21E-06	4.03E-03	8.08E-06	1.90E-05	1.41E-06	6.50E-04	4.96E-06	2.99E-06	5.46E-04	5.15E-04	2.69E-06	4.85E-06	6.00E-04	2.34E-06	1.09E-04	3.81E-05
Forklift_3	60	0.2	6.50	1.86E-04	7.80E-05	2.08E-06	2.51E-06	1.33E-06	2.42E-03	4.85E-06	1.14E-05	8.45E-07	3.90E-04	2.98E-06	1.79E-06	3.27E-04	3.09E-04	1.61E-06	2.91E-06	3.60E-04	1.40E-06	6.56E-05	2.29E-05
Forklift_4	60	0.2	6.50	1.86E-04	7.80E-05	2.08E-06	2.51E-06	1.33E-06	2.42E-03	4.85E-06	1.14E-05	8.45E-07	3.90E-04	2.98E-06	1.79E-06	3.27E-04	3.09E-04	1.61E-06	2.91E-06	3.60E-04	1.40E-06	6.56E-05	2.29E-05
			Total	9.91E-04	4.16E-04	1.11E-05	1.34E-05	7.07E-06	1.29E-02	2.59E-05	6.09E-05	4.51E-06	2.08E-03	1.59E-05	9.56E-06	1.75E-03	1.65E-03	8.59E-06	1.55E-05	1.92E-03	7.49E-06	3.50E-04	1.22E-04

B.7-9 - Annual Emissions from Proposed Forklifts

Source	Operating Hours		Annual Emissions (lbs/yr)																				
	hrs/day	days/yr	Benzene	1,3-Butadiene	Carbon Tetrachloride	Ethylene Dibromide	Dichloroethane, 1,2-	Formaldehyde	Methylene Chloride	Naphthalene	Vinyl Chloride	Ammonia	Tetrachloroethane, 1,1	Trichloroethane, 1,1,2	Acetaldehyde	Acrolein	Chloroform	Ethyl benzene	Methanol	Styrene	Toluene	Xylene
Forklift_1	24	365	2.71E+00	1.14E+00	3.04E-02	3.66E-02	1.94E-02	3.53E+01	7.08E-02	1.67E-01	1.23E-02	5.69E+00	4.34E-02	2.62E-02	4.78E+00	4.52E+00	2.35E-02	4.25E-02	5.26E+00	2.05E-02	9.58E-01	3.34E-01
Forklift_2	24	365	2.71E+00	1.14E+00	3.04E-02	3.66E-02	1.94E-02	3.53E+01	7.08E-02	1.67E-01	1.23E-02	5.69E+00	4.34E-02	2.62E-02	4.78E+00	4.52E+00	2.35E-02	4.25E-02	5.26E+00	2.05E-02	9.58E-01	3.34E-01
Forklift_3	24	365	1.63E+00	6.83E-01	1.82E-02	2.20E-02	1.16E-02	2.12E+01	4.25E-02	1.00E-01	7.40E-03	3.42E+00	2.61E-02	1.57E-02	2.87E+00	2.71E+00	1.41E-02	2.55E-02	3.15E+00	1.23E-02	5.75E-01	2.00E-01
Forklift_4	24	365	1.63E+00	6.83E-01	1.82E-02	2.20E-02	1.16E-02	2.12E+01	4.25E-02	1.00E-01	7.40E-03	3.42E+00	2.61E-02	1.57E-02	2.87E+00	2.71E+00	1.41E-02	2.55E-02	3.15E+00	1.23E-02	5.75E-01	2.00E-01
		Total	8.68	3.64	0.10	0.12	0.06	112.93	0.23	0.53	0.04	18.21	0.14	0.08	15.30	14.45	0.08	0.14	16.82	0.07	3.07	1.07

Emission Increases from Existing Equipment

Increase in emissions of TACs from existing equipment are expected from increased operated due to the proposed project. Emission increased are estimated from baseline emissions and the expected increase in operations

B.7-6 - Emissions Increases from Existing Combustion Units

Permit Number	Device	Expected Increase in Operations (%)	Hourly Emissions (lbs/hr)*												Annual Emissions (lb/yr)											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
I73290	Sludge Dryer	25	8.43E-08	1.79E-07	1.05E-09	3.16E-09	4.53E-08	2.85E-08	3.37E-05	1.00E-07	6.64E-08	3.86E-07	2.87E-07	7.71E-06	7.39E-04	1.57E-03	9.24E-06	2.77E-05	3.97E-04	2.49E-04	0.30	8.77E-04	5.82E-04	3.38E-03	2.51E-03	0.07
G26779	Thorpe Furnace	20	6.68E-07	1.42E-06	8.35E-09	2.50E-08	3.59E-07	2.25E-07	2.67E-04	7.93E-07	5.26E-07	3.06E-06	2.27E-06	6.10E-05	5.85E-03	0.01	7.31E-05	2.19E-04	3.15E-03	1.97E-03	2.34	6.95E-03	4.61E-03	0.03	0.02	0.53
G26775	No. 1 Furnace	5	5.58E-07	1.19E-06	6.98E-09	2.09E-08	3.00E-07	1.88E-07	2.23E-04	6.63E-07	4.40E-07	2.55E-06	1.90E-06	5.10E-05	4.89E-03	0.01	6.11E-05	1.83E-04	2.63E-03	1.65E-03	1.96	5.81E-03	3.85E-03	0.02	0.02	0.45
G26776	No. 2 Furnace	5	7.20E-07	1.53E-06	9.00E-09	2.70E-08	3.87E-07	2.43E-07	2.88E-04	8.55E-07	5.67E-07	3.29E-06	2.45E-06	6.58E-05	6.31E-03	0.01	7.88E-05	2.36E-04	3.39E-03	2.13E-03	2.52	7.49E-03	4.97E-03	0.03	0.02	0.58
G26557	Rotary Furnace	20	2.23E-06	4.72E-06	3.84E-08	1.15E-07	1.19E-06	1.04E-06	1.23E-03	2.65E-06	1.77E-06	1.02E-05	7.57E-06	2.04E-04	0.02	0.04	3.36E-04	1.01E-03	0.01	9.08E-03	10.77	0.02	0.02	0.09	0.07	1.78
G26560	Lindberg Furnace	30	3.55E-06	7.54E-06	4.43E-08	1.33E-07	1.91E-06	1.20E-06	1.42E-03	4.21E-06	2.79E-06	1.62E-05	1.21E-05	3.24E-04	0.03	0.07	3.88E-04	1.17E-03	0.02	0.01	12.43	0.04	0.02	0.14	0.11	2.84
G26558	Car Bottom Furnace	20	1.74E-06	3.70E-06	3.01E-08	9.02E-08	9.32E-07	8.12E-07	9.62E-04	2.07E-06	1.38E-06	7.97E-06	5.92E-06	1.59E-04	0.02	0.03	2.63E-04	7.90E-04	8.16E-03	7.11E-03	8.43	0.02	0.01	0.07	0.05	1.40
G26561	AOV Furnace	20	3.48E-07	7.40E-07	4.35E-09	1.31E-08	1.87E-07	1.18E-07	1.39E-04	4.14E-07	2.74E-07	1.59E-06	1.18E-06	3.18E-05	3.05E-03	6.48E-03	3.81E-05	1.14E-04	1.64E-03	1.03E-03	1.22	3.62E-03	2.40E-03	0.01	0.01	0.28
R219	#1 Car Bottom Furnace	30	1.74E-06	3.70E-06	2.18E-08	6.53E-08	9.36E-07	5.88E-07	6.96E-04	2.07E-06	1.37E-06	7.96E-06	5.92E-06	1.59E-04	0.02	0.03	1.91E-04	5.72E-04	8.20E-03	5.15E-03	6.10	0.02	0.01	0.07	0.05	1.39
R219	Exempt Oven	20	3.81E-05	8.10E-05	4.76E-07	1.43E-06	2.05E-05	1.29E-05	0.02	4.52E-05	3.00E-05	1.74E-04	1.30E-04	3.48E-03	0.33	0.71	4.17E-03	0.01	0.18	0.11	133.50	0.40	0.26	1.53	1.13	30.50
R219	CEC Furnace	20	1.92E-06	4.07E-06	2.40E-08	7.19E-08	1.03E-06	6.47E-07	7.67E-04	2.28E-06	1.51E-06	8.77E-06	6.52E-06	1.75E-04	0.02	0.04	2.10E-04	6.30E-04	9.03E-03	5.67E-03	6.72	0.02	0.01	0.08	0.06	1.53

Note: Emission units are expected up to 24 hours per day, 365 days per year

Table B.7-7 - TAC Emissions Increase from Grinding / Sawing Operations

Emission Source	Hourly Emissions (lbs/hr) [1]									Annual Emissions (lbs/yr) [2]								
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium
Bldg. H Baghouse	2.88E-08	ND	1.90E-08	NA	7.40E-06	1.17E-06	3.18E-06	7.49E-06	ND	8.59E-05	ND	5.69E-05	NA	2.21E-02	3.50E-03	9.49E-03	2.24E-02	ND
Bldg. P Baghouse	5.17E-08	ND	2.54E-08	NA	3.09E-06	ND	4.12E-06	1.09E-05	ND	1.55E-04	ND	7.59E-05	NA	9.22E-03	ND	1.23E-02	3.25E-02	ND
Bldg. M Baghouse	ND	ND	5.32E-07	NA	2.73E-04	4.90E-06	7.29E-05	2.37E-04	ND	ND	ND	1.59E-03	NA	8.17E-01	1.46E-02	2.18E-01	7.07E-01	ND
Bldg. A1 Fugitives	4.90E-07	6.26E-08	ND	NA	1.73E-03	1.26E-06	3.28E-04	1.01E-05	ND	1.46E-03	1.87E-04	ND	NA	5.17E+00	3.77E-03	9.79E-01	3.03E-02	ND
Bldg. M Fugitives	6.89E-08	ND	1.06E-08	NA	2.71E-06	2.88E-07	6.72E-06	1.62E-06	ND	2.06E-04	ND	3.17E-05	NA	8.09E-03	8.62E-04	2.01E-02	4.84E-03	ND
Bldg. H Fugitives	3.57E-08	ND	2.12E-08	NA	1.39E-06	ND	6.61E-07	2.24E-06	ND	1.07E-04	ND	6.32E-05	NA	4.16E-03	ND	1.97E-03	6.68E-03	ND
Bldg. P Fugitives	7.75E-08	ND	5.58E-08	NA	1.04E-05	4.19E-07	2.37E-06	5.29E-06	ND	2.32E-04	ND	1.67E-04	NA	3.11E-02	1.25E-03	7.08E-03	1.58E-02	ND
Totals	7.53E-07	6.26E-08	6.64E-07	0.00E+00	2.03E-03	8.04E-06	4.17E-04	2.74E-04	0.00E+00	2.25E-03	1.87E-04	1.98E-03	0.00E+00	6.06E+00	2.40E-02	1.25E+00	8.20E-01	0.00E+00

Note:

1. Estimated TAC emissions based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.
2. Based on potential increase in annual grinding/sawing operations of +50% in the four operation centers

B.8 - Baseline TAC Emissions

Baseline TAC Emissions were based on emissions from 2012 and 2013 and are summarized in Table B.8-1.

Table B.8-1 - Baseline TAC Emissions Summary

Annual Emissions (lb/yr)

Permit Number	Device	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium
F73290	Sludge Dryer	2.96E-03	6.28E-03	3.69E-05	1.11E-04	1.59E-03	9.98E-04	1.18	3.51E-03	2.33E-03	0.01	0.01	0.27	-	-	-	-	-	-	-	-	-
G26779	Thorpe Furnace	0.03	0.06	3.66E-04	1.10E-03	0.02	9.87E-03	11.70	0.03	0.02	0.13	0.10	2.67	-	-	-	-	-	-	-	-	-
G26775	No. 1 Furnace	0.10	0.21	1.22E-03	3.67E-03	0.05	0.03	39.13	0.12	0.08	0.45	0.33	8.94	-	-	-	-	-	-	-	-	-
G26776	No. 2 Furnace	0.13	0.27	1.58E-03	4.73E-03	0.07	0.04	50.44	0.15	0.10	0.58	0.43	11.52	-	-	-	-	-	-	-	-	-
G26557	Rotary Furnace	0.10	0.21	1.68E-03	5.05E-03	0.05	0.05	53.83	0.12	0.08	0.45	0.33	8.92	-	-	-	-	-	-	-	-	-
G26559	A&A Furnace	0.06	0.12	7.12E-04	2.13E-03	0.03	0.02	22.77	0.07	0.04	0.26	0.19	5.20	-	-	-	-	-	-	-	-	-
G26560	Lindberg Furnace	0.10	0.22	1.29E-03	3.88E-03	0.06	0.03	41.43	0.12	0.08	0.47	0.35	9.47	-	-	-	-	-	-	-	-	-
G26558	Car Bottom Furnace	0.08	0.16	1.32E-03	3.95E-03	0.04	0.04	42.13	0.09	0.06	0.35	0.26	6.98	-	-	-	-	-	-	-	-	-
G26561	AOV Furnace	0.02	0.03	1.91E-04	5.72E-04	8.20E-03	5.15E-03	6.10	0.02	0.01	0.07	0.05	1.39	-	-	-	-	-	-	-	-	-
R219	Exempt Boilers	0.04	0.09	5.23E-04	1.57E-03	0.02	0.01	16.75	0.05	0.03	0.19	0.14	3.83	-	-	-	-	-	-	-	-	-
R219	AgingFurnace	0.01	0.03	1.84E-04	5.51E-04	7.90E-03	4.96E-03	5.88	0.02	0.01	0.07	0.05	1.34	-	-	-	-	-	-	-	-	-
R219	#1 Car Bottom Furnace	0.05	0.11	6.35E-04	1.91E-03	0.03	0.02	20.33	0.06	0.04	0.23	0.17	4.65	-	-	-	-	-	-	-	-	-
R219	Exempt Ovens	1.67	3.55	0.02	0.06	0.90	0.56	667.49	1.98	1.31	7.63	5.67	152.48	-	-	-	-	-	-	-	-	-
R219	CEC Furnace	0.08	0.18	1.05E-03	3.15E-03	0.05	0.03	33.59	0.10	0.07	0.38	0.29	7.67	-	-	-	-	-	-	-	-	-
R219	Grinding / Sawing	-	-	-	-	-	-	-	-	-	-	-	-	2.25E-06	1.87E-07	1.98E-06	0.00E+00	6.06E-03	2.40E-05	1.25E-03	8.20E-04	0.00E+00
Total		2.47E+00	5.24E+00	3.16E-02	9.49E-02	1.32E+00	8.55E-01	1.01E+03	2.93E+00	1.94E+00	1.13E+01	8.38E+00	2.25E+02	2.25E-06	1.87E-07	1.98E-06	0.00E+00	6.06E-03	2.40E-05	1.25E-03	8.20E-04	0.00E+00

Annual Emissions (tons/yr)

Permit Number	Device	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium
F73290	Sludge Dryer	1.48E-06	3.14E-06	1.85E-08	5.54E-08	7.94E-07	4.99E-07	5.91E-04	1.75E-06	1.16E-06	6.76E-06	5.02E-06	1.35E-04	-	-	-	-	-	-	-	-	-
G26779	Thorpe Furnace	1.46E-05	3.11E-05	1.83E-07	5.49E-07	7.86E-06	4.94E-06	5.85E-03	1.74E-05	1.15E-05	6.69E-05	4.97E-05	1.34E-03	-	-	-	-	-	-	-	-	-
G26775	No. 1 Furnace	4.89E-05	1.04E-04	6.11E-07	1.83E-06	2.63E-05	1.65E-05	0.02	5.81E-05	3.85E-05	2.24E-04	1.66E-04	4.47E-03	-	-	-	-	-	-	-	-	-
G26776	No. 2 Furnace	6.31E-05	1.34E-04	7.88E-07	2.36E-06	3.39E-05	2.13E-05	0.03	7.49E-05	4.97E-05	2.88E-04	2.14E-04	5.76E-03	-	-	-	-	-	-	-	-	-
G26557	Rotary Furnace	4.88E-05	1.03E-04	8.41E-07	2.52E-06	2.61E-05	2.27E-05	0.03	5.80E-05	3.87E-05	2.23E-04	1.66E-04	4.46E-03	-	-	-	-	-	-	-	-	-
G26559	A&A Furnace	2.85E-05	6.05E-05	3.56E-07	1.07E-06	1.53E-05	9.61E-06	0.01	3.38E-05	2.24E-05	1.30E-04	9.68E-05	2.60E-03	-	-	-	-	-	-	-	-	-
G26560	Lindberg Furnace	5.18E-05	1.10E-04	6.47E-07	1.94E-06	2.78E-05	1.75E-05	0.02	6.15E-05	4.08E-05	2.37E-04	1.76E-04	4.73E-03	-	-	-	-	-	-	-	-	-
G26558	Car Bottom Furnace	3.82E-05	8.10E-05	6.58E-07	1.97E-06	2.04E-05	1.78E-05	0.02	4.54E-05	3.03E-05	1.74E-04	1.30E-04	3.49E-03	-	-	-	-	-	-	-	-	-
G26561	AOV Furnace	7.63E-06	1.62E-05	9.53E-08	2.86E-07	4.10E-06	2.57E-06	3.05E-03	9.06E-06	6.01E-06	3.49E-05	2.59E-05	6.97E-04	-	-	-	-	-	-	-	-	-
R219	Exempt Boilers	2.09E-05	4.45E-05	2.62E-07	7.85E-07	1.13E-05	7.06E-06	8.37E-03	2.49E-05	1.65E-05	9.58E-05	7.12E-05	1.91E-03	-	-	-	-	-	-	-	-	-
R219	AgingFurnace	7.35E-06	1.56E-05	9.18E-08	2.76E-07	3.95E-06	2.48E-06	2.94E-03	8.72E-06	5.79E-06	3.36E-05	2.50E-05	6.71E-04	-	-	-	-	-	-	-	-	-
R219	#1 Car Bottom Furnace	2.54E-05	5.40E-05	3.18E-07	9.53E-07	1.37E-05	8.58E-06	0.01	3.02E-05	2.00E-05	1.16E-04	8.64E-05	2.32E-03	-	-	-	-	-	-	-	-	-
R219	Exempt Ovens	8.34E-04	1.77E-03	1.04E-05	3.13E-05	4.48E-04	2.82E-04	0.33	9.91E-04	6.57E-04	3.82E-03	2.84E-03	0.08	-	-	-	-	-	-	-	-	-
R219	CEC Furnace	4.20E-05	8.92E-05	5.25E-07	1.57E-06	2.26E-05	1.42E-05	0.02	4.99E-05	3.31E-05	1.92E-04	1.43E-04	3.84E-03	-	-	-	-	-	-	-	-	-
R219	Grinding / Sawing	-	-	-	-	-	-	-	-	-	-	-	-	4.50E-03	3.74E-04	3.97E-03	0.00E+00	1.21E+01	4.81E-02	2.49E+00	1.64E+00	0.00E+00
Total		1.23E-03	2.62E-03	1.58E-05	4.75E-05	6.62E-04	4.27E-04	5.06E-01	1.46E-03	9.71E-04	5.64E-03	4.19E-03	1.13E-01	4.50E-03	3.74E-04	3.97E-03	0.00E+00	1.21E+01	4.81E-02	2.49E+00	1.64E+00	0.00E+00

Note: Baseline emissions for Thorpe furnace is based on emissions from 2014. Thorpe Furnace was installed and operated in 2014.

Emissions from Combustion Sources

Emissions of criteria pollutants from combustion sources were calculated based on the following equation:
Annual Emissions = Throughput (mmscf) x Emission factor (lb/mmscf)

Table B.8-2 - 2013Emissions

			Emission Factors (lb/mmscf)												Annual Emissions (lb/yr)											
Permit Number	Device	Throughput (mmscf/yr)	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
F73290	Sludge Dryer	0.30	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	2.36E-03	5.02E-03	2.95E-05	8.85E-05	1.27E-03	7.97E-04	9.44E-01	2.80E-03	1.86E-03	1.08E-02	8.02E-03	2.16E-01
G26779	Thorpe Furnace	0	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	0	0	0	0	0	0	0	0	0	0	0	0
G26775	No. 1 Furnace	12.51	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.00E-01	2.13E-01	1.25E-03	3.75E-03	5.38E-02	3.38E-02	4.00E+01	1.19E-01	7.88E-02	4.58E-01	3.40E-01	9.14E+00
G26776	No. 2 Furnace	15.15	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.21E-01	2.57E-01	1.51E-03	4.54E-03	6.51E-02	4.09E-02	4.85E+01	1.44E-01	9.54E-02	5.54E-01	4.12E-01	1.11E+01
G26557	Rotary Furnace	16.25	5.80E-03	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	3.20E+00	6.90E-03	4.60E-03	2.65E-02	1.97E-02	5.30E-01	9.43E-02	2.00E-01	1.63E-03	4.88E-03	5.04E-02	4.39E-02	5.20E+01	1.12E-01	7.48E-02	4.31E-01	3.20E-01	8.61E+00
G26559	A&A Furnace	6.53	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	5.22E-02	1.11E-01	6.53E-04	1.96E-03	2.81E-02	1.76E-02	2.09E+01	6.20E-02	4.11E-02	2.39E-01	1.78E-01	4.77E+00
G26560	Lindberg Furnace	14.00	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.12E-01	2.38E-01	1.40E-03	4.20E-03	6.02E-02	3.78E-02	4.48E+01	1.33E-01	8.82E-02	5.12E-01	3.81E-01	1.02E+01
G26558	Car Bottom Furnace	12.88	5.80E-03	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	3.20E+00	6.90E-03	4.60E-03	2.65E-02	1.97E-02	5.30E-01	7.47E-02	1.58E-01	1.29E-03	3.86E-03	3.99E-02	3.48E-02	4.12E+01	8.89E-02	5.93E-02	3.41E-01	2.54E-01	6.83E+00
G26561	AOV Furnace	1.90	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.52E-02	3.24E-02	1.90E-04	5.71E-04	8.19E-03	5.14E-03	6.09E+00	1.81E-02	1.20E-02	6.97E-02	5.18E-02	1.39E+00
R219	Exempt Boilers	5.13	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	4.11E-02	8.72E-02	5.13E-04	1.54E-03	2.21E-02	1.39E-02	1.64E+01	4.88E-02	3.23E-02	1.88E-01	1.40E-01	3.75E+00
R219	AgingFurnace	1.83	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.46E-02	3.10E-02	1.83E-04	5.48E-04	7.85E-03	4.93E-03	5.84E+00	1.73E-02	1.15E-02	6.68E-02	4.96E-02	1.33E+00
R219	#1 Car Bottom Furnace	11.04	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	8.83E-02	1.88E-01	1.10E-03	3.31E-03	4.75E-02	2.98E-02	3.53E+01	1.05E-01	6.96E-02	4.04E-01	3.00E-01	8.07E+00
R219	Exempt Ovens	210.32	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.68E+00	3.58E+00	2.10E-02	6.31E-02	9.04E-01	5.68E-01	6.73E+02	2.00E+00	1.33E+00	7.70E+00	5.72E+00	1.54E+02
R219	CEC Furnace	10.37	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	8.29E-02	1.76E-01	1.04E-03	3.11E-03	4.46E-02	2.80E-02	3.32E+01	9.85E-02	6.53E-02	3.79E-01	2.82E-01	7.58E+00

Table B8-3 - 2014 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factors (lb/mmscf)												Annual Emissions (lb/yr)											
			Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene	Benzene	Formaldehyde	Total PAHs (excluding Naphthalene)	Naphthalene	Acetaldehyde	Acrolein	Ammonia	Ethyl benzene	Hexane	Toluene	Xylene	Propylene
F73290	Sludge Dryer	0.44	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	3.55E-03	7.55E-03	4.44E-05	1.33E-04	1.91E-03	1.20E-03	1.42E+00	4.22E-03	2.80E-03	1.62E-02	1.21E-02	3.24E-01
G26779	Thorpe Furnace	3.66	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	2.93E-02	6.22E-02	3.66E-04	1.10E-03	1.57E-02	9.87E-03	1.17E+01	3.47E-02	2.30E-02	1.34E-01	9.95E-02	2.67E+00
G26775	No. 1 Furnace	11.95	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	9.56E-02	2.03E-01	1.20E-03	3.59E-03	5.14E-02	3.23E-02	3.83E+01	1.14E-01	7.53E-02	4.37E-01	3.25E-01	8.74E+00
G26776	No. 2 Furnace	16.38	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.31E-01	2.78E-01	1.64E-03	4.91E-03	7.04E-02	4.42E-02	5.24E+01	1.56E-01	1.03E-01	6.00E-01	4.46E-01	1.20E+01
G26857	Rotary Furnace	17.39	5.80E-03	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	3.20E+00	6.90E-03	4.60E-03	2.65E-02	1.97E-02	5.30E-01	1.01E-01	2.14E-01	1.74E-03	5.22E-03	5.39E-02	4.70E-02	5.57E+01	1.20E-01	8.00E-02	4.61E-01	3.43E-01	9.22E+00
G26559	A&A Furnace	7.70	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	6.16E-02	1.31E-01	7.70E-04	2.31E-03	3.31E-02	2.08E-02	2.47E+01	7.32E-02	4.85E-02	2.82E-01	2.10E-01	5.63E+00
G26560	Lindberg Furnace	11.90	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	9.52E-02	2.02E-01	1.19E-03	3.57E-03	5.12E-02	3.21E-02	3.81E+01	1.13E-01	7.50E-02	4.35E-01	3.24E-01	8.70E+00
G26558	Car Bottom Furnace	13.45	5.80E-03	1.23E-02	1.00E-04	3.00E-04	3.10E-03	2.70E-03	3.20E+00	6.90E-03	4.60E-03	2.65E-02	1.97E-02	5.30E-01	7.80E-02	1.63E-01	1.35E-03	4.04E-03	4.17E-02	3.63E-02	4.30E+01	9.28E-02	6.19E-02	3.56E-01	2.65E-01	7.13E+00
G26561	AOV Furnace	1.91	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.53E-02	3.25E-02	1.91E-04	5.73E-04	8.21E-03	5.15E-03	6.11E+00	1.81E-02	1.20E-02	6.99E-02	5.19E-02	1.40E+00
R219	Exempt Boilers	5.33	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	4.27E-02	9.07E-02	5.33E-04	1.60E-03	2.29E-02	1.44E-02	1.71E+01	5.07E-02	3.36E-02	1.95E-01	1.45E-01	3.90E+00
R219	AgingFurnace	1.85	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.48E-02	3.14E-02	1.85E-04	5.54E-04	7.95E-03	4.99E-03	5.91E+00	1.76E-02	1.16E-02	6.76E-02	5.03E-02	1.35E+00
R219	#1 Car Bottom Furnace	1.67	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.33E-02	2.83E-02	1.67E-04	5.00E-04	7.16E-03	4.50E-03	5.33E+00	1.58E-02	1.05E-02	6.10E-02	4.33E-02	1.22E+00
R219	Exempt Ovens	206.86	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	1.65E+00	3.52E+00	2.07E-02	6.21E-02	8.80E-01	5.59E-01	6.62E+02	1.97E+00	1.30E+00	7.57E+00	5.63E+00	1.51E+02
R219	CEC Furnace	10.63	8.00E-03	1.70E-02	1.00E-04	3.00E-04	4.30E-03	2.70E-03	3.20E+00	9.50E-03	6.30E-03	3.66E-02	2.72E-02	7.31E-01	8.50E-02	1.81E-01	1.06E-03	3.19E-03	4.57E-02	2.87E-02	3.40E+01	1.01E-01	6.69E-02	3.89E-01	2.89E-01	7.77E+00

Note:
1. Emission factors were based on AB2588 emission factors.
2. Ammonia emission factor is based on SCAQMD AER value for sources not equipped with an NSCR or SCR.

Table B8-4 - Estimated Baseline TAC Emissions from Grinding / Sawing Operations [1]

Emission Source	Hourly Emissions (lbs/hr) [1]									Annual Emissions (lbs/yr) [2]								
	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium	Arsenic	Beryllium	Cadmium	Chromium	Copper	Lead	Manganese	Nickel	Selenium
Bldg. H Baghouse	2.88E-08	ND	1.90E-08	NA	7.40E-06	1.17E-06	3.18E-06	7.49E-06	ND	1.72E-04	ND	1.14E-04	NA	4.42E-02	7.00E-03	1.90E-02	4.47E-02	ND
Bldg. P Baghouse	5.17E-08	ND	2.54E-08	NA	3.09E-06	ND	4.12E-06	1.09E-05	ND	3.09E-04	ND	1.52E-04	NA	1.84E-02	ND	2.46E-02	6.51E-02	ND
Bldg. M Baghouse	ND	ND	5.32E-07	NA	2.73E-04	4.90E-06	7.29E-05	2.37E-04	ND	ND	ND	3.18E-03	NA	1.63E+00	2.93E-02	4.36E-01	1.41E+00	ND
Bldg. A1 Fugitives	4.90E-07	6.26E-08	ND	NA	1.73E-03	1.26E-06	3.28E-04	1.01E-03	ND	2.93E-03	3.74E-04	ND	NA	1.03E+01	7.54E-03	1.96E+00	6.06E-02	ND
Bldg. M Fugitives	6.89E-08	ND	1.00E-08	NA	2.71E-06	2.88E-07	6.72E-06	1.62E-06	ND	4.12E-04	ND	6.35E-05	NA	1.62E-02	1.72E-03	4.01E-02	9.68E-03	ND
Bldg. H Fugitives	3.57E-08	ND	2.12E-08	NA	1.39E-06	ND	6.61E-07	2.24E-06	ND	2.13E-04	ND	1.26E-04	NA	8.32E-03	ND	3.95E-03	1.34E-02	ND
Bldg. P Fugitives	7.75E-08	ND	5.58E-08	NA	1.04E-05	4.19E-07	2.37E-06	5.29E-06	ND	4.63E-04	ND	3.34E-04	NA	6.21E-02	2.50E-03	1.42E-02	3.16E-02	ND
Totals	7.53E-07	6.26E-08	6.64E-07	0.00E+00	2.03E-03	8.04E-06	4.17E-04	2.74E-04	0.00E+00	4.50E-03	3.74E-04	3.97E-03	0.00E+00	1.21E+01	4.81E-02	2.49E+00	1.64E+00	0.00E+00

Note:
1. Estimated TAC emissions based on ERM emissions testing and ambient sampling conducted at Weber Metals, January 2015.
2. Annual emissions based on current operating schedule of 5 days a week, 52 weeks per year less 11 holidays

Table C.1 Greenhouse Gas Project Impacts

Emission Source	CO2e (MT/yr)
Construction Emissions from CalEEMod	2,679
Construction Emissions Amortized Over 30 Years	89
Direct Operational Emissions	56,152
GHG credits required for Direct Operational Emissions under Cap-and-Trade	-56,152
Indirect Electricity Consumption	5,414
GHG credits required for Indirect Electricity Consumption under Cap-and-Trade	-5,414
Total	89
Threshold	10,000
Exceeds Threshold?	No

Table C.2-1 Baseline Indirect GHG Emissions from Electricity Consumption

Year	MWh/yr	lb CO2e/yr	MT CO2e/yr
2013	21,260	14,988,300	6,794
2014	23,378	16,481,490	7,471
		Average	7,133

Table C.2-2 Indirect GHG Emissions from Electricity Consumption from Proposed Project

Year	MWh/yr	lb CO2e/yr	MT CO2e/yr
2018	39,259	27,677,595	12,547

Note: Emission factor basis is 705 lb/CO2e/MWh from SCE, 2012 Corporate Responsibility & Sustainability Report (2013)

Table C.2-3 Increase in Indirect GHG Emissions from Electricity Consumption

Category	MT CO2e/yr
Baseline Emissions	7,133
Post Project Emissions	12,547
Emission Increases	5,414

C.3 Project GHG Emissions

Project GHG emissions include emissions from proposed emission units and emission increases from existing emission units. Project GHG emissions are summarized in Table B.7-1.

C.3-1 - Emissions from Proposed Combustion Sources

Device	Annual CO2e (MT/yr)
Large Rotary Furnace	10,243.45
Medium Rotary Furnace #1	6,518.56
Medium Rotary Furnace #2	6,518.56
Chain Conveyor Furnace #1	6,052.95
Chain Conveyor Furnace #2	6,052.95
Pedestal Die Heating Furnace #1	3,724.89
Pedestal Die Heating Furnace #2	3,724.89
Pedestal Die Heating Furnace #3	3,724.89
Pedestal Die Heating Furnace #4	3,724.89
Sludge Dryer	5.15
Thorpe Furnace	40.82
No. 1 Furnace	34.13
No. 2 Furnace	43.99
Rotary Furnace	187.77
Lindberg Furnace	119.13
Car Bottom Furnace	144.53
AOV Furnace	146.96
#1 Car Bottom Furnace	30.75
Exempt Oven	70.93
CEC Furnaces	2,328.27
Manipulators	794.13
Fork Trucks	1,919.88
Total	56,152.48

Emissions from Proposed Combustion Sources

Emissions of GHG were estimated using the following equation. Proposed emission units are expected to operate 8,760 hours per year:
Annual Emissions = maximum heat rating (mmbtu/hr) x operating hours per year (hrs/yr) x Emission factor (kg/mmbtu)

Emissions of CO2e were calculated based global warming potential factors for each GHG as shown in the following equation:
CO2e (MT/yr)= [CO2 emissions (kg/yr) + 21 (kg CO2e/kg CH4) x CH4 emissions (kg/yr) + 310 (kg CO2e/ kg N2O) x N2O emissions (kg/yr)]/1000 (kg/MT)

C.3-2 - Emissions from Proposed Natural Gas Combustion Sources

Device	Heat Rating (MMBtu/hr)	Emission Factor (kg/mmbtu)			Annual Emissions (kg/yr)			CO2e (MT/yr)
		CO2	CH4	N2O	CO2	CH4	N2O	
Large Rotary Furnace	22	53.1	0.001	0.0001	10,233,432	193	19	10,243.45
Medium Rotary Furnace #1	14	53.1	0.001	0.0001	6,512,184	123	12	6,518.56
Medium Rotary Furnace #2	14	53.1	0.001	0.0001	6,512,184	123	12	6,518.56
Chain Conveyor Furnace #1	13	53.1	0.001	0.0001	6,047,028	114	11	6,052.95
Chain Conveyor Furnace #2	13	53.1	0.001	0.0001	6,047,028	114	11	6,052.95
Pedestal Die Heating Furnace #1	8	53.1	0.001	0.0001	3,721,248	70	7	3,724.89
Pedestal Die Heating Furnace #2	8	53.1	0.001	0.0001	3,721,248	70	7	3,724.89
Pedestal Die Heating Furnace #3	8	53.1	0.001	0.0001	3,721,248	70	7	3,724.89
Pedestal Die Heating Furnace #4	8	53.1	0.001	0.0001	3,721,248	70	7	3,724.89

Note:
1. Medium Rotary Furnace #2 to be installed and operated in 2019 and expected to be identical to Medium Furnace #1.
2. GHG emission factors are based on emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

C.3-3 - Emissions from Proposed Diesel Combustion Sources

Device	Heat Rating (MMBtu/hr)	Emission Factor (kg/mmbtu)			Annual Emissions (kg/yr)			CO2e (MT/yr)
		CO2	CH4	N2O	CO2	CH4	N2O	
Manipulator #1	0.6108	73.96	3.00E-03	6.00E-04	395,731	16	3	397.06
Manipulator #2	0.6108	73.96	3.00E-03	6.00E-04	395,731	16	3	397.06

1. GHG emission factors are based on emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

C.3-4 - Emissions from Proposed Propane Combustion Sources

Device	Heat Rating (MMBtu/hr)	Emission Factor (kg/mmbtu)			Annual Emissions (kg/yr)			CO2e (MT/yr)
		CO2	CH4	N2O	CO2	CH4	N2O	
Fork Truck #1	1.018	62.87	3.00E-03	6.00E-04	560,655	27	5	562.88
Fork Truck #2	1.018	62.87	3.00E-03	6.00E-04	560,655	27	5	562.88
Fork Truck #3	0.6108	73.96	3.00E-03	6.00E-04	395,731	16	3	397.06
Fork Truck #4	0.6108	73.96	3.00E-03	6.00E-04	395,731	16	3	397.06

1. GHG emission factors are based on emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

Emission Increases from Existing Sources

Increase in emissions of criteria pollutants from existing are expected from increased operated due to the proposed project. Emission increased are estimated from baseline emissions and the expected increase in operations.

C.3-5 - Emissions Increases from Existing Emission Units

Permit Number	Device	Expected Increase in Operations (%)	Annual CO2e (MT/yr)
F73290	Sludge Dryer	25	5.15
G26779	Thorpe Furnace	20	40.82
G26775	No. 1 Furnace	5	34.13
G26776	No. 2 Furnace	5	43.99
G26557	Rotary Furnace	20	187.77
G26560	Lindberg Furnace	30	119.13
G26558	Car Bottom Furnace	20	144.53
G26561	AOV Furnace	20	146.96
R219	#1 Car Bottom Furnace	30	30.75
R219	Exempt Oven	20	70.93
R219	CEC Furnaces	20	2,328.27

Note: Emission units are expected up to 365 days per year

C.4 Baseline GHG Emissions

Emissions of GHG were estimated using the following equation:
Annual Emissions = Throughput (mmscf) x Emission factor (kg/MMBtu) x HHV (1050 MMBtu/mmscf)

Emissions of CO2e were calculated based global warming potential factors for each GHG as shown in the following equation:
CO2e (MT/yr)= [CO2 emissions (kg/yr) + 21 (kg CO2e/kg CH4) x CH4 emissions (kg/yr) + 310 (kg CO2e/ kg N2O) x N2O emissions (kg/yr)]/1000 (kg/MT)

C.4-1 - 2013 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factor (kg/MMbtu)			Annual Emissions (kg/yr)			Annual CO2e (MT/yr)
			CO2	CH4	N2O	CO2	CH4	N2O	
F73290	Sludge Dryer	0.30	53.1	0.001	0.0001	16,448	0.31	0.03	16.46
G26779	Thorpe Furnace	0	53.1	0.001	0.0001	0	0	0	0.00
G26775	No. 1 Furnace	12.51	53.1	0.001	0.0001	697,261	13	1	697.94
G26776	No. 2 Furnace	15.15	53.1	0.001	0.0001	844,515	16	2	845.34
G26557	Rotary Furnace	16.25	53.1	0.001	0.0001	906,219	17	2	907.11
G26559	A&A Furnace	6.53	53.1	0.001	0.0001	363,846	7	1	364.20
G26560	Lindberg Furnace	14.00	53.1	0.001	0.0001	780,537	15	1	781.30
G26558	Car Bottom Furnace	12.88	53.1	0.001	0.0001	718,269	14	1	718.97
G26561	AOV Furnace	1.90	53.1	0.001	0.0001	106,185	2	0.20	106.29
R219	Exempt Boilers	5.13	53.1	0.001	0.0001	286,151	5	1	286.43
R219	AgingFurnace	1.83	53.1	0.001	0.0001	101,772	2	0	101.87
R219	#1 Car Bottom Furnace	11.04	53.1	0.001	0.0001	615,697	12	1	616.30
R219	Exempt Ovens	210.32	53.1	0.001	0.0001	11,726,337	221	22	11,737.82
R219	CEC Furnace	10.37	53.1	0.001	0.0001	577,981	11	1	578.55

C.4-2 - 2014 Emissions

Permit Number	Device	Throughput (mmscf/yr)	Emission Factor (kg/mmscf)			Annual Emissions (kg/yr)			Annual CO2e (MT/yr)
			CO2	CH4	N2O	CO2	CH4	N2O	
F73290	Sludge Dryer	0.44	53.1	0.001	0.0001	24,749	0.47	0.05	24.77
G26779	Thorpe Furnace	3.66	53.1	0.001	0.0001	203,905	4	0	204.10
G26775	No. 1 Furnace	11.95	53.1	0.001	0.0001	666,457	13	1	667.11
G26776	No. 2 Furnace	16.38	53.1	0.001	0.0001	913,297	17	2	914.19
G26557	Rotary Furnace	17.39	53.1	0.001	0.0001	969,632	18	2	970.58
G26559	A&A Furnace	7.70	53.1	0.001	0.0001	429,573	8	1	429.99
G26560	Lindberg Furnace	11.90	53.1	0.001	0.0001	663,318	12	1	663.97
G26558	Car Bottom Furnace	13.45	53.1	0.001	0.0001	749,919	14	1	750.65
G26561	AOV Furnace	1.91	53.1	0.001	0.0001	106,447	2	0.20	106.55
R219	Exempt Boilers	5.33	53.1	0.001	0.0001	297,361	6	1	297.65
R219	AgingFurnace	1.85	53.1	0.001	0.0001	103,035	2	0	103.14
R219	#1 Car Bottom Furnace	1.67	53.1	0.001	0.0001	92,888	2	0	92.98
R219	Exempt Ovens	206.86	53.1	0.001	0.0001	11,533,598	217	21.72	11,544.89
R219	CEC Furnace	10.63	53.1	0.001	0.0001	592,398	11	1	592.98

Note: GHG emission factors are based on emission factors from 40 CFR 98 Subpart C, Tables C-1 and C-2.

C.4-3 - Baseline GHG Emissions Summary

Permit Number	Device	Baseline CO2e (MT/yr)
F73290	Sludge Dryer	20.62
G26779	Thorpe Furnace	204.10
G26775	No. 1 Furnace	682.53
G26776	No. 2 Furnace	879.77
G26557	Rotary Furnace	938.84
G26559	A&A Furnace	397.10
G26560	Lindberg Furnace	722.63
G26558	Car Bottom Furnace	734.81
G26561	AOV Furnace	106.42
R219	Exempt Boilers	292.04
R219	Aging Furnace	102.50
R219	#1 Car Bottom Furnace	354.64
R219	Exempt Ovens	11,641.36
R219	CEC Furnace	585.76

Note: Baseline emissions for Thorpe furnace is based on emissions from 2014. Thorpe Furnace was installed and operated in 2014.

CALEEMOD Annual Results

Weber Metals

South Coast Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	115.00	1000sqft	2.64	115,000.00	0
User Defined Industrial	30.00	User Defined Unit	0.69	30,000.00	0
Parking Lot	120.50	1000sqft	2.77	120,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Footprint of substation is 30,000 SF. Total paving area is 120,500 SF

Construction Phase - Based on construction schedule provided by Weber Metals; 4B expected to occur in one day in the month of June

Off-road Equipment - 1 dozers and 2 loader

Off-road Equipment - 1 drill rig, 4 excavators, 2 loaders, 1 dozer, 2 rollers

Off-road Equipment - 3 cranes, 6 rough terrain forklifts, 9 lifts (5 aerial, 4 scissor), 2 welders, 2 air compressors, 2 pumps

Off-road Equipment - one paver

Off-road Equipment - 1 forklift, 9 cranes, 3 lifts

Off-road Equipment - 9 cranes, 3 aerial lifts, 1 forklift

Off-road Equipment - 35 trucks to haul new press; no on-site off road equipment

Off-road Equipment - 2 rough terrain forklifts, 10 lifts (2 aerial, 8 scissor), 4 welders, 2 air compressors

Off-road Equipment - 1 dozer, 2 loaders

Off-road Equipment - 1 crane, 6 rough terrain forklifts, 2 welders, 4 aerial lifts

Off-road Equipment - 4 lifts, 6 rough terrain forklifts, 2 welders, 1 crane

Trips and VMT - excavation/dewatering - 6,876 trips; press facility construction - 470 vehicles, 12 concrete trucks; substation construction - 60 vehicles; utility connections - 75 vehicles; equipment installation - 140 vehicles

Demolition - demolition of old substation. footprint ~ 35' x 60'

Grading - pit estimated to be 190' by 150' and 85' deep, up to 120,000 SF disturbed per day during site prep, up to 30,000 SF disturbed during Substation site prep

Architectural Coating -

Road Dust -

Area Coating - no architectural coating

Landscape Equipment - no landscaping

Energy Use - Electricity to be calculated outside of CalEEMod

Construction Off-road Equipment Mitigation - dust mitigation, Tier 2 dozers in Phase 1 and 2

Operational Off-Road Equipment - No Offroad Equiipment

Off-road Equipment - 2 rough terrain forklifts

Off-road Equipment - 1 aerial lift

Off-road Equipment - one aerial lift, one rough terrain forklift

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	74308	0
tblAreaCoating	Area_Nonresidential_Interior	222923	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	216.00
tblConstructionPhase	NumDays	230.00	196.00
tblConstructionPhase	NumDays	230.00	131.00

tblConstructionPhase	NumDays	230.00	87.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	230.00	43.00
tblConstructionPhase	NumDays	230.00	22.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	PhaseEndDate	12/30/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/29/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/2/2016	6/2/2016
tblConstructionPhase	PhaseEndDate	7/13/2016	7/31/2016
tblConstructionPhase	PhaseEndDate	7/14/2016	6/14/2016
tblConstructionPhase	PhaseEndDate	9/30/2015	7/31/2015
tblConstructionPhase	PhaseEndDate	6/29/2016	9/30/2015
tblConstructionPhase	PhaseEndDate	8/30/2016	5/31/2016
tblConstructionPhase	PhaseEndDate	7/4/2016	6/30/2016
tblConstructionPhase	PhaseEndDate	8/1/2016	6/30/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	5/1/2016
tblConstructionPhase	PhaseStartDate	8/1/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	11/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	5/1/2015
tblConstructionPhase	PhaseStartDate	5/31/2016	9/1/2015
tblConstructionPhase	PhaseStartDate	7/1/2016	4/1/2016

tblConstructionPhase	PhaseStartDate	6/3/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/1/2016	5/1/2016
tblGrading	AcresOfGrading	0.00	0.65
tblGrading	AcresOfGrading	0.00	2.75
tblGrading	AcresOfGrading	0.00	0.69
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	HorsePower	62.00	46.00
tblOffRoadEquipment	LoadFactor	0.31	0.45
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts

tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	PhaseName		4A_Equipment Installation
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		3A_Adjusted
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections

tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		4A_Adjusted
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00

tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripNumber	0.00	35.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripNumber	44.00	12.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00

tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	33.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	8.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	75.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00
tblTripsAndVMT	WorkerTripNumber	112.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	25.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00

tblTripsAndVMT	WorkerTripNumber	5.00	60.00

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					
2015	0.8211	7.8741	6.9410	0.0139	0.8189	0.3629	1.1817	0.2997	0.3400	0.6397	0.0000	1,230.5068	1,230.5068	0.1650	0.0000	1,233.9714
2016	1.1622	9.4236	9.2827	0.0169	0.6042	0.4858	1.0899	0.1600	0.4574	0.6174	0.0000	1,439.1953	1,439.1953	0.2647	0.0000	1,444.7537
Total	**1.9832**	**17.2977**	**16.2238**	**0.0308**	**1.4231**	**0.8486**	**2.2717**	**0.4598**	**0.7974**	**1.2571**	**0.0000**	**2,669.7021**	**2,669.7021**	**0.4297**	**0.0000**	**2,678.7251**

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					
2015	0.7868	7.6497	6.7368	0.0139	0.6533	0.3462	0.9995	0.2099	0.3251	0.5350	0.0000	1,230.5061	1,230.5061	0.1650	0.0000	1,233.9708
2016	1.1622	9.4236	9.2827	0.0169	0.6036	0.4858	1.0894	0.1599	0.4574	0.6173	0.0000	1,439.1943	1,439.1943	0.2647	0.0000	1,444.7527
Total	**1.9490**	**17.0733**	**16.0195**	**0.0308**	**1.2569**	**0.8320**	**2.0889**	**0.3698**	**0.7825**	**1.1523**	**0.0000**	**2,669.7004**	**2,669.7004**	**0.4297**	**0.0000**	**2,678.7235**

	ROG	NOx	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	**1.73**	**1.30**	**1.26**	**0.00**	**11.68**	**1.96**	**8.05**	**19.56**	**1.87**	**8.34**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	542.3348	542.3348	0.0218	6.1800e-003	544.7080
Mobile	0.1202	0.4350	1.5845	4.2000e-003	0.2895	6.0500e-003	0.2955	0.0775	5.5700e-003	0.0830	0.0000	325.0446	325.0446	0.0126	0.0000	325.3086
Waste						0.0000	0.0000		0.0000	0.0000	28.9465	0.0000	28.9465	1.7107	0.0000	64.8710
Water						0.0000	0.0000		0.0000	0.0000	8.4370	99.0931	107.5300	0.8711	0.0214	132.4586
Total	**1.0912**	**0.5410**	**1.6735**	**4.8400e-003**	**0.2895**	**0.0141**	**0.3036**	**0.0775**	**0.0136**	**0.0911**	**37.3835**	**966.4725**	**1,003.8560**	**2.6162**	**0.0276**	**1,067.3462**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	542.3348	542.3348	0.0218	6.1800e-003	544.7080
Mobile	0.1202	0.4350	1.5845	4.2000e-003	0.2895	6.0500e-003	0.2955	0.0775	5.5700e-003	0.0830	0.0000	325.0446	325.0446	0.0126	0.0000	325.3086
Waste						0.0000	0.0000		0.0000	0.0000	28.9465	0.0000	28.9465	1.7107	0.0000	64.8710
Water						0.0000	0.0000		0.0000	0.0000	8.4370	99.0931	107.5300	0.8710	0.0214	132.4451
Total	**1.0912**	**0.5410**	**1.6735**	**4.8400e-003**	**0.2895**	**0.0141**	**0.3036**	**0.0775**	**0.0136**	**0.0911**	**37.3835**	**966.4725**	**1,003.8560**	**2.6161**	**0.0276**	**1,067.3328**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.11**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1_Site Preparation	Site Preparation	5/1/2015	6/30/2015	5	43	
2	2_Excavation/Dewatering	Site Preparation	5/1/2015	7/31/2015	5	66	
3	3A_Press Facility Construction	Building Construction	8/1/2015	5/30/2016	5	216	
4	6A_Site Prep	Site Preparation	9/1/2015	9/30/2015	5	22	
5	6B_Substation Construction	Building Construction	10/1/2015	6/30/2016	5	196	
6	3A_Adjusted	Building Construction	4/1/2016	5/31/2016	5	43	
7	6A_Adjusted	Site Preparation	5/1/2016	6/30/2016	5	44	
8	5_Utility and Electrical Connections	Building Construction	5/1/2016	10/31/2016	5	131	
9	4B_Press Installaion	Building Construction	6/1/2016	6/2/2016	5	2	
10	4A_Adjusted	Building Construction	6/1/2016	6/30/2016	5	22	
11	3B_Paving	Paving	6/1/2016	6/14/2016	5	10	
12	6C_Substation Demolition	Demolition	7/1/2016	7/31/2016	5	21	
13	4A_Equipment Installation	Building Construction	7/1/2016	10/31/2016	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1_Site Preparation	Rubber Tired Dozers	1	6.00	255	0.40
1_Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
4A_Equipment Installation	Aerial Lifts	3	6.00	62	0.31
6C_Substation Demolition	Aerial Lifts	4	6.00	62	0.31
6A_Adjusted	Aerial Lifts	1	8.00	62	0.31

2_Excavation/Dewatering	Rubber Tired Dozers	1	6.00	255	0.40
2_Excavation/Dewatering	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6C_Substation Demolition	Rough Terrain Forklifts	6	6.00	100	0.40
6C_Substation Demolition	Welders	2	6.00	46	0.45
3A_Press Facility Construction	Cranes	3	6.00	226	0.29
6C_Substation Demolition	Cranes	1	6.00	226	0.29
3A_Press Facility Construction	Welders	2	6.00	46	0.45
6A_Site Prep	Rubber Tired Dozers	1	6.00	255	0.40
6A_Site Prep	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6B_Substation Construction	Rough Terrain Forklifts	6	6.00	100	0.40
6B_Substation Construction	Cranes	1	6.00	226	0.29
3A_Adjusted	Rough Terrain Forklifts	2	8.00	100	0.40
6B_Substation Construction	Welders	2	6.00	46	0.45
6A_Adjusted	Rough Terrain Forklifts	1	8.00	100	0.40
5_Utility and Electrical Connections	Welders	4	6.00	46	0.45
4A_Equipment Installation	Cranes	9	6.00	226	0.29
4A_Equipment Installation	Forklifts	1	6.00	89	0.20
3B_Paving	Pavers	1	6.00	125	0.42
6B_Substation Construction	Aerial Lifts	4	6.00	62	0.31
5_Utility and Electrical Connections	Rough Terrain Forklifts	2	6.00	100	0.40
5_Utility and Electrical Connections	Aerial Lifts	10	6.00	62	0.31
5_Utility and Electrical Connections	Air Compressors	2	6.00	78	0.48
4A_Adjusted	Aerial Lifts	1	8.00	46	0.45
2_Excavation/Dewatering	Bore/Drill Rigs	1	6.00	205	0.50
2_Excavation/Dewatering	Excavators	4	6.00	162	0.38
2_Excavation/Dewatering	Rollers	2	6.00	80	0.38
3A_Press Facility Construction	Rough Terrain Forklifts	6	6.00	100	0.40
3A_Press Facility Construction	Aerial Lifts	9	6.00	62	0.31

3A_Press Facility Construction	Air Compressors	2	6.00	78	0.48
3A_Press Facility Construction	Pumps	2	6.00	84	0.74
4B_Press Installaion	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1_Site Preparation	3	25.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
2_Excavation/Dewatering	10	25.00	0.00	6,875.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Press Facility Construction	24	470.00	12.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Site Prep	3	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6B_Substation Construction	13	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
5_Utility and Electrical Connections	18	75.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Equipment Installation	13	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4B_Press Installaion	0	0.00	0.00	35.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3B_Paving	1	25.00	8.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6C_Substation Demolition	13	60.00	0.00	10.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Adjusted	2	470.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Adjusted	1	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Adjusted	2	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 1_Site Preparation - 2015

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					0.0975	0.0000	0.0975	0.0534	0.0000	0.0534	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0322	0.3427	0.2552	2.4000e-004		0.0195	0.0195		0.0179	0.0179	0.0000	23.2431	23.2431	6.9400e-003	0.0000	23.3888
Total	**0.0322**	**0.3427**	**0.2552**	**2.4000e-004**	**0.0975**	**0.0195**	**0.1169**	**0.0534**	**0.0179**	**0.0713**	**0.0000**	**23.2431**	**23.2431**	**6.9400e-003**	**0.0000**	**23.3888**

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	2.3300e-003	3.2900e-003	0.0343	7.0000e-005	5.5000e-003	5.0000e-005	5.5500e-003	1.4600e-003	5.0000e-005	1.5100e-003	0.0000	5.3414	5.3414	3.0000e-004	0.0000	5.3478
Total	**2.3300e-003**	**3.2900e-003**	**0.0343**	**7.0000e-005**	**5.5000e-003**	**5.0000e-005**	**5.5500e-003**	**1.4600e-003**	**5.0000e-005**	**1.5100e-003**	**0.0000**	**5.3414**	**5.3414**	**3.0000e-004**	**0.0000**	**5.3478**

3.2 1_Site Preparation - 2015

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					0.0439	0.0000	0.0439	0.0240	0.0000	0.0240	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0209	0.2690	0.1882	2.4000e-004		0.0140	0.0140		0.0130	0.0130	0.0000	23.2431	23.2431	6.9400e-003	0.0000	23.3888
Total	**0.0209**	**0.2690**	**0.1882**	**2.4000e-004**	**0.0439**	**0.0140**	**0.0579**	**0.0240**	**0.0130**	**0.0371**	**0.0000**	**23.2431**	**23.2431**	**6.9400e-003**	**0.0000**	**23.3888**

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	2.3300e-003	3.2900e-003	0.0343	7.0000e-005	5.5000e-003	5.0000e-005	5.5500e-003	1.4600e-003	5.0000e-005	1.5100e-003	0.0000	5.3414	5.3414	3.0000e-004	0.0000	5.3478
Total	**2.3300e-003**	**3.2900e-003**	**0.0343**	**7.0000e-005**	**5.5000e-003**	**5.0000e-005**	**5.5500e-003**	**1.4600e-003**	**5.0000e-005**	**1.5100e-003**	**0.0000**	**5.3414**	**5.3414**	**3.0000e-004**	**0.0000**	**5.3478**

3.3 2_Excavation/Dewatering - 2015

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					0.1536	0.0000	0.1536	0.0826	0.0000	0.0826	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1183	1.3228	0.8860	1.2400e-003		0.0705	0.0705		0.0649	0.0649	0.0000	118.4931	118.4931	0.0354	0.0000	119.2360
Total	**0.1183**	**1.3228**	**0.8860**	**1.2400e-003**	**0.1536**	**0.0705**	**0.2242**	**0.0826**	**0.0649**	**0.1475**	**0.0000**	**118.4931**	**118.4931**	**0.0354**	**0.0000**	**119.2360**

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	0.0910	1.6669	0.9550	3.7800e-003	0.1551	0.0275	0.1826	0.0406	0.0253	0.0659	0.0000	348.8628	348.8628	2.7100e-003	0.0000	348.9196
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	3.5800e-003	5.0500e-003	0.0526	1.0000e-004	0.0158	8.0000e-005	0.0158	4.0400e-003	7.0000e-005	4.1100e-003	0.0000	8.1985	8.1985	4.6000e-004	0.0000	8.2082
Total	**0.0946**	**1.6719**	**1.0076**	**3.8800e-003**	**0.1708**	**0.0276**	**0.1984**	**0.0446**	**0.0254**	**0.0700**	**0.0000**	**357.0612**	**357.0612**	**3.1700e-003**	**0.0000**	**357.1278**

3.3 2_Excavation/Dewatering - 2015

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					0.0691	0.0000	0.0691	0.0372	0.0000	0.0372	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1010	1.2097	0.7831	1.2400e-003		0.0622	0.0622		0.0574	0.0574	0.0000	118.4930	118.4930	0.0354	0.0000	119.2359
Total	**0.1010**	**1.2097**	**0.7831**	**1.2400e-003**	**0.0691**	**0.0622**	**0.1313**	**0.0372**	**0.0574**	**0.0946**	**0.0000**	**118.4930**	**118.4930**	**0.0354**	**0.0000**	**119.2359**

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	0.0910	1.6669	0.9550	3.7800e-003	0.1551	0.0275	0.1826	0.0406	0.0253	0.0659	0.0000	348.8628	348.8628	2.7100e-003	0.0000	348.9196
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	3.5800e-003	5.0500e-003	0.0526	1.0000e-004	0.0158	8.0000e-005	0.0158	4.0400e-003	7.0000e-005	4.1100e-003	0.0000	8.1985	8.1985	4.6000e-004	0.0000	8.2082
Total	**0.0946**	**1.6719**	**1.0076**	**3.8800e-003**	**0.1708**	**0.0276**	**0.1984**	**0.0446**	**0.0254**	**0.0700**	**0.0000**	**357.0612**	**357.0612**	**3.1700e-003**	**0.0000**	**357.1278**

3.4 3A_Press Facility Construction - 2015

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	0.3296	3.0758	2.0516	3.2100e-003		0.1795	0.1795		0.1707	0.1707	0.0000	293.5564	293.5564	0.0737	0.0000	295.1040
Total	**0.3296**	**3.0758**	**2.0516**	**3.2100e-003**		**0.1795**	**0.1795**		**0.1707**	**0.1707**	**0.0000**	**293.5564**	**293.5564**	**0.0737**	**0.0000**	**295.1040**

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	0.0140	0.2460	0.1374	5.8000e-004	0.0174	4.6600e-003	0.0221	4.9700e-003	4.2900e-003	9.2600e-003	0.0000	53.2776	53.2776	3.8000e-004	0.0000	53.2856
Worker	0.1111	0.1568	1.6330	3.2300e-003	0.2619	2.3600e-003	0.2643	0.0696	2.1700e-003	0.0717	0.0000	254.5503	254.5503	0.0144	0.0000	254.8530
Total	**0.1252**	**0.4028**	**1.7704**	**3.8100e-003**	**0.2794**	**7.0200e-003**	**0.2864**	**0.0745**	**6.4600e-003**	**0.0810**	**0.0000**	**307.8279**	**307.8279**	**0.0148**	**0.0000**	**308.1385**

3.4 3A_Press Facility Construction - 2015

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	0.3296	3.0758	2.0516	3.2100e-003		0.1795	0.1795		0.1707	0.1707	0.0000	293.5560	293.5560	0.0737	0.0000	295.1036
Total	**0.3296**	**3.0758**	**2.0516**	**3.2100e-003**		**0.1795**	**0.1795**		**0.1707**	**0.1707**	**0.0000**	**293.5560**	**293.5560**	**0.0737**	**0.0000**	**295.1036**

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	0.0140	0.2460	0.1374	5.8000e-004	0.0174	4.6600e-003	0.0221	4.9700e-003	4.2900e-003	9.2600e-003	0.0000	53.2776	53.2776	3.8000e-004	0.0000	53.2856
Worker	0.1111	0.1568	1.6330	3.2300e-003	0.2619	2.3600e-003	0.2643	0.0696	2.1700e-003	0.0717	0.0000	254.5503	254.5503	0.0144	0.0000	254.8530
Total	**0.1252**	**0.4028**	**1.7704**	**3.8100e-003**	**0.2794**	**7.0200e-003**	**0.2864**	**0.0745**	**6.4600e-003**	**0.0810**	**0.0000**	**307.8279**	**307.8279**	**0.0148**	**0.0000**	**308.1385**

3.4 3A_Press Facility Construction - 2016

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	0.2964	2.8048	1.9883	3.1600e-003		0.1575	0.1575		0.1498	0.1498	0.0000	286.1457	286.1457	0.0711	0.0000	287.6391
Total	**0.2964**	**2.8048**	**1.9883**	**3.1600e-003**		**0.1575**	**0.1575**		**0.1498**	**0.1498**	**0.0000**	**286.1457**	**286.1457**	**0.0711**	**0.0000**	**287.6391**

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	0.0122	0.2109	0.1235	5.7000e-004	0.0171	3.8100e-003	0.0209	4.8800e-003	3.5100e-003	8.3900e-003	0.0000	51.7228	51.7228	3.3000e-004	0.0000	51.7297
Worker	0.0983	0.1389	1.4477	3.1600e-003	0.2571	2.2000e-003	0.2593	0.0683	2.0300e-003	0.0703	0.0000	241.2451	241.2451	0.0130	0.0000	241.5185
Total	**0.1105**	**0.3498**	**1.5712**	**3.7300e-003**	**0.2742**	**6.0100e-003**	**0.2803**	**0.0732**	**5.5400e-003**	**0.0787**	**0.0000**	**292.9679**	**292.9679**	**0.0134**	**0.0000**	**293.2482**

3.4 3A_Press Facility Construction - 2016

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	0.2964	2.8048	1.9883	3.1600e-003		0.1575	0.1575		0.1498	0.1498	0.0000	286.1454	286.1454	0.0711	0.0000	287.6387
Total	**0.2964**	**2.8048**	**1.9883**	**3.1600e-003**		**0.1575**	**0.1575**		**0.1498**	**0.1498**	**0.0000**	**286.1454**	**286.1454**	**0.0711**	**0.0000**	**287.6387**

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	0.0122	0.2109	0.1235	5.7000e-004	0.0171	3.8100e-003	0.0209	4.8800e-003	3.5100e-003	8.3900e-003	0.0000	51.7228	51.7228	3.3000e-004	0.0000	51.7297
Worker	0.0983	0.1389	1.4477	3.1600e-003	0.2571	2.2000e-003	0.2593	0.0683	2.0300e-003	0.0703	0.0000	241.2451	241.2451	0.0130	0.0000	241.5185
Total	**0.1105**	**0.3498**	**1.5712**	**3.7300e-003**	**0.2742**	**6.0100e-003**	**0.2803**	**0.0732**	**5.5400e-003**	**0.0787**	**0.0000**	**292.9679**	**292.9679**	**0.0134**	**0.0000**	**293.2482**

3.5 6A_Site Prep - 2015

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					0.0501	0.0000	0.0501	0.0274	0.0000	0.0274	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0165	0.1753	0.1306	1.2000e-004		9.9700e-003	9.9700e-003		9.1700e-003	9.1700e-003	0.0000	11.8918	11.8918	3.5500e-003	0.0000	11.9664
Total	**0.0165**	**0.1753**	**0.1306**	**1.2000e-004**	**0.0501**	**9.9700e-003**	**0.0600**	**0.0274**	**9.1700e-003**	**0.0365**	**0.0000**	**11.8918**	**11.8918**	**3.5500e-003**	**0.0000**	**11.9664**

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	2.8600e-003	4.0400e-003	0.0421	8.0000e-005	0.0243	6.0000e-005	0.0244	6.1000e-003	6.0000e-005	6.1600e-003	0.0000	6.5588	6.5588	3.7000e-004	0.0000	6.5666
Total	**2.8600e-003**	**4.0400e-003**	**0.0421**	**8.0000e-005**	**0.0243**	**6.0000e-005**	**0.0244**	**6.1000e-003**	**6.0000e-005**	**6.1600e-003**	**0.0000**	**6.5588**	**6.5588**	**3.7000e-004**	**0.0000**	**6.5666**

3.5 6A_Site Prep - 2015

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					0.0225	0.0000	0.0225	0.0123	0.0000	0.0123	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0107	0.1376	0.0963	1.2000e-004		7.1800e-003	7.1800e-003		6.6700e-003	6.6700e-003	0.0000	11.8918	11.8918	3.5500e-003	0.0000	11.9664
Total	**0.0107**	**0.1376**	**0.0963**	**1.2000e-004**	**0.0225**	**7.1800e-003**	**0.0297**	**0.0123**	**6.6700e-003**	**0.0190**	**0.0000**	**11.8918**	**11.8918**	**3.5500e-003**	**0.0000**	**11.9664**

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	2.8600e-003	4.0400e-003	0.0421	8.0000e-005	0.0243	6.0000e-005	0.0244	6.1000e-003	6.0000e-005	6.1600e-003	0.0000	6.5588	6.5588	3.7000e-004	0.0000	6.5666
Total	**2.8600e-003**	**4.0400e-003**	**0.0421**	**8.0000e-005**	**0.0243**	**6.0000e-005**	**0.0244**	**6.1000e-003**	**6.0000e-005**	**6.1600e-003**	**0.0000**	**6.5588**	**6.5588**	**3.7000e-004**	**0.0000**	**6.5666**

3.6 6B_Substation Construction - 2015

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	0.0911	0.8633	0.6371	9.4000e-004		0.0484	0.0484		0.0452	0.0452	0.0000	86.8566	86.8566	0.0257	0.0000	87.3958
Total	**0.0911**	**0.8633**	**0.6371**	**9.4000e-004**		**0.0484**	**0.0484**		**0.0452**	**0.0452**	**0.0000**	**86.8566**	**86.8566**	**0.0257**	**0.0000**	**87.3958**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5900e-003	0.0121	0.1262	2.5000e-004	0.0378	1.8000e-004	0.0380	9.6900e-003	1.7000e-004	9.8500e-003	0.0000	19.6763	19.6763	1.1100e-003	0.0000	19.6997
Total	**8.5900e-003**	**0.0121**	**0.1262**	**2.5000e-004**	**0.0378**	**1.8000e-004**	**0.0380**	**9.6900e-003**	**1.7000e-004**	**9.8500e-003**	**0.0000**	**19.6763**	**19.6763**	**1.1100e-003**	**0.0000**	**19.6997**

3.6 6B_Substation Construction - 2015

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	0.0911	0.8633	0.6371	9.4000e-004		0.0484	0.0484		0.0452	0.0452	0.0000	86.8565	86.8565	0.0257	0.0000	87.3957
Total	**0.0911**	**0.8633**	**0.6371**	**9.4000e-004**		**0.0484**	**0.0484**		**0.0452**	**0.0452**	**0.0000**	**86.8565**	**86.8565**	**0.0257**	**0.0000**	**87.3957**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.5900e-003	0.0121	0.1262	2.5000e-004	0.0378	1.8000e-004	0.0380	9.6900e-003	1.7000e-004	9.8500e-003	0.0000	19.6763	19.6763	1.1100e-003	0.0000	19.6997
Total	**8.5900e-003**	**0.0121**	**0.1262**	**2.5000e-004**	**0.0378**	**1.8000e-004**	**0.0380**	**9.6900e-003**	**1.7000e-004**	**9.8500e-003**	**0.0000**	**19.6763**	**19.6763**	**1.1100e-003**	**0.0000**	**19.6997**

3.6 6B_Substation Construction - 2016

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	0.1631	1.5640	1.2387	1.8500e-003		0.0841	0.0841		0.0785	0.0785	0.0000	169.5563	169.5563	0.0501	0.0000	170.6077
Total	**0.1631**	**1.5640**	**1.2387**	**1.8500e-003**		**0.0841**	**0.0841**		**0.0785**	**0.0785**	**0.0000**	**169.5563**	**169.5563**	**0.0501**	**0.0000**	**170.6077**

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	0.0153	0.0215	0.2245	4.9000e-004	0.0745	3.4000e-004	0.0748	0.0191	3.1000e-004	0.0194	0.0000	37.4172	37.4172	2.0200e-003	0.0000	37.4596
Total	**0.0153**	**0.0215**	**0.2245**	**4.9000e-004**	**0.0745**	**3.4000e-004**	**0.0748**	**0.0191**	**3.1000e-004**	**0.0194**	**0.0000**	**37.4172**	**37.4172**	**2.0200e-003**	**0.0000**	**37.4596**

3.6 6B_Substation Construction - 2016

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	0.1631	1.5640	1.2387	1.8500e-003		0.0841	0.0841		0.0785	0.0785	0.0000	169.5561	169.5561	0.0501	0.0000	170.6075
Total	**0.1631**	**1.5640**	**1.2387**	**1.8500e-003**		**0.0841**	**0.0841**		**0.0785**	**0.0785**	**0.0000**	**169.5561**	**169.5561**	**0.0501**	**0.0000**	**170.6075**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0153	0.0215	0.2245	4.9000e-004	0.0745	3.4000e-004	0.0748	0.0191	3.1000e-004	0.0194	0.0000	37.4172	37.4172	2.0200e-003	0.0000	37.4596
Total	**0.0153**	**0.0215**	**0.2245**	**4.9000e-004**	**0.0745**	**3.4000e-004**	**0.0748**	**0.0191**	**3.1000e-004**	**0.0194**	**0.0000**	**37.4172**	**37.4172**	**2.0200e-003**	**0.0000**	**37.4596**

3.7 3A_Adjusted - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.1165	0.1014	1.5000e-004		6.4700e-003	6.4700e-003		5.9500e-003	5.9500e-003	0.0000	13.9545	13.9545	4.2100e-003	0.0000	14.0429
Total	**9.1500e-003**	**0.1165**	**0.1014**	**1.5000e-004**		**6.4700e-003**	**6.4700e-003**		**5.9500e-003**	**5.9500e-003**	**0.0000**	**13.9545**	**13.9545**	**4.2100e-003**	**0.0000**	**14.0429**

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	0.0395	0.0558	0.5818	1.2700e-003	0.1033	8.9000e-004	0.1042	0.0274	8.1000e-004	0.0283	0.0000	96.9490	96.9490	5.2300e-003	0.0000	97.0588
Total	**0.0395**	**0.0558**	**0.5818**	**1.2700e-003**	**0.1033**	**8.9000e-004**	**0.1042**	**0.0274**	**8.1000e-004**	**0.0283**	**0.0000**	**96.9490**	**96.9490**	**5.2300e-003**	**0.0000**	**97.0588**

3.7 3A_Adjusted - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1500e-003	0.1165	0.1014	1.5000e-004		6.4700e-003	6.4700e-003		5.9500e-003	5.9500e-003	0.0000	13.9544	13.9544	4.2100e-003	0.0000	14.0428
Total	**9.1500e-003**	**0.1165**	**0.1014**	**1.5000e-004**		**6.4700e-003**	**6.4700e-003**		**5.9500e-003**	**5.9500e-003**	**0.0000**	**13.9544**	**13.9544**	**4.2100e-003**	**0.0000**	**14.0428**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0395	0.0558	0.5818	1.2700e-003	0.1033	8.9000e-004	0.1042	0.0274	8.1000e-004	0.0283	0.0000	96.9490	96.9490	5.2300e-003	0.0000	97.0588
Total	**0.0395**	**0.0558**	**0.5818**	**1.2700e-003**	**0.1033**	**8.9000e-004**	**0.1042**	**0.0274**	**8.1000e-004**	**0.0283**	**0.0000**	**96.9490**	**96.9490**	**5.2300e-003**	**0.0000**	**97.0588**

3.8 6A_Adjusted - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9200e-003	0.0799	0.0757	1.1000e-004		4.1400e-003	4.1400e-003		3.8100e-003	3.8100e-003	0.0000	10.5642	10.5642	3.1900e-003	0.0000	10.6312
Total	**5.9200e-003**	**0.0799**	**0.0757**	**1.1000e-004**		**4.1400e-003**	**4.1400e-003**		**3.8100e-003**	**3.8100e-003**	**0.0000**	**10.5642**	**10.5642**	**3.1900e-003**	**0.0000**	**10.6312**

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	5.1600e-003	7.2900e-003	0.0760	1.7000e-004	0.0135	1.2000e-004	0.0136	3.5800e-003	1.1000e-004	3.6900e-003	0.0000	12.6643	12.6643	6.8000e-004	0.0000	12.6786
Total	**5.1600e-003**	**7.2900e-003**	**0.0760**	**1.7000e-004**	**0.0135**	**1.2000e-004**	**0.0136**	**3.5800e-003**	**1.1000e-004**	**3.6900e-003**	**0.0000**	**12.6643**	**12.6643**	**6.8000e-004**	**0.0000**	**12.6786**

3.8 6A_Adjusted - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.9200e-003	0.0799	0.0757	1.1000e-004		4.1400e-003	4.1400e-003		3.8100e-003	3.8100e-003	0.0000	10.5642	10.5642	3.1900e-003	0.0000	10.6311
Total	**5.9200e-003**	**0.0799**	**0.0757**	**1.1000e-004**		**4.1400e-003**	**4.1400e-003**		**3.8100e-003**	**3.8100e-003**	**0.0000**	**10.5642**	**10.5642**	**3.1900e-003**	**0.0000**	**10.6311**

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	5.1600e-003	7.2900e-003	0.0760	1.7000e-004	0.0135	1.2000e-004	0.0136	3.5800e-003	1.1000e-004	3.6900e-003	0.0000	12.6643	12.6643	6.8000e-004	0.0000	12.6786
Total	**5.1600e-003**	**7.2900e-003**	**0.0760**	**1.7000e-004**	**0.0135**	**1.2000e-004**	**0.0136**	**3.5800e-003**	**1.1000e-004**	**3.6900e-003**	**0.0000**	**12.6643**	**12.6643**	**6.8000e-004**	**0.0000**	**12.6786**

3.9 5_Utility and Electrical Connections - 2016

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	0.2072	1.3844	1.3985	2.0400e-003		0.0871	0.0871		0.0844	0.0844	0.0000	178.7902	178.7902	0.0456	0.0000	179.7480
Total	**0.2072**	**1.3844**	**1.3985**	**2.0400e-003**		**0.0871**	**0.0871**		**0.0844**	**0.0844**	**0.0000**	**178.7902**	**178.7902**	**0.0456**	**0.0000**	**179.7480**

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	0.0192	0.0271	0.2828	6.2000e-004	0.0502	4.3000e-004	0.0507	0.0133	4.0000e-004	0.0137	0.0000	47.1313	47.1313	2.5400e-003	0.0000	47.1847
Total	**0.0192**	**0.0271**	**0.2828**	**6.2000e-004**	**0.0502**	**4.3000e-004**	**0.0507**	**0.0133**	**4.0000e-004**	**0.0137**	**0.0000**	**47.1313**	**47.1313**	**2.5400e-003**	**0.0000**	**47.1847**

3.9 5_Utility and Electrical Connections - 2016

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	0.2072	1.3843	1.3985	2.0400e-003		0.0871	0.0871		0.0844	0.0844	0.0000	178.7900	178.7900	0.0456	0.0000	179.7478
Total	**0.2072**	**1.3843**	**1.3985**	**2.0400e-003**		**0.0871**	**0.0871**		**0.0844**	**0.0844**	**0.0000**	**178.7900**	**178.7900**	**0.0456**	**0.0000**	**179.7478**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0192	0.0271	0.2828	6.2000e-004	0.0502	4.3000e-004	0.0507	0.0133	4.0000e-004	0.0137	0.0000	47.1313	47.1313	2.5400e-003	0.0000	47.1847
Total	**0.0192**	**0.0271**	**0.2828**	**6.2000e-004**	**0.0502**	**4.3000e-004**	**0.0507**	**0.0133**	**4.0000e-004**	**0.0137**	**0.0000**	**47.1313**	**47.1313**	**2.5400e-003**	**0.0000**	**47.1847**

3.10 4B_Press Installaion - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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	4.1000e-004	7.4800e-003	4.5200e-003	2.0000e-005	4.5000e-004	1.1000e-004	5.6000e-004	1.2000e-004	1.0000e-004	2.3000e-004	0.0000	1.7563	1.7563	1.0000e-005	0.0000	1.7565
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	**4.1000e-004**	**7.4800e-003**	**4.5200e-003**	**2.0000e-005**	**4.5000e-004**	**1.1000e-004**	**5.6000e-004**	**1.2000e-004**	**1.0000e-004**	**2.3000e-004**	**0.0000**	**1.7563**	**1.7563**	**1.0000e-005**	**0.0000**	**1.7565**

3.10 4B_Press Installaion - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**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	4.1000e-004	7.4800e-003	4.5200e-003	2.0000e-005	4.5000e-004	1.1000e-004	5.6000e-004	1.2000e-004	1.0000e-004	2.3000e-004	0.0000	1.7563	1.7563	1.0000e-005	0.0000	1.7565
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	**4.1000e-004**	**7.4800e-003**	**4.5200e-003**	**2.0000e-005**	**4.5000e-004**	**1.1000e-004**	**5.6000e-004**	**1.2000e-004**	**1.0000e-004**	**2.3000e-004**	**0.0000**	**1.7563**	**1.7563**	**1.0000e-005**	**0.0000**	**1.7565**

3.11 4A_Adjusted - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1000e-004	0.0148	0.0128	2.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	2.0511	2.0511	6.2000e-004	0.0000	2.0641
Total	**9.1000e-004**	**0.0148**	**0.0128**	**2.0000e-005**		**4.2000e-004**	**4.2000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**2.0511**	**2.0511**	**6.2000e-004**	**0.0000**	**2.0641**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0200e-003	8.5000e-003	0.0887	1.9000e-004	0.0158	1.3000e-004	0.0159	4.1800e-003	1.2000e-004	4.3100e-003	0.0000	14.7750	14.7750	8.0000e-004	0.0000	14.7918
Total	**6.0200e-003**	**8.5000e-003**	**0.0887**	**1.9000e-004**	**0.0158**	**1.3000e-004**	**0.0159**	**4.1800e-003**	**1.2000e-004**	**4.3100e-003**	**0.0000**	**14.7750**	**14.7750**	**8.0000e-004**	**0.0000**	**14.7918**

3.11 4A_Adjusted - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.1000e-004	0.0148	0.0128	2.0000e-005		4.2000e-004	4.2000e-004		3.9000e-004	3.9000e-004	0.0000	2.0511	2.0511	6.2000e-004	0.0000	2.0641
Total	**9.1000e-004**	**0.0148**	**0.0128**	**2.0000e-005**		**4.2000e-004**	**4.2000e-004**		**3.9000e-004**	**3.9000e-004**	**0.0000**	**2.0511**	**2.0511**	**6.2000e-004**	**0.0000**	**2.0641**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0200e-003	8.5000e-003	0.0887	1.9000e-004	0.0158	1.3000e-004	0.0159	4.1800e-003	1.2000e-004	4.3100e-003	0.0000	14.7750	14.7750	8.0000e-004	0.0000	14.7918
Total	**6.0200e-003**	**8.5000e-003**	**0.0887**	**1.9000e-004**	**0.0158**	**1.3000e-004**	**0.0159**	**4.1800e-003**	**1.2000e-004**	**4.3100e-003**	**0.0000**	**14.7750**	**14.7750**	**8.0000e-004**	**0.0000**	**14.7918**

3.12 3B_Paving - 2016

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	1.5000e-003	0.0169	0.0107	2.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	1.5956	1.5956	4.8000e-004	0.0000	1.6057
Paving	3.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1300e-003**	**0.0169**	**0.0107**	**2.0000e-005**		**8.4000e-004**	**8.4000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**1.5956**	**1.5956**	**4.8000e-004**	**0.0000**	**1.6057**

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	7.6000e-004	0.0131	7.6900e-003	4.0000e-005	1.0700e-003	2.4000e-004	1.3000e-003	3.0000e-004	2.2000e-004	5.2000e-004	0.0000	3.2226	3.2226	2.0000e-005	0.0000	3.2230
Worker	4.9000e-004	6.9000e-004	7.2000e-003	2.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1993	1.1993	6.0000e-005	0.0000	1.2006
Total	**1.2500e-003**	**0.0138**	**0.0149**	**6.0000e-005**	**2.3500e-003**	**2.5000e-004**	**2.5900e-003**	**6.4000e-004**	**2.3000e-004**	**8.7000e-004**	**0.0000**	**4.4219**	**4.4219**	**8.0000e-005**	**0.0000**	**4.4237**

3.12 3B_Paving - 2016

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	1.5000e-003	0.0169	0.0107	2.0000e-005		8.4000e-004	8.4000e-004		7.7000e-004	7.7000e-004	0.0000	1.5956	1.5956	4.8000e-004	0.0000	1.6057
Paving	3.6300e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.1300e-003**	**0.0169**	**0.0107**	**2.0000e-005**		**8.4000e-004**	**8.4000e-004**		**7.7000e-004**	**7.7000e-004**	**0.0000**	**1.5956**	**1.5956**	**4.8000e-004**	**0.0000**	**1.6057**

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	7.6000e-004	0.0131	7.6900e-003	4.0000e-005	1.0700e-003	2.4000e-004	1.3000e-003	3.0000e-004	2.2000e-004	5.2000e-004	0.0000	3.2226	3.2226	2.0000e-005	0.0000	3.2230
Worker	4.9000e-004	6.9000e-004	7.2000e-003	2.0000e-005	1.2800e-003	1.0000e-005	1.2900e-003	3.4000e-004	1.0000e-005	3.5000e-004	0.0000	1.1993	1.1993	6.0000e-005	0.0000	1.2006
Total	**1.2500e-003**	**0.0138**	**0.0149**	**6.0000e-005**	**2.3500e-003**	**2.5000e-004**	**2.5900e-003**	**6.4000e-004**	**2.3000e-004**	**8.7000e-004**	**0.0000**	**4.4219**	**4.4219**	**8.0000e-005**	**0.0000**	**4.4237**

3.13 6C_Substation Demolition - 2016

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					1.0300e-003	0.0000	1.0300e-003	1.6000e-004	0.0000	1.6000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2526	0.2001	3.0000e-004		0.0136	0.0136		0.0127	0.0127	0.0000	27.3899	27.3899	8.0900e-003	0.0000	27.5597
Total	**0.0264**	**0.2526**	**0.2001**	**3.0000e-004**	**1.0300e-003**	**0.0136**	**0.0146**	**1.6000e-004**	**0.0127**	**0.0128**	**0.0000**	**27.3899**	**27.3899**	**8.0900e-003**	**0.0000**	**27.5597**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-004	2.1400e-003	1.2900e-003	1.0000e-005	1.3000e-004	3.0000e-005	1.6000e-004	4.0000e-005	3.0000e-005	6.0000e-005	0.0000	0.5018	0.5018	0.0000	0.0000	0.5019
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	2.4600e-003	3.4800e-003	0.0363	8.0000e-005	6.4400e-003	6.0000e-005	6.5000e-003	1.7100e-003	5.0000e-005	1.7600e-003	0.0000	6.0443	6.0443	3.3000e-004	0.0000	6.0512
Total	**2.5800e-003**	**5.6200e-003**	**0.0376**	**9.0000e-005**	**6.5700e-003**	**9.0000e-005**	**6.6600e-003**	**1.7500e-003**	**8.0000e-005**	**1.8200e-003**	**0.0000**	**6.5461**	**6.5461**	**3.3000e-004**	**0.0000**	**6.5530**

3.13 6C_Substation Demolition - 2016

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					4.7000e-004	0.0000	4.7000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2526	0.2001	3.0000e-004		0.0136	0.0136		0.0127	0.0127	0.0000	27.3898	27.3898	8.0900e-003	0.0000	27.5597
Total	**0.0264**	**0.2526**	**0.2001**	**3.0000e-004**	**4.7000e-004**	**0.0136**	**0.0141**	**7.0000e-005**	**0.0127**	**0.0128**	**0.0000**	**27.3898**	**27.3898**	**8.0900e-003**	**0.0000**	**27.5597**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.2000e-004	2.1400e-003	1.2900e-003	1.0000e-005	1.3000e-004	3.0000e-005	1.6000e-004	4.0000e-005	3.0000e-005	6.0000e-005	0.0000	0.5018	0.5018	0.0000	0.0000	0.5019
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	2.4600e-003	3.4800e-003	0.0363	8.0000e-005	6.4400e-003	6.0000e-005	6.5000e-003	1.7100e-003	5.0000e-005	1.7600e-003	0.0000	6.0443	6.0443	3.3000e-004	0.0000	6.0512
Total	**2.5800e-003**	**5.6200e-003**	**0.0376**	**9.0000e-005**	**6.5700e-003**	**9.0000e-005**	**6.6600e-003**	**1.7500e-003**	**8.0000e-005**	**1.8200e-003**	**0.0000**	**6.5461**	**6.5461**	**3.3000e-004**	**0.0000**	**6.5530**

3.14 4A_Equipment Installation - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2243	2.6591	1.0238	1.8700e-003		0.1227	0.1227		0.1129	0.1129	0.0000	176.0905	176.0905	0.0531	0.0000	177.2059
Total	**0.2243**	**2.6591**	**1.0238**	**1.8700e-003**		**0.1227**	**0.1227**		**0.1129**	**0.1129**	**0.0000**	**176.0905**	**176.0905**	**0.0531**	**0.0000**	**177.2059**

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	0.0238	0.0336	0.3506	7.7000e-004	0.0623	5.3000e-004	0.0628	0.0165	4.9000e-004	0.0170	0.0000	58.4284	58.4284	3.1500e-003	0.0000	58.4946
Total	**0.0238**	**0.0336**	**0.3506**	**7.7000e-004**	**0.0623**	**5.3000e-004**	**0.0628**	**0.0165**	**4.9000e-004**	**0.0170**	**0.0000**	**58.4284**	**58.4284**	**3.1500e-003**	**0.0000**	**58.4946**

3.14 4A_Equipment Installation - 2016

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2243	2.6591	1.0238	1.8700e-003		0.1227	0.1227		0.1129	0.1129	0.0000	176.0903	176.0903	0.0531	0.0000	177.2057
Total	**0.2243**	**2.6591**	**1.0238**	**1.8700e-003**		**0.1227**	**0.1227**		**0.1129**	**0.1129**	**0.0000**	**176.0903**	**176.0903**	**0.0531**	**0.0000**	**177.2057**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0238	0.0336	0.3506	7.7000e-004	0.0623	5.3000e-004	0.0628	0.0165	4.9000e-004	0.0170	0.0000	58.4284	58.4284	3.1500e-003	0.0000	58.4946
Total	**0.0238**	**0.0336**	**0.3506**	**7.7000e-004**	**0.0623**	**5.3000e-004**	**0.0628**	**0.0165**	**4.9000e-004**	**0.0170**	**0.0000**	**58.4284**	**58.4284**	**3.1500e-003**	**0.0000**	**58.4946**

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	0.1202	0.4350	1.5845	4.2000e-003	0.2895	6.0500e-003	0.2955	0.0775	5.5700e-003	0.0830	0.0000	325.0446	325.0446	0.0126	0.0000	325.3086
Unmitigated	0.1202	0.4350	1.5845	4.2000e-003	0.2895	6.0500e-003	0.2955	0.0775	5.5700e-003	0.0830	0.0000	325.0446	325.0446	0.0126	0.0000	325.3086

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	172.50	172.50	172.50	763,878	763,878
Parking Lot	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	172.50	172.50	172.50	763,878	763,878

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	426.9009	426.9009	0.0196	4.0600e-003	428.5716
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	426.9009	426.9009	0.0196	4.0600e-003	428.5716
NaturalGas Mitigated	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	115.4339	115.4339	2.2100e-003	2.1200e-003	116.1364
NaturalGas Unmitigated	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	115.4339	115.4339	2.2100e-003	2.1200e-003	116.1364

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Heavy Industry	2.16315e+006	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	115.4339	115.4339	2.2100e-003	2.1200e-003	116.1364
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0117**	**0.1060**	**0.0891**	**6.4000e-004**		**8.0600e-003**	**8.0600e-003**		**8.0600e-003**	**8.0600e-003**	**0.0000**	**115.4339**	**115.4339**	**2.2100e-003**	**2.1200e-003**	**116.1364**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	2.16315e+006	0.0117	0.1060	0.0891	6.4000e-004		8.0600e-003	8.0600e-003		8.0600e-003	8.0600e-003	0.0000	115.4339	115.4339	2.2100e-003	2.1200e-003	116.1364
Total		**0.0117**	**0.1060**	**0.0891**	**6.4000e-004**		**8.0600e-003**	**8.0600e-003**		**8.0600e-003**	**8.0600e-003**	**0.0000**	**115.4339**	**115.4339**	**2.2100e-003**	**2.1200e-003**	**116.1364**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	1.38575e+006	396.5558	0.0182	3.7700e-003	398.1077
Parking Lot	106040	30.3451	1.3900e-003	2.9000e-004	30.4639
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**426.9009**	**0.0196**	**4.0600e-003**	**428.5716**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Heavy Industry	1.38575e+006	396.5558	0.0182	3.7700e-003	398.1077
Parking Lot	106040	30.3451	1.3900e-003	2.9000e-004	30.4639
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**426.9009**	**0.0196**	**4.0600e-003**	**428.5716**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9594**					**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.9594					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.9594**					**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	107.5300	0.8710	0.0214	132.4451
Unmitigated	107.5300	0.8711	0.0214	132.4586

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	26.5938 / 0	107.5300	0.8711	0.0214	132.4586
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**107.5300**	**0.8711**	**0.0214**	**132.4586**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Heavy Industry	26.5938 / 0	107.5300	0.8710	0.0214	132.4451
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**107.5300**	**0.8710**	**0.0214**	**132.4451**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	28.9465	1.7107	0.0000	64.8710
Unmitigated	28.9465	1.7107	0.0000	64.8710

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	142.6	28.9465	1.7107	0.0000	64.8710
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**28.9465**	**1.7107**	**0.0000**	**64.8710**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Heavy Industry	142.6	28.9465	1.7107	0.0000	64.8710
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**28.9465**	**1.7107**	**0.0000**	**64.8710**

9.0 Operational Offroad

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

10.0 Vegetation

CALEEMOD Summer Results

Weber Metals

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	115.00	1000sqft	2.64	115,000.00	0
User Defined Industrial	30.00	User Defined Unit	0.69	30,000.00	0
Parking Lot	120.50	1000sqft	2.77	120,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Footprint of substation is 30,000 SF. Total paving area is 120,500 SF

Construction Phase - Based on construction schedule provided by Weber Metals; 4B expected to occur in one day in the month of June

Off-road Equipment - 1 dozers and 2 loader

Off-road Equipment - 1 drill rig, 4 excavators, 2 loaders, 1 dozer, 2 rollers

Off-road Equipment - 3 cranes, 6 rough terrain forklifts, 9 lifts (5 aerial, 4 scissor), 2 welders, 2 air compressors, 2 pumps

Off-road Equipment - one paver

Off-road Equipment - 1 forklift, 9 cranes, 3 lifts

Off-road Equipment - 9 cranes, 3 aerial lifts, 1 forklift

Off-road Equipment - 35 trucks to haul new press; no on-site off road equipment

Off-road Equipment - 2 rough terrain forklifts, 10 lifts (2 aerial, 8 scissor), 4 welders, 2 air compressors

Off-road Equipment - 1 dozer, 2 loaders

Off-road Equipment - 1 crane, 6 rough terrain forklifts, 2 welders, 4 aerial lifts

Off-road Equipment - 4 lifts, 6 rough terrain forklifts, 2 welders, 1 crane

Trips and VMT - excavation/dewatering - 6,876 trips; press facility construction - 470 vehicles, 12 concrete trucks; substation construction - 60 vehicles; utility connections - 75 vehicles; equipment installation - 140 vehicles

Demolition - demolition of old substation. footprint ~ 35' x 60'

Grading - pit estimated to be 190' by 150' and 85' deep, up to 120,000 SF disturbed per day during site prep, up to 30,000 SF disturbed during Substation site prep

Architectural Coating -

Road Dust -

Area Coating - no architectural coating

Landscape Equipment - no landscaping

Energy Use - Electricity to be calculated outside of CalEEMod

Construction Off-road Equipment Mitigation - dust mitigation, Tier 2 dozers in Phase 1 and 2

Operational Off-Road Equipment - No Offroad Equiipment

Off-road Equipment - 2 rough terrain forklifts

Off-road Equipment - 1 aerial lift

Off-road Equipment - one aerial lift, one rough terrain forklift

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	74308	0
tblAreaCoating	Area_Nonresidential_Interior	222923	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	216.00
tblConstructionPhase	NumDays	230.00	196.00
tblConstructionPhase	NumDays	230.00	131.00

tblConstructionPhase	NumDays	230.00	87.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	230.00	43.00
tblConstructionPhase	NumDays	230.00	22.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	PhaseEndDate	12/30/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/29/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/2/2016	6/2/2016
tblConstructionPhase	PhaseEndDate	7/13/2016	7/31/2016
tblConstructionPhase	PhaseEndDate	7/14/2016	6/14/2016
tblConstructionPhase	PhaseEndDate	9/30/2015	7/31/2015
tblConstructionPhase	PhaseEndDate	6/29/2016	9/30/2015
tblConstructionPhase	PhaseEndDate	8/30/2016	5/31/2016
tblConstructionPhase	PhaseEndDate	7/4/2016	6/30/2016
tblConstructionPhase	PhaseEndDate	8/1/2016	6/30/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	5/1/2016
tblConstructionPhase	PhaseStartDate	8/1/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	11/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	5/1/2015
tblConstructionPhase	PhaseStartDate	5/31/2016	9/1/2015
tblConstructionPhase	PhaseStartDate	7/1/2016	4/1/2016

tblConstructionPhase	PhaseStartDate	6/3/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/1/2016	5/1/2016
tblGrading	AcresOfGrading	0.00	0.65
tblGrading	AcresOfGrading	0.00	2.75
tblGrading	AcresOfGrading	0.00	0.69
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	HorsePower	62.00	46.00
tblOffRoadEquipment	LoadFactor	0.31	0.45
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts

tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	PhaseName		4A_Equipment Installation
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		3A_Adjusted
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections

tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		4A_Adjusted
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00

tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripNumber	0.00	35.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripNumber	44.00	12.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00

tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	33.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	8.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	75.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00
tblTripsAndVMT	WorkerTripNumber	112.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	25.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00

tblTripsAndVMT	WorkerTripNumber	5.00	60.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	11.4396	104.1606	94.8871	0.1701	14.7211	4.8960	18.6025	6.4317	4.6250	10.0025	0.0000	17,385.6835	17,385.6835	2.6845	0.0000	17,442.0581
2016	16.7356	115.9514	156.9045	0.2913	12.6928	6.2272	18.9200	3.3618	5.9028	9.2646	0.0000	26,693.0769	26,693.0769	4.1117	0.0000	26,779.4235
Total	**28.1752**	**220.1120**	**251.7916**	**0.4614**	**27.4139**	**11.1231**	**37.5225**	**9.7935**	**10.5278**	**19.2671**	**0.0000**	**44,078.7604**	**44,078.7604**	**6.7962**	**0.0000**	**44,221.4816**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	11.4396	97.3086	94.8871	0.1701	9.6679	4.8960	13.6045	3.6893	4.6250	6.9379	0.0000	17,385.6835	17,385.6835	2.6845	0.0000	17,442.0581
2016	16.7356	115.9514	156.9045	0.2913	12.6928	6.2272	18.9200	3.3618	5.9028	9.2646	0.0000	26,693.0768	26,693.0768	4.1117	0.0000	26,779.4235
Total	**28.1752**	**213.2599**	**251.7916**	**0.4614**	**22.3607**	**11.1231**	**32.5245**	**7.0511**	**10.5278**	**16.2025**	**0.0000**	**44,078.7604**	**44,078.7604**	**6.7962**	**0.0000**	**44,221.4816**

	ROG	NOx	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	3.11	0.00	0.00	18.43	0.00	13.32	28.00	0.00	15.91	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Energy	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Mobile	0.6728	2.2246	8.9041	0.0241	1.6199	0.0332	1.6531	0.4328	0.0306	0.4634		2,046.2441	2,046.2441	0.0762		2,047.8448
Total	**5.9963**	**2.8059**	**9.4198**	**0.0275**	**1.6199**	**0.0775**	**1.6974**	**0.4328**	**0.0749**	**0.5077**		**2,743.5303**	**2,743.5303**	**0.0897**	**0.0128**	**2,749.3775**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Energy	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Mobile	0.6728	2.2246	8.9041	0.0241	1.6199	0.0332	1.6531	0.4328	0.0306	0.4634		2,046.2441	2,046.2441	0.0762		2,047.8448
Total	**5.9963**	**2.8059**	**9.4198**	**0.0275**	**1.6199**	**0.0775**	**1.6974**	**0.4328**	**0.0749**	**0.5077**		**2,743.5303**	**2,743.5303**	**0.0897**	**0.0128**	**2,749.3775**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1_Site Preparation	Site Preparation	5/1/2015	6/30/2015	5	43	
2	2_Excavation/Dewatering	Site Preparation	5/1/2015	7/31/2015	5	66	
3	3A_Press Facility Construction	Building Construction	8/1/2015	5/30/2016	5	216	
4	6A_Site Prep	Site Preparation	9/1/2015	9/30/2015	5	22	
5	6B_Substation Construction	Building Construction	10/1/2015	6/30/2016	5	196	
6	3A_Adjusted	Building Construction	4/1/2016	5/31/2016	5	43	
7	6A_Adjusted	Site Preparation	5/1/2016	6/30/2016	5	44	
8	5_Utility and Electrical Connections	Building Construction	5/1/2016	10/31/2016	5	131	
9	4B_Press Installaion	Building Construction	6/1/2016	6/2/2016	5	2	
10	4A_Adjusted	Building Construction	6/1/2016	6/30/2016	5	22	
11	3B_Paving	Paving	6/1/2016	6/14/2016	5	10	
12	6C_Substation Demolition	Demolition	7/1/2016	7/31/2016	5	21	
13	4A_Equipment Installation	Building Construction	7/1/2016	10/31/2016	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1_Site Preparation	Rubber Tired Dozers	1	6.00	255	0.40
1_Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
4A_Equipment Installation	Aerial Lifts	3	6.00	62	0.31
6C_Substation Demolition	Aerial Lifts	4	6.00	62	0.31
6A_Adjusted	Aerial Lifts	1	8.00	62	0.31
2_Excavation/Dewatering	Rubber Tired Dozers	1	6.00	255	0.40
2_Excavation/Dewatering	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6C_Substation Demolition	Rough Terrain Forklifts	6	6.00	100	0.40
6C_Substation Demolition	Welders	2	6.00	46	0.45
3A_Press Facility Construction	Cranes	3	6.00	226	0.29
6C_Substation Demolition	Cranes	1	6.00	226	0.29
3A_Press Facility Construction	Welders	2	6.00	46	0.45
6A_Site Prep	Rubber Tired Dozers	1	6.00	255	0.40
6A_Site Prep	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6B_Substation Construction	Rough Terrain Forklifts	6	6.00	100	0.40
6B_Substation Construction	Cranes	1	6.00	226	0.29
3A_Adjusted	Rough Terrain Forklifts	2	8.00	100	0.40
6B_Substation Construction	Welders	2	6.00	46	0.45
6A_Adjusted	Rough Terrain Forklifts	1	8.00	100	0.40
5_Utility and Electrical Connections	Welders	4	6.00	46	0.45
4A_Equipment Installation	Cranes	9	6.00	226	0.29
4A_Equipment Installation	Forklifts	1	6.00	89	0.20
3B_Paving	Pavers	1	6.00	125	0.42
6B_Substation Construction	Aerial Lifts	4	6.00	62	0.31
5_Utility and Electrical Connections	Rough Terrain Forklifts	2	6.00	100	0.40
5_Utility and Electrical Connections	Aerial Lifts	10	6.00	62	0.31

5_Utility and Electrical Connections	Air Compressors	2	6.00	78	0.48
4A_Adjusted	Aerial Lifts	1	8.00	46	0.45
2_Excavation/Dewatering	Bore/Drill Rigs	1	6.00	205	0.50
2_Excavation/Dewatering	Excavators	4	6.00	162	0.38
2_Excavation/Dewatering	Rollers	2	6.00	80	0.38
3A_Press Facility Construction	Rough Terrain Forklifts	6	6.00	100	0.40
3A_Press Facility Construction	Aerial Lifts	9	6.00	62	0.31
3A_Press Facility Construction	Air Compressors	2	6.00	78	0.48
3A_Press Facility Construction	Pumps	2	6.00	84	0.74
4B_Press Installaion	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1_Site Preparation	3	25.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
2_Excavation/Dewatering	10	25.00	0.00	6,875.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Press Facility Construction	24	470.00	12.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Site Prep	3	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6B_Substation Construction	13	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
5_Utility and Electrical Connections	18	75.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Equipment Installation	13	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4B_Press Installaion	0	0.00	0.00	35.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3B_Paving	1	25.00	8.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6C_Substation Demolition	13	60.00	0.00	10.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Adjusted	2	470.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Adjusted	1	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Adjusted	2	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 1_Site Preparation - 2015

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					4.5326	0.0000	4.5326	2.4844	0.0000	2.4844			0.0000			0.0000
Off-Road	1.4954	15.9385	11.8708	0.0113		0.9064	0.9064		0.8339	0.8339		1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**1.4954**	**15.9385**	**11.8708**	**0.0113**	**4.5326**	**0.9064**	**5.4390**	**2.4844**	**0.8339**	**3.3183**		**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.2 1_Site Preparation - 2015

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	0.1123	0.1354	1.6800	3.3100e-003	0.2605	2.3100e-003	0.2628	0.0691	2.1100e-003	0.0712		287.4726	287.4726	0.0155		287.7982
Total	**0.1123**	**0.1354**	**1.6800**	**3.3100e-003**	**0.2605**	**2.3100e-003**	**0.2628**	**0.0691**	**2.1100e-003**	**0.0712**		**287.4726**	**287.4726**	**0.0155**		**287.7982**

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					2.0397	0.0000	2.0397	1.1180	0.0000	1.1180			0.0000			0.0000
Off-Road	0.9721	12.5124	8.7527	0.0113		0.6525	0.6525		0.6066	0.6066	0.0000	1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**0.9721**	**12.5124**	**8.7527**	**0.0113**	**2.0397**	**0.6525**	**2.6922**	**1.1180**	**0.6066**	**1.7245**	**0.0000**	**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.2 1_Site Preparation - 2015

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	0.1123	0.1354	1.6800	3.3100e-003	0.2605	2.3100e-003	0.2628	0.0691	2.1100e-003	0.0712		287.4726	287.4726	0.0155		287.7982
Total	**0.1123**	**0.1354**	**1.6800**	**3.3100e-003**	**0.2605**	**2.3100e-003**	**0.2628**	**0.0691**	**2.1100e-003**	**0.0712**		**287.4726**	**287.4726**	**0.0155**		**287.7982**

3.3 2_Excavation/Dewatering - 2015

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					4.6550	0.0000	4.6550	2.5017	0.0000	2.5017			0.0000			0.0000
Off-Road	3.5838	40.0844	26.8493	0.0377		2.1376	2.1376		1.9666	1.9666		3,958.0706	3,958.0706	1.1817		3,982.8852
Total	**3.5838**	**40.0844**	**26.8493**	**0.0377**	**4.6550**	**2.1376**	**6.7926**	**2.5017**	**1.9666**	**4.4683**		**3,958.0706**	**3,958.0706**	**1.1817**		**3,982.8852**

3.3 2_Excavation/Dewatering - 2015

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	2.6728	47.8670	26.4242	0.1144	4.7862	0.8328	5.6190	1.2518	0.7661	2.0179		11,660.9879	11,660.9879	0.0901		11,662.8793
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	0.1123	0.1354	1.6800	3.3100e-003	0.4869	2.3100e-003	0.4892	0.1247	2.1100e-003	0.1268		287.4726	287.4726	0.0155		287.7982
Total	**2.7851**	**48.0024**	**28.1041**	**0.1177**	**5.2730**	**0.8351**	**6.1082**	**1.3765**	**0.7682**	**2.1447**		**11,948.4605**	**11,948.4605**	**0.1056**		**11,950.6776**

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					2.0948	0.0000	2.0948	1.1258	0.0000	1.1258			0.0000			0.0000
Off-Road	3.0605	36.6584	23.7312	0.0377		1.8837	1.8837		1.7393	1.7393	0.0000	3,958.0706	3,958.0706	1.1817		3,982.8852
Total	**3.0605**	**36.6584**	**23.7312**	**0.0377**	**2.0948**	**1.8837**	**3.9785**	**1.1258**	**1.7393**	**2.8651**	**0.0000**	**3,958.0706**	**3,958.0706**	**1.1817**		**3,982.8852**

3.3 2_Excavation/Dewatering - 2015

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	2.6728	47.8670	26.4242	0.1144	4.7862	0.8328	5.6190	1.2518	0.7661	2.0179		11,660.9879	11,660.9879	0.0901		11,662.8793
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	0.1123	0.1354	1.6800	3.3100e-003	0.4869	2.3100e-003	0.4892	0.1247	2.1100e-003	0.1268		287.4726	287.4726	0.0155		287.7982
Total	**2.7851**	**48.0024**	**28.1041**	**0.1177**	**5.2730**	**0.8351**	**6.1082**	**1.3765**	**0.7682**	**2.1447**		**11,948.4605**	**11,948.4605**	**0.1056**		**11,950.6776**

3.4 3A_Press Facility Construction - 2015

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	6.0473	56.4372	37.6441	0.0590		3.2936	3.2936		3.1321	3.1321		5,937.4409	5,937.4409	1.4906		5,968.7426
Total	**6.0473**	**56.4372**	**37.6441**	**0.0590**		**3.2936**	**3.2936**		**3.1321**	**3.1321**		**5,937.4409**	**5,937.4409**	**1.4906**		**5,968.7426**

3.4 3A_Press Facility Construction - 2015

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	0.2502	4.2739	2.3228	0.0106	0.3250	0.0855	0.4105	0.0924	0.0786	0.1711		1,078.5155	1,078.5155	7.6200e-003		1,078.6755
Worker	2.1109	2.5452	31.5833	0.0622	4.8964	0.0434	4.9398	1.2986	0.0397	1.3383		5,404.4850	5,404.4850	0.2915		5,410.6070
Total	**2.3610**	**6.8190**	**33.9061**	**0.0728**	**5.2214**	**0.1288**	**5.3503**	**1.3910**	**0.1184**	**1.5094**		**6,483.0004**	**6,483.0004**	**0.2992**		**6,489.2825**

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	6.0473	56.4372	37.6441	0.0590		3.2936	3.2936		3.1321	3.1321	0.0000	5,937.4409	5,937.4409	1.4906		5,968.7426
Total	**6.0473**	**56.4372**	**37.6441**	**0.0590**		**3.2936**	**3.2936**		**3.1321**	**3.1321**	**0.0000**	**5,937.4409**	**5,937.4409**	**1.4906**		**5,968.7426**

3.4 3A_Press Facility Construction - 2015

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	0.2502	4.2739	2.3228	0.0106	0.3250	0.0855	0.4105	0.0924	0.0786	0.1711		1,078.5155	1,078.5155	7.6200e-003		1,078.6755
Worker	2.1109	2.5452	31.5833	0.0622	4.8964	0.0434	4.9398	1.2986	0.0397	1.3383		5,404.4850	5,404.4850	0.2915		5,410.6070
Total	**2.3610**	**6.8190**	**33.9061**	**0.0728**	**5.2214**	**0.1288**	**5.3503**	**1.3910**	**0.1184**	**1.5094**		**6,483.0004**	**6,483.0004**	**0.2992**		**6,489.2825**

3.4 3A_Press Facility Construction - 2016

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	5.5397	52.4270	37.1648	0.0590		2.9444	2.9444		2.8001	2.8001		5,895.7320	5,895.7320	1.4652		5,926.5009
Total	**5.5397**	**52.4270**	**37.1648**	**0.0590**		**2.9444**	**2.9444**		**2.8001**	**2.8001**		**5,895.7320**	**5,895.7320**	**1.4652**		**5,926.5009**

3.4 3A_Press Facility Construction - 2016

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	0.2214	3.7342	2.1117	0.0106	0.3251	0.0712	0.3963	0.0925	0.0655	0.1580		1,066.6149	1,066.6149	6.8100e-003		1,066.7580
Worker	1.9079	2.2958	28.5985	0.0621	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		5,218.2934	5,218.2934	0.2682		5,223.9257
Total	**2.1293**	**6.0301**	**30.7101**	**0.0727**	**5.2215**	**0.1124**	**5.3339**	**1.3911**	**0.1034**	**1.4944**		**6,284.9083**	**6,284.9083**	**0.2750**		**6,290.6837**

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	5.5397	52.4270	37.1648	0.0590		2.9444	2.9444		2.8001	2.8001	0.0000	5,895.7320	5,895.7320	1.4652		5,926.5009
Total	**5.5397**	**52.4270**	**37.1648**	**0.0590**		**2.9444**	**2.9444**		**2.8001**	**2.8001**	**0.0000**	**5,895.7320**	**5,895.7320**	**1.4652**		**5,926.5009**

3.4 3A_Press Facility Construction - 2016

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	0.2214	3.7342	2.1117	0.0106	0.3251	0.0712	0.3963	0.0925	0.0655	0.1580		1,066.6149	1,066.6149	6.8100e-003		1,066.7580
Worker	1.9079	2.2958	28.5985	0.0621	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		5,218.2934	5,218.2934	0.2682		5,223.9257
Total	**2.1293**	**6.0301**	**30.7101**	**0.0727**	**5.2215**	**0.1124**	**5.3339**	**1.3911**	**0.1034**	**1.4944**		**6,284.9083**	**6,284.9083**	**0.2750**		**6,290.6837**

3.5 6A_Site Prep - 2015

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					4.5498	0.0000	4.5498	2.4863	0.0000	2.4863			0.0000			0.0000
Off-Road	1.4954	15.9385	11.8708	0.0113		0.9064	0.9064		0.8339	0.8339		1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**1.4954**	**15.9385**	**11.8708**	**0.0113**	**4.5498**	**0.9064**	**5.4562**	**2.4863**	**0.8339**	**3.3201**		**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.5 6A_Site Prep - 2015

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	0.2695	0.3249	4.0319	7.9300e-003	2.2552	5.5300e-003	2.2608	0.5659	5.0700e-003	0.5710		689.9343	689.9343	0.0372		690.7158
Total	**0.2695**	**0.3249**	**4.0319**	**7.9300e-003**	**2.2552**	**5.5300e-003**	**2.2608**	**0.5659**	**5.0700e-003**	**0.5710**		**689.9343**	**689.9343**	**0.0372**		**690.7158**

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					2.0474	0.0000	2.0474	1.1188	0.0000	1.1188			0.0000			0.0000
Off-Road	0.9721	12.5124	8.7527	0.0113		0.6525	0.6525		0.6066	0.6066	0.0000	1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**0.9721**	**12.5124**	**8.7527**	**0.0113**	**2.0474**	**0.6525**	**2.6999**	**1.1188**	**0.6066**	**1.7254**	**0.0000**	**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.5 6A_Site Prep - 2015

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	0.2695	0.3249	4.0319	7.9300e-003	2.2552	5.5300e-003	2.2608	0.5659	5.0700e-003	0.5710		689.9343	689.9343	0.0372		690.7158
Total	**0.2695**	**0.3249**	**4.0319**	**7.9300e-003**	**2.2552**	**5.5300e-003**	**2.2608**	**0.5659**	**5.0700e-003**	**0.5710**		**689.9343**	**689.9343**	**0.0372**		**690.7158**

3.6 6B_Substation Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7618	26.1613	19.3051	0.0285		1.4680	1.4680		1.3694	1.3694		2,901.3045	2,901.3045	0.8576		2,919.3138
Total	**2.7618**	**26.1613**	**19.3051**	**0.0285**		**1.4680**	**1.4680**		**1.3694**	**1.3694**		**2,901.3045**	**2,901.3045**	**0.8576**		**2,919.3138**

3.6 6B_Substation Construction - 2015

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	0.2695	0.3249	4.0319	7.9300e-003	1.1685	5.5300e-003	1.1740	0.2992	5.0700e-003	0.3042		689.9343	689.9343	0.0372		690.7158
Total	**0.2695**	**0.3249**	**4.0319**	**7.9300e-003**	**1.1685**	**5.5300e-003**	**1.1740**	**0.2992**	**5.0700e-003**	**0.3042**		**689.9343**	**689.9343**	**0.0372**		**690.7158**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7618	26.1613	19.3051	0.0285		1.4680	1.4680		1.3694	1.3694	0.0000	2,901.3045	2,901.3045	0.8576		2,919.3138
Total	**2.7618**	**26.1613**	**19.3051**	**0.0285**		**1.4680**	**1.4680**		**1.3694**	**1.3694**	**0.0000**	**2,901.3045**	**2,901.3045**	**0.8576**		**2,919.3138**

3.6 6B_Substation Construction - 2015

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	0.2695	0.3249	4.0319	7.9300e-003	1.1685	5.5300e-003	1.1740	0.2992	5.0700e-003	0.3042		689.9343	689.9343	0.0372		690.7158
Total	**0.2695**	**0.3249**	**4.0319**	**7.9300e-003**	**1.1685**	**5.5300e-003**	**1.1740**	**0.2992**	**5.0700e-003**	**0.3042**		**689.9343**	**689.9343**	**0.0372**		**690.7158**

3.6 6B_Substation Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073		2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**		**1.2938**	**1.2938**		**1.2073**	**1.2073**		**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.6 6B_Substation Construction - 2016

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	0.2436	0.2931	3.6509	7.9300e-003	1.1685	5.2600e-003	1.1737	0.2992	4.8300e-003	0.3040		666.1651	666.1651	0.0342		666.8841
Total	**0.2436**	**0.2931**	**3.6509**	**7.9300e-003**	**1.1685**	**5.2600e-003**	**1.1737**	**0.2992**	**4.8300e-003**	**0.3040**		**666.1651**	**666.1651**	**0.0342**		**666.8841**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073	0.0000	2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**		**1.2938**	**1.2938**		**1.2073**	**1.2073**	**0.0000**	**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.6 6B_Substation Construction - 2016

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	0.2436	0.2931	3.6509	7.9300e-003	1.1685	5.2600e-003	1.1737	0.2992	4.8300e-003	0.3040		666.1651	666.1651	0.0342		666.8841
Total	**0.2436**	**0.2931**	**3.6509**	**7.9300e-003**	**1.1685**	**5.2600e-003**	**1.1737**	**0.2992**	**4.8300e-003**	**0.3040**		**666.1651**	**666.1651**	**0.0342**		**666.8841**

3.7 3A_Adjusted - 2016

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	0.4255	5.4181	4.7150	6.8900e-003		0.3007	0.3007		0.2767	0.2767		715.4489	715.4489	0.2158		719.9808
Total	**0.4255**	**5.4181**	**4.7150**	**6.8900e-003**		**0.3007**	**0.3007**		**0.2767**	**0.2767**		**715.4489**	**715.4489**	**0.2158**		**719.9808**

3.7 3A_Adjusted - 2016

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	1.9079	2.2958	28.5985	0.0621	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		5,218.2934	5,218.2934	0.2682		5,223.9257
Total	**1.9079**	**2.2958**	**28.5985**	**0.0621**	**4.8964**	**0.0412**	**4.9376**	**1.2986**	**0.0379**	**1.3365**		**5,218.2934**	**5,218.2934**	**0.2682**		**5,223.9257**

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	0.4255	5.4181	4.7150	6.8900e-003		0.3007	0.3007		0.2767	0.2767	0.0000	715.4489	715.4489	0.2158		719.9808
Total	**0.4255**	**5.4181**	**4.7150**	**6.8900e-003**		**0.3007**	**0.3007**		**0.2767**	**0.2767**	**0.0000**	**715.4489**	**715.4489**	**0.2158**		**719.9808**

3.7 3A_Adjusted - 2016

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	1.9079	2.2958	28.5985	0.0621	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		5,218.2934	5,218.2934	0.2682		5,223.9257
Total	**1.9079**	**2.2958**	**28.5985**	**0.0621**	**4.8964**	**0.0412**	**4.9376**	**1.2986**	**0.0379**	**1.3365**		**5,218.2934**	**5,218.2934**	**0.2682**		**5,223.9257**

3.8 6A_Adjusted - 2016

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	0.2689	3.6319	3.4426	5.1000e-003		0.1883	0.1883		0.1732	0.1732		529.3214	529.3214	0.1597		532.6743
Total	**0.2689**	**3.6319**	**3.4426**	**5.1000e-003**		**0.1883**	**0.1883**		**0.1732**	**0.1732**		**529.3214**	**529.3214**	**0.1597**		**532.6743**

3.8 6A_Adjusted - 2016

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	0.2436	0.2931	3.6509	7.9300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		666.1651	666.1651	0.0342		666.8841
Total	**0.2436**	**0.2931**	**3.6509**	**7.9300e-003**	**0.6251**	**5.2600e-003**	**0.6303**	**0.1658**	**4.8300e-003**	**0.1706**		**666.1651**	**666.1651**	**0.0342**		**666.8841**

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	0.2689	3.6319	3.4426	5.1000e-003		0.1883	0.1883		0.1732	0.1732	0.0000	529.3214	529.3214	0.1597		532.6743
Total	**0.2689**	**3.6319**	**3.4426**	**5.1000e-003**		**0.1883**	**0.1883**		**0.1732**	**0.1732**	**0.0000**	**529.3214**	**529.3214**	**0.1597**		**532.6743**

3.8 6A_Adjusted - 2016

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	0.2436	0.2931	3.6509	7.9300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		666.1651	666.1651	0.0342		666.8841
Total	**0.2436**	**0.2931**	**3.6509**	**7.9300e-003**	**0.6251**	**5.2600e-003**	**0.6303**	**0.1658**	**4.8300e-003**	**0.1706**		**666.1651**	**666.1651**	**0.0342**		**666.8841**

3.9 5_Utility and Electrical Connections - 2016

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	3.1636	21.1351	21.3512	0.0312		1.3293	1.3293		1.2885	1.2885		3,008.8929	3,008.8929	0.7676		3,025.0116
Total	**3.1636**	**21.1351**	**21.3512**	**0.0312**		**1.3293**	**1.3293**		**1.2885**	**1.2885**		**3,008.8929**	**3,008.8929**	**0.7676**		**3,025.0116**

3.9 5_Utility and Electrical Connections - 2016

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	0.3045	0.3664	4.5636	9.9100e-003	0.7813	6.5700e-003	0.7879	0.2072	6.0400e-003	0.2133		832.7064	832.7064	0.0428		833.6052
Total	**0.3045**	**0.3664**	**4.5636**	**9.9100e-003**	**0.7813**	**6.5700e-003**	**0.7879**	**0.2072**	**6.0400e-003**	**0.2133**		**832.7064**	**832.7064**	**0.0428**		**833.6052**

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	3.1636	21.1351	21.3512	0.0312		1.3293	1.3293		1.2885	1.2885	0.0000	3,008.8929	3,008.8929	0.7676		3,025.0116
Total	**3.1636**	**21.1351**	**21.3512**	**0.0312**		**1.3293**	**1.3293**		**1.2885**	**1.2885**	**0.0000**	**3,008.8929**	**3,008.8929**	**0.7676**		**3,025.0116**

3.9 5_Utility and Electrical Connections - 2016

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	0.3045	0.3664	4.5636	9.9100e-003	0.7813	6.5700e-003	0.7879	0.2072	6.0400e-003	0.2133		832.7064	832.7064	0.0428		833.6052
Total	**0.3045**	**0.3664**	**4.5636**	**9.9100e-003**	**0.7813**	**6.5700e-003**	**0.7879**	**0.2072**	**6.0400e-003**	**0.2133**		**832.7064**	**832.7064**	**0.0428**		**833.6052**

3.10 4B_Press Installaion - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.10 4B_Press Installaion - 2016

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	0.3975	7.0869	4.1005	0.0192	0.4571	0.1119	0.5690	0.1252	0.1030	0.2281		1,937.2332	1,937.2332	0.0136		1,937.5179
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	**0.3975**	**7.0869**	**4.1005**	**0.0192**	**0.4571**	**0.1119**	**0.5690**	**0.1252**	**0.1030**	**0.2281**		**1,937.2332**	**1,937.2332**	**0.0136**		**1,937.5179**

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.10 4B_Press Installaion - 2016

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	0.3975	7.0869	4.1005	0.0192	0.4571	0.1119	0.5690	0.1252	0.1030	0.2281		1,937.2332	1,937.2332	0.0136		1,937.5179
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	**0.3975**	**7.0869**	**4.1005**	**0.0192**	**0.4571**	**0.1119**	**0.5690**	**0.1252**	**0.1030**	**0.2281**		**1,937.2332**	**1,937.2332**	**0.0136**		**1,937.5179**

3.11 4A_Adjusted - 2016

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	0.0832	1.3420	1.1673	1.9800e-003		0.0382	0.0382		0.0351	0.0351		205.5418	205.5418	0.0620		206.8438
Total	**0.0832**	**1.3420**	**1.1673**	**1.9800e-003**		**0.0382**	**0.0382**		**0.0351**	**0.0351**		**205.5418**	**205.5418**	**0.0620**		**206.8438**

3.11 4A_Adjusted - 2016

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	0.5683	0.6839	8.5187	0.0185	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,554.3853	1,554.3853	0.0799		1,556.0630
Total	**0.5683**	**0.6839**	**8.5187**	**0.0185**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,554.3853**	**1,554.3853**	**0.0799**		**1,556.0630**

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	0.0832	1.3420	1.1673	1.9800e-003		0.0382	0.0382		0.0351	0.0351	0.0000	205.5418	205.5418	0.0620		206.8438
Total	**0.0832**	**1.3420**	**1.1673**	**1.9800e-003**		**0.0382**	**0.0382**		**0.0351**	**0.0351**	**0.0000**	**205.5418**	**205.5418**	**0.0620**		**206.8438**

3.11 4A_Adjusted - 2016

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	0.5683	0.6839	8.5187	0.0185	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,554.3853	1,554.3853	0.0799		1,556.0630
Total	**0.5683**	**0.6839**	**8.5187**	**0.0185**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,554.3853**	**1,554.3853**	**0.0799**		**1,556.0630**

3.12 3B_Paving - 2016

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	0.3009	3.3848	2.1391	3.3900e-003		0.1682	0.1682		0.1547	0.1547		351.7699	351.7699	0.1061		353.9981
Paving	0.7257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0266**	**3.3848**	**2.1391**	**3.3900e-003**		**0.1682**	**0.1682**		**0.1547**	**0.1547**		**351.7699**	**351.7699**	**0.1061**		**353.9981**

3.12 3B_Paving - 2016

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	0.1476	2.4895	1.4078	7.0600e-003	0.2167	0.0475	0.2642	0.0617	0.0437	0.1053		711.0766	711.0766	4.5400e-003		711.1720
Worker	0.1015	0.1221	1.5212	3.3000e-003	0.2605	2.1900e-003	0.2626	0.0691	2.0100e-003	0.0711		277.5688	277.5688	0.0143		277.8684
Total	**0.2491**	**2.6116**	**2.9290**	**0.0104**	**0.4772**	**0.0497**	**0.5268**	**0.1307**	**0.0457**	**0.1764**		**988.6454**	**988.6454**	**0.0188**		**989.0404**

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	0.3009	3.3848	2.1391	3.3900e-003		0.1682	0.1682		0.1547	0.1547	0.0000	351.7699	351.7699	0.1061		353.9981
Paving	0.7257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0266**	**3.3848**	**2.1391**	**3.3900e-003**		**0.1682**	**0.1682**		**0.1547**	**0.1547**	**0.0000**	**351.7699**	**351.7699**	**0.1061**		**353.9981**

3.12 3B_Paving - 2016

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	0.1476	2.4895	1.4078	7.0600e-003	0.2167	0.0475	0.2642	0.0617	0.0437	0.1053		711.0766	711.0766	4.5400e-003		711.1720
Worker	0.1015	0.1221	1.5212	3.3000e-003	0.2605	2.1900e-003	0.2626	0.0691	2.0100e-003	0.0711		277.5688	277.5688	0.0143		277.8684
Total	**0.2491**	**2.6116**	**2.9290**	**0.0104**	**0.4772**	**0.0497**	**0.5268**	**0.1307**	**0.0457**	**0.1764**		**988.6454**	**988.6454**	**0.0188**		**989.0404**

3.13 6C_Substation Demolition - 2016

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					0.0984	0.0000	0.0984	0.0149	0.0000	0.0149			0.0000			0.0000
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073		2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**	**0.0984**	**1.2938**	**1.3922**	**0.0149**	**1.2073**	**1.2222**		**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.13 6C_Substation Demolition - 2016

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	0.0108	0.1928	0.1116	5.2000e-004	0.0124	3.0500e-003	0.0155	3.4100e-003	2.8000e-003	6.2100e-003		52.7138	52.7138	3.7000e-004		52.7216
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	0.2436	0.2931	3.6509	7.9300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		666.1651	666.1651	0.0342		666.8841
Total	**0.2544**	**0.4859**	**3.7625**	**8.4500e-003**	**0.6375**	**8.3100e-003**	**0.6458**	**0.1692**	**7.6300e-003**	**0.1768**		**718.8789**	**718.8789**	**0.0346**		**719.6057**

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					0.0443	0.0000	0.0443	6.7100e-003	0.0000	6.7100e-003			0.0000			0.0000
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073	0.0000	2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**	**0.0443**	**1.2938**	**1.3381**	**6.7100e-003**	**1.2073**	**1.2140**	**0.0000**	**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.13 6C_Substation Demolition - 2016

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	0.0108	0.1928	0.1116	5.2000e-004	0.0124	3.0500e-003	0.0155	3.4100e-003	2.8000e-003	6.2100e-003		52.7138	52.7138	3.7000e-004		52.7216
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	0.2436	0.2931	3.6509	7.9300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		666.1651	666.1651	0.0342		666.8841
Total	**0.2544**	**0.4859**	**3.7625**	**8.4500e-003**	**0.6375**	**8.3100e-003**	**0.6458**	**0.1692**	**7.6300e-003**	**0.1768**		**718.8789**	**718.8789**	**0.0346**		**719.6057**

3.14 4A_Equipment Installation - 2016

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	5.1566	61.1291	23.5364	0.0429		2.8210	2.8210		2.5953	2.5953		4,462.2191	4,462.2191	1.3460		4,490.4843
Total	**5.1566**	**61.1291**	**23.5364**	**0.0429**		**2.8210**	**2.8210**		**2.5953**	**2.5953**		**4,462.2191**	**4,462.2191**	**1.3460**		**4,490.4843**

3.14 4A_Equipment Installation - 2016

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	0.5683	0.6839	8.5187	0.0185	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,554.3853	1,554.3853	0.0799		1,556.0630
Total	**0.5683**	**0.6839**	**8.5187**	**0.0185**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,554.3853**	**1,554.3853**	**0.0799**		**1,556.0630**

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	5.1566	61.1291	23.5364	0.0429		2.8210	2.8210		2.5953	2.5953	0.0000	4,462.2191	4,462.2191	1.3460		4,490.4843
Total	**5.1566**	**61.1291**	**23.5364**	**0.0429**		**2.8210**	**2.8210**		**2.5953**	**2.5953**	**0.0000**	**4,462.2191**	**4,462.2191**	**1.3460**		**4,490.4843**

3.14 4A_Equipment Installation - 2016

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	0.5683	0.6839	8.5187	0.0185	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,554.3853	1,554.3853	0.0799		1,556.0630
Total	**0.5683**	**0.6839**	**8.5187**	**0.0185**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,554.3853**	**1,554.3853**	**0.0799**		**1,556.0630**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6728	2.2246	8.9041	0.0241	1.6199	0.0332	1.6531	0.4328	0.0306	0.4634		2,046.2441	2,046.2441	0.0762		2,047.8448
Unmitigated	0.6728	2.2246	8.9041	0.0241	1.6199	0.0332	1.6531	0.4328	0.0306	0.4634		2,046.2441	2,046.2441	0.0762		2,047.8448

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	172.50	172.50	172.50	763,878	763,878
Parking Lot	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	172.50	172.50	172.50	763,878	763,878

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
NaturalGas Unmitigated	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	5926.44	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0639**	**0.5810**	**0.4881**	**3.4900e-003**		**0.0442**	**0.0442**		**0.0442**	**0.0442**		**697.2280**	**697.2280**	**0.0134**	**0.0128**	**701.4713**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Heavy Industry	5.92644	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Total		**0.0639**	**0.5810**	**0.4881**	**3.4900e-003**		**0.0442**	**0.0442**		**0.0442**	**0.0442**		**697.2280**	**697.2280**	**0.0134**	**0.0128**	**701.4713**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Unmitigated	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6700e-003	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Total	**5.2596**	**2.6000e-004**	**0.0276**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0581**	**0.0581**	**1.6000e-004**		**0.0615**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6700e-003	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Total	**5.2596**	**2.6000e-004**	**0.0276**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0581**	**0.0581**	**1.6000e-004**		**0.0615**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation

CALEEMOD Winter Results

Weber Metals

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Heavy Industry	115.00	1000sqft	2.64	115,000.00	0
User Defined Industrial	30.00	User Defined Unit	0.69	30,000.00	0
Parking Lot	120.50	1000sqft	2.77	120,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2017
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	630.89	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Footprint of substation is 30,000 SF. Total paving area is 120,500 SF

Construction Phase - Based on construction schedule provided by Weber Metals; 4B expected to occur in one day in the month of June

Off-road Equipment - 1 dozers and 2 loader

Off-road Equipment - 1 drill rig, 4 excavators, 2 loaders, 1 dozer, 2 rollers

Off-road Equipment - 3 cranes, 6 rough terrain forklifts, 9 lifts (5 aerial, 4 scissor), 2 welders, 2 air compressors, 2 pumps

Off-road Equipment - one paver

Off-road Equipment - 1 forklift, 9 cranes, 3 lifts

Off-road Equipment - 9 cranes, 3 aerial lifts, 1 forklift

Off-road Equipment - 35 trucks to haul new press; no on-site off road equipment

Off-road Equipment - 2 rough terrain forklifts, 10 lifts (2 aerial, 8 scissor), 4 welders, 2 air compressors

Off-road Equipment - 1 dozer, 2 loaders

Off-road Equipment - 1 crane, 6 rough terrain forklifts, 2 welders, 4 aerial lifts

Off-road Equipment - 4 lifts, 6 rough terrain forklifts, 2 welders, 1 crane

Trips and VMT - excavation/dewatering - 6,876 trips; press facility construction - 470 vehicles, 12 concrete trucks; substation construction - 60 vehicles; utility connections - 75 vehicles; equipment installation - 140 vehicles

Demolition - demolition of old substation. footprint ~ 35' x 60'

Grading - pit estimated to be 190' by 150' and 85' deep, up to 120,000 SF disturbed per day during site prep, up to 30,000 SF disturbed during Substation site prep

Architectural Coating -

Road Dust -

Area Coating - no architectural coating

Landscape Equipment - no landscaping

Energy Use - Electricity to be calculated outside of CalEEMod

Construction Off-road Equipment Mitigation - dust mitigation, Tier 2 dozers in Phase 1 and 2

Operational Off-Road Equipment - No Offroad Equiipment

Off-road Equipment - 2 rough terrain forklifts

Off-road Equipment - 1 aerial lift

Off-road Equipment - one aerial lift, one rough terrain forklift

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	74308	0
tblAreaCoating	Area_Nonresidential_Interior	222923	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	Tier	No Change	Tier 2
tblConstructionPhase	NumDays	230.00	216.00
tblConstructionPhase	NumDays	230.00	196.00
tblConstructionPhase	NumDays	230.00	131.00

tblConstructionPhase	NumDays	230.00	87.00
tblConstructionPhase	NumDays	230.00	2.00
tblConstructionPhase	NumDays	20.00	21.00
tblConstructionPhase	NumDays	20.00	10.00
tblConstructionPhase	NumDays	10.00	43.00
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	10.00	22.00
tblConstructionPhase	NumDays	230.00	43.00
tblConstructionPhase	NumDays	230.00	22.00
tblConstructionPhase	NumDays	10.00	44.00
tblConstructionPhase	PhaseEndDate	12/30/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/29/2016	10/31/2016
tblConstructionPhase	PhaseEndDate	11/2/2016	6/2/2016
tblConstructionPhase	PhaseEndDate	7/13/2016	7/31/2016
tblConstructionPhase	PhaseEndDate	7/14/2016	6/14/2016
tblConstructionPhase	PhaseEndDate	9/30/2015	7/31/2015
tblConstructionPhase	PhaseEndDate	6/29/2016	9/30/2015
tblConstructionPhase	PhaseEndDate	8/30/2016	5/31/2016
tblConstructionPhase	PhaseEndDate	7/4/2016	6/30/2016
tblConstructionPhase	PhaseEndDate	8/1/2016	6/30/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	5/1/2016
tblConstructionPhase	PhaseStartDate	8/1/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	11/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/15/2016	7/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	7/1/2015	5/1/2015
tblConstructionPhase	PhaseStartDate	5/31/2016	9/1/2015
tblConstructionPhase	PhaseStartDate	7/1/2016	4/1/2016

tblConstructionPhase	PhaseStartDate	6/3/2016	6/1/2016
tblConstructionPhase	PhaseStartDate	6/1/2016	5/1/2016
tblGrading	AcresOfGrading	0.00	0.65
tblGrading	AcresOfGrading	0.00	2.75
tblGrading	AcresOfGrading	0.00	0.69
tblGrading	MaterialExported	0.00	55,000.00
tblLandUse	LandUseSquareFeet	0.00	30,000.00
tblLandUse	LotAcreage	0.00	0.69
tblOffRoadEquipment	HorsePower	62.00	46.00
tblOffRoadEquipment	LoadFactor	0.31	0.45
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Welders
tblOffRoadEquipment	OffRoadEquipmentType		Cranes
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts
tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType	Welders	Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Bore/Drill Rigs
tblOffRoadEquipment	OffRoadEquipmentType		Excavators
tblOffRoadEquipment	OffRoadEquipmentType		Rollers
tblOffRoadEquipment	OffRoadEquipmentType		Rough Terrain Forklifts

tblOffRoadEquipment	OffRoadEquipmentType		Aerial Lifts
tblOffRoadEquipment	OffRoadEquipmentType		Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Pumps
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	9.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	4.00
tblOffRoadEquipment	PhaseName		4A_Equipment Installation
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6C_Substation Demolition
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		3A_Adjusted
tblOffRoadEquipment	PhaseName		6A_Adjusted
tblOffRoadEquipment	PhaseName		6B_Substation Construction
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections

tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		5_Utility and Electrical Connections
tblOffRoadEquipment	PhaseName		4A_Adjusted
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		2_Excavation/Dewatering
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	PhaseName		3A_Press Facility Construction
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblProjectCharacteristics	OperationalYear	2014	2017
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00

tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripLength	20.00	30.00
tblTripsAndVMT	HaulingTripNumber	0.00	35.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripLength	6.90	30.00
tblTripsAndVMT	VendorTripNumber	44.00	12.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00

tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	8.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	VendorTripNumber	44.00	0.00
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripLength	14.70	13.70
tblTripsAndVMT	WorkerTripNumber	8.00	25.00
tblTripsAndVMT	WorkerTripNumber	33.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	8.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	60.00
tblTripsAndVMT	WorkerTripNumber	112.00	75.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00
tblTripsAndVMT	WorkerTripNumber	112.00	0.00
tblTripsAndVMT	WorkerTripNumber	3.00	25.00
tblTripsAndVMT	WorkerTripNumber	112.00	470.00
tblTripsAndVMT	WorkerTripNumber	112.00	140.00

tblTripsAndVMT	WorkerTripNumber	5.00	60.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	11.5127	105.9895	92.5305	0.1695	14.7211	4.8962	18.6044	6.4317	4.6252	10.0042	0.0000	17,331.5107	17,331.5107	2.6846	0.0000	17,387.8864
2016	16.8565	116.6355	151.9065	0.2819	12.6928	6.2274	18.9202	3.3618	5.9030	9.2648	0.0000	25,908.9242	25,908.9242	4.1118	0.0000	25,995.2720
Total	**28.3693**	**222.6250**	**244.4370**	**0.4514**	**27.4139**	**11.1236**	**37.5246**	**9.7935**	**10.5282**	**19.2690**	**0.0000**	**43,240.4349**	**43,240.4349**	**6.7964**	**0.0000**	**43,383.1585**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2015	11.5127	99.1375	92.5305	0.1695	9.6679	4.8962	13.6048	3.6893	4.6252	6.9381	0.0000	17,331.5107	17,331.5107	2.6846	0.0000	17,387.8864
2016	16.8565	116.6355	151.9065	0.2819	12.6928	6.2274	18.9202	3.3618	5.9030	9.2648	0.0000	25,908.9242	25,908.9242	4.1118	0.0000	25,995.2720
Total	**28.3693**	**215.7729**	**244.4370**	**0.4514**	**22.3607**	**11.1236**	**32.5250**	**7.0511**	**10.5282**	**16.2029**	**0.0000**	**43,240.4349**	**43,240.4349**	**6.7964**	**0.0000**	**43,383.1585**

	ROG	NOx	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	3.08	0.00	0.00	18.43	0.00	13.32	28.00	0.00	15.91	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Energy	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Mobile	0.6899	2.3430	8.5886	0.0228	1.6199	0.0333	1.6532	0.4328	0.0307	0.4635		1,947.3393	1,947.3393	0.0763		1,948.9409
Total	**6.0134**	**2.9243**	**9.1043**	**0.0263**	**1.6199**	**0.0776**	**1.6975**	**0.4328**	**0.0749**	**0.5078**		**2,644.6255**	**2,644.6255**	**0.0898**	**0.0128**	**2,650.4737**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Energy	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Mobile	0.6899	2.3430	8.5886	0.0228	1.6199	0.0333	1.6532	0.4328	0.0307	0.4635		1,947.3393	1,947.3393	0.0763		1,948.9409
Total	**6.0134**	**2.9243**	**9.1043**	**0.0263**	**1.6199**	**0.0776**	**1.6975**	**0.4328**	**0.0749**	**0.5078**		**2,644.6255**	**2,644.6255**	**0.0898**	**0.0128**	**2,650.4737**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1_Site Preparation	Site Preparation	5/1/2015	6/30/2015	5	43	
2	2_Excavation/Dewatering	Site Preparation	5/1/2015	7/31/2015	5	66	
3	3A_Press Facility Construction	Building Construction	8/1/2015	5/30/2016	5	216	
4	6A_Site Prep	Site Preparation	9/1/2015	9/30/2015	5	22	
5	6B_Substation Construction	Building Construction	10/1/2015	6/30/2016	5	196	
6	3A_Adjusted	Building Construction	4/1/2016	5/31/2016	5	43	
7	6A_Adjusted	Site Preparation	5/1/2016	6/30/2016	5	44	
8	5_Utility and Electrical Connections	Building Construction	5/1/2016	10/31/2016	5	131	
9	4B_Press Installaion	Building Construction	6/1/2016	6/2/2016	5	2	
10	4A_Adjusted	Building Construction	6/1/2016	6/30/2016	5	22	
11	3B_Paving	Paving	6/1/2016	6/14/2016	5	10	
12	6C_Substation Demolition	Demolition	7/1/2016	7/31/2016	5	21	
13	4A_Equipment Installation	Building Construction	7/1/2016	10/31/2016	5	87	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1_Site Preparation	Rubber Tired Dozers	1	6.00	255	0.40
1_Site Preparation	Tractors/Loaders/Backhoes	2	6.00	97	0.37
4A_Equipment Installation	Aerial Lifts	3	6.00	62	0.31
6C_Substation Demolition	Aerial Lifts	4	6.00	62	0.31
6A_Adjusted	Aerial Lifts	1	8.00	62	0.31
2_Excavation/Dewatering	Rubber Tired Dozers	1	6.00	255	0.40
2_Excavation/Dewatering	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6C_Substation Demolition	Rough Terrain Forklifts	6	6.00	100	0.40
6C_Substation Demolition	Welders	2	6.00	46	0.45
3A_Press Facility Construction	Cranes	3	6.00	226	0.29
6C_Substation Demolition	Cranes	1	6.00	226	0.29
3A_Press Facility Construction	Welders	2	6.00	46	0.45
6A_Site Prep	Rubber Tired Dozers	1	6.00	255	0.40
6A_Site Prep	Tractors/Loaders/Backhoes	2	6.00	97	0.37
6B_Substation Construction	Rough Terrain Forklifts	6	6.00	100	0.40
6B_Substation Construction	Cranes	1	6.00	226	0.29
3A_Adjusted	Rough Terrain Forklifts	2	8.00	100	0.40
6B_Substation Construction	Welders	2	6.00	46	0.45
6A_Adjusted	Rough Terrain Forklifts	1	8.00	100	0.40
5_Utility and Electrical Connections	Welders	4	6.00	46	0.45
4A_Equipment Installation	Cranes	9	6.00	226	0.29
4A_Equipment Installation	Forklifts	1	6.00	89	0.20
3B_Paving	Pavers	1	6.00	125	0.42
6B_Substation Construction	Aerial Lifts	4	6.00	62	0.31
5_Utility and Electrical Connections	Rough Terrain Forklifts	2	6.00	100	0.40
5_Utility and Electrical Connections	Aerial Lifts	10	6.00	62	0.31

5_Utility and Electrical Connections	Air Compressors	2	6.00	78	0.48
4A_Adjusted	Aerial Lifts	1	8.00	46	0.45
2_Excavation/Dewatering	Bore/Drill Rigs	1	6.00	205	0.50
2_Excavation/Dewatering	Excavators	4	6.00	162	0.38
2_Excavation/Dewatering	Rollers	2	6.00	80	0.38
3A_Press Facility Construction	Rough Terrain Forklifts	6	6.00	100	0.40
3A_Press Facility Construction	Aerial Lifts	9	6.00	62	0.31
3A_Press Facility Construction	Air Compressors	2	6.00	78	0.48
3A_Press Facility Construction	Pumps	2	6.00	84	0.74
4B_Press Installaion	Welders	0	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1_Site Preparation	3	25.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
2_Excavation/Dewatering	10	25.00	0.00	6,875.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Press Facility Construction	24	470.00	12.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Site Prep	3	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6B_Substation Construction	13	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
5_Utility and Electrical Connections	18	75.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Equipment Installation	13	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4B_Press Installaion	0	0.00	0.00	35.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3B_Paving	1	25.00	8.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6C_Substation Demolition	13	60.00	0.00	10.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
3A_Adjusted	2	470.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
4A_Adjusted	1	140.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT
6A_Adjusted	2	60.00	0.00	0.00	13.70	30.00	30.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

Clean Paved Roads

3.2 1_Site Preparation - 2015

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					4.5326	0.0000	4.5326	2.4844	0.0000	2.4844			0.0000			0.0000
Off-Road	1.4954	15.9385	11.8708	0.0113		0.9064	0.9064		0.8339	0.8339		1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**1.4954**	**15.9385**	**11.8708**	**0.0113**	**4.5326**	**0.9064**	**5.4390**	**2.4844**	**0.8339**	**3.3183**		**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.2 1_Site Preparation - 2015

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	0.1152	0.1487	1.5577	3.1000e-003	0.2605	2.3100e-003	0.2628	0.0691	2.1100e-003	0.0712		269.6659	269.6659	0.0155		269.9916
Total	**0.1152**	**0.1487**	**1.5577**	**3.1000e-003**	**0.2605**	**2.3100e-003**	**0.2628**	**0.0691**	**2.1100e-003**	**0.0712**		**269.6659**	**269.6659**	**0.0155**		**269.9916**

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					2.0397	0.0000	2.0397	1.1180	0.0000	1.1180			0.0000			0.0000
Off-Road	0.9721	12.5124	8.7527	0.0113		0.6525	0.6525		0.6066	0.6066	0.0000	1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**0.9721**	**12.5124**	**8.7527**	**0.0113**	**2.0397**	**0.6525**	**2.6922**	**1.1180**	**0.6066**	**1.7245**	**0.0000**	**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.2 1_Site Preparation - 2015

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	0.1152	0.1487	1.5577	3.1000e-003	0.2605	2.3100e-003	0.2628	0.0691	2.1100e-003	0.0712		269.6659	269.6659	0.0155		269.9916
Total	**0.1152**	**0.1487**	**1.5577**	**3.1000e-003**	**0.2605**	**2.3100e-003**	**0.2628**	**0.0691**	**2.1100e-003**	**0.0712**		**269.6659**	**269.6659**	**0.0155**		**269.9916**

3.3 2_Excavation/Dewatering - 2015

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					4.6550	0.0000	4.6550	2.5017	0.0000	2.5017			0.0000			0.0000
Off-Road	3.5838	40.0844	26.8493	0.0377		2.1376	2.1376		1.9666	1.9666		3,958.0706	3,958.0706	1.1817		3,982.8852
Total	**3.5838**	**40.0844**	**26.8493**	**0.0377**	**4.6550**	**2.1376**	**6.7926**	**2.5017**	**1.9666**	**4.4683**		**3,958.0706**	**3,958.0706**	**1.1817**		**3,982.8852**

3.3 2_Excavation/Dewatering - 2015

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	2.7913	49.6692	29.3359	0.1143	4.7862	0.8347	5.6209	1.2518	0.7679	2.0197		11,642.4283	11,642.4283	0.0908		11,644.3360
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	0.1152	0.1487	1.5577	3.1000e-003	0.4869	2.3100e-003	0.4892	0.1247	2.1100e-003	0.1268		269.6659	269.6659	0.0155		269.9916
Total	**2.9065**	**49.8179**	**30.8936**	**0.1174**	**5.2730**	**0.8371**	**6.1101**	**1.3765**	**0.7700**	**2.1464**		**11,912.0942**	**11,912.0942**	**0.1064**		**11,914.3276**

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					2.0948	0.0000	2.0948	1.1258	0.0000	1.1258			0.0000			0.0000
Off-Road	3.0605	36.6584	23.7312	0.0377		1.8837	1.8837		1.7393	1.7393	0.0000	3,958.0706	3,958.0706	1.1817		3,982.8852
Total	**3.0605**	**36.6584**	**23.7312**	**0.0377**	**2.0948**	**1.8837**	**3.9785**	**1.1258**	**1.7393**	**2.8651**	**0.0000**	**3,958.0706**	**3,958.0706**	**1.1817**		**3,982.8852**

3.3 2_Excavation/Dewatering - 2015

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	2.7913	49.6692	29.3359	0.1143	4.7862	0.8347	5.6209	1.2518	0.7679	2.0197		11,642.4283	11,642.4283	0.0908		11,644.3360
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	0.1152	0.1487	1.5577	3.1000e-003	0.4869	2.3100e-003	0.4892	0.1247	2.1100e-003	0.1268		269.6659	269.6659	0.0155		269.9916
Total	**2.9065**	**49.8179**	**30.8936**	**0.1174**	**5.2730**	**0.8371**	**6.1101**	**1.3765**	**0.7700**	**2.1464**		**11,912.0942**	**11,912.0942**	**0.1064**		**11,914.3276**

3.4 3A_Press Facility Construction - 2015

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	6.0473	56.4372	37.6441	0.0590		3.2936	3.2936		3.1321	3.1321		5,937.4409	5,937.4409	1.4906		5,968.7426
Total	**6.0473**	**56.4372**	**37.6441**	**0.0590**		**3.2936**	**3.2936**		**3.1321**	**3.1321**		**5,937.4409**	**5,937.4409**	**1.4906**		**5,968.7426**

3.4 3A_Press Facility Construction - 2015

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	0.2610	4.4336	2.5579	0.0106	0.3250	0.0857	0.4107	0.0924	0.0789	0.1713		1,076.3071	1,076.3071	7.6800e-003		1,076.4684
Worker	2.1661	2.7962	29.2850	0.0583	4.8964	0.0434	4.9398	1.2986	0.0397	1.3383		5,069.7197	5,069.7197	0.2915		5,075.8417
Total	**2.4271**	**7.2298**	**31.8429**	**0.0689**	**5.2214**	**0.1291**	**5.3505**	**1.3910**	**0.1186**	**1.5096**		**6,146.0267**	**6,146.0267**	**0.2992**		**6,152.3100**

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	6.0473	56.4372	37.6441	0.0590		3.2936	3.2936		3.1321	3.1321	0.0000	5,937.4409	5,937.4409	1.4906		5,968.7426
Total	**6.0473**	**56.4372**	**37.6441**	**0.0590**		**3.2936**	**3.2936**		**3.1321**	**3.1321**	**0.0000**	**5,937.4409**	**5,937.4409**	**1.4906**		**5,968.7426**

3.4 3A_Press Facility Construction - 2015

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	0.2610	4.4336	2.5579	0.0106	0.3250	0.0857	0.4107	0.0924	0.0789	0.1713		1,076.3071	1,076.3071	7.6800e-003		1,076.4684
Worker	2.1661	2.7962	29.2850	0.0583	4.8964	0.0434	4.9398	1.2986	0.0397	1.3383		5,069.7197	5,069.7197	0.2915		5,075.8417
Total	**2.4271**	**7.2298**	**31.8429**	**0.0689**	**5.2214**	**0.1291**	**5.3505**	**1.3910**	**0.1186**	**1.5096**		**6,146.0267**	**6,146.0267**	**0.2992**		**6,152.3100**

3.4 3A_Press Facility Construction - 2016

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	5.5397	52.4270	37.1648	0.0590		2.9444	2.9444		2.8001	2.8001		5,895.7320	5,895.7320	1.4652		5,926.5009
Total	**5.5397**	**52.4270**	**37.1648**	**0.0590**		**2.9444**	**2.9444**		**2.8001**	**2.8001**		**5,895.7320**	**5,895.7320**	**1.4652**		**5,926.5009**

3.4 3A_Press Facility Construction - 2016

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	0.2308	3.8729	2.3443	0.0106	0.3251	0.0714	0.3965	0.0925	0.0657	0.1581		1,064.4207	1,064.4207	6.8700e-003		1,064.5650
Worker	1.9541	2.5217	26.4325	0.0582	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		4,894.4868	4,894.4868	0.2682		4,900.1191
Total	**2.1849**	**6.3946**	**28.7768**	**0.0688**	**5.2215**	**0.1126**	**5.3341**	**1.3911**	**0.1035**	**1.4946**		**5,958.9075**	**5,958.9075**	**0.2751**		**5,964.6841**

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	5.5397	52.4270	37.1648	0.0590		2.9444	2.9444		2.8001	2.8001	0.0000	5,895.7320	5,895.7320	1.4652		5,926.5009
Total	**5.5397**	**52.4270**	**37.1648**	**0.0590**		**2.9444**	**2.9444**		**2.8001**	**2.8001**	**0.0000**	**5,895.7320**	**5,895.7320**	**1.4652**		**5,926.5009**

3.4 3A_Press Facility Construction - 2016

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	0.2308	3.8729	2.3443	0.0106	0.3251	0.0714	0.3965	0.0925	0.0657	0.1581		1,064.4207	1,064.4207	6.8700e-003		1,064.5650
Worker	1.9541	2.5217	26.4325	0.0582	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		4,894.4868	4,894.4868	0.2682		4,900.1191
Total	**2.1849**	**6.3946**	**28.7768**	**0.0688**	**5.2215**	**0.1126**	**5.3341**	**1.3911**	**0.1035**	**1.4946**		**5,958.9075**	**5,958.9075**	**0.2751**		**5,964.6841**

3.5 6A_Site Prep - 2015

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					4.5498	0.0000	4.5498	2.4863	0.0000	2.4863			0.0000			0.0000
Off-Road	1.4954	15.9385	11.8708	0.0113		0.9064	0.9064		0.8339	0.8339		1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**1.4954**	**15.9385**	**11.8708**	**0.0113**	**4.5498**	**0.9064**	**5.4562**	**2.4863**	**0.8339**	**3.3201**		**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.5 6A_Site Prep - 2015

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	0.2765	0.3570	3.7385	7.4400e-003	2.2552	5.5300e-003	2.2608	0.5659	5.0700e-003	0.5710		647.1983	647.1983	0.0372		647.9798
Total	**0.2765**	**0.3570**	**3.7385**	**7.4400e-003**	**2.2552**	**5.5300e-003**	**2.2608**	**0.5659**	**5.0700e-003**	**0.5710**		**647.1983**	**647.1983**	**0.0372**		**647.9798**

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					2.0474	0.0000	2.0474	1.1188	0.0000	1.1188			0.0000			0.0000
Off-Road	0.9721	12.5124	8.7527	0.0113		0.6525	0.6525		0.6066	0.6066	0.0000	1,191.6799	1,191.6799	0.3558		1,199.1510
Total	**0.9721**	**12.5124**	**8.7527**	**0.0113**	**2.0474**	**0.6525**	**2.6999**	**1.1188**	**0.6066**	**1.7254**	**0.0000**	**1,191.6799**	**1,191.6799**	**0.3558**		**1,199.1510**

3.5 6A_Site Prep - 2015

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	0.2765	0.3570	3.7385	7.4400e-003	2.2552	5.5300e-003	2.2608	0.5659	5.0700e-003	0.5710		647.1983	647.1983	0.0372		647.9798
Total	**0.2765**	**0.3570**	**3.7385**	**7.4400e-003**	**2.2552**	**5.5300e-003**	**2.2608**	**0.5659**	**5.0700e-003**	**0.5710**		**647.1983**	**647.1983**	**0.0372**		**647.9798**

3.6 6B_Substation Construction - 2015

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7618	26.1613	19.3051	0.0285		1.4680	1.4680		1.3694	1.3694		2,901.3045	2,901.3045	0.8576		2,919.3138
Total	**2.7618**	**26.1613**	**19.3051**	**0.0285**		**1.4680**	**1.4680**		**1.3694**	**1.3694**		**2,901.3045**	**2,901.3045**	**0.8576**		**2,919.3138**

3.6 6B_Substation Construction - 2015

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	0.2765	0.3570	3.7385	7.4400e-003	1.1685	5.5300e-003	1.1740	0.2992	5.0700e-003	0.3042		647.1983	647.1983	0.0372		647.9798
Total	**0.2765**	**0.3570**	**3.7385**	**7.4400e-003**	**1.1685**	**5.5300e-003**	**1.1740**	**0.2992**	**5.0700e-003**	**0.3042**		**647.1983**	**647.1983**	**0.0372**		**647.9798**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.7618	26.1613	19.3051	0.0285		1.4680	1.4680		1.3694	1.3694	0.0000	2,901.3045	2,901.3045	0.8576		2,919.3138
Total	**2.7618**	**26.1613**	**19.3051**	**0.0285**		**1.4680**	**1.4680**		**1.3694**	**1.3694**	**0.0000**	**2,901.3045**	**2,901.3045**	**0.8576**		**2,919.3138**

3.6 6B_Substation Construction - 2015

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	0.2765	0.3570	3.7385	7.4400e-003	1.1685	5.5300e-003	1.1740	0.2992	5.0700e-003	0.3042		647.1983	647.1983	0.0372		647.9798
Total	**0.2765**	**0.3570**	**3.7385**	**7.4400e-003**	**1.1685**	**5.5300e-003**	**1.1740**	**0.2992**	**5.0700e-003**	**0.3042**		**647.1983**	**647.1983**	**0.0372**		**647.9798**

3.6 6B_Substation Construction - 2016

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073		2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**		**1.2938**	**1.2938**		**1.2073**	**1.2073**		**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.6 6B_Substation Construction - 2016

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	0.2495	0.3219	3.3744	7.4300e-003	1.1685	5.2600e-003	1.1737	0.2992	4.8300e-003	0.3040		624.8281	624.8281	0.0342		625.5471
Total	**0.2495**	**0.3219**	**3.3744**	**7.4300e-003**	**1.1685**	**5.2600e-003**	**1.1737**	**0.2992**	**4.8300e-003**	**0.3040**		**624.8281**	**624.8281**	**0.0342**		**625.5471**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073	0.0000	2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**		**1.2938**	**1.2938**		**1.2073**	**1.2073**	**0.0000**	**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.6 6B_Substation Construction - 2016

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	0.2495	0.3219	3.3744	7.4300e-003	1.1685	5.2600e-003	1.1737	0.2992	4.8300e-003	0.3040		624.8281	624.8281	0.0342		625.5471
Total	**0.2495**	**0.3219**	**3.3744**	**7.4300e-003**	**1.1685**	**5.2600e-003**	**1.1737**	**0.2992**	**4.8300e-003**	**0.3040**		**624.8281**	**624.8281**	**0.0342**		**625.5471**

3.7 3A_Adjusted - 2016

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	0.4255	5.4181	4.7150	6.8900e-003		0.3007	0.3007		0.2767	0.2767		715.4489	715.4489	0.2158		719.9808
Total	**0.4255**	**5.4181**	**4.7150**	**6.8900e-003**		**0.3007**	**0.3007**		**0.2767**	**0.2767**		**715.4489**	**715.4489**	**0.2158**		**719.9808**

3.7 3A_Adjusted - 2016

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	1.9541	2.5217	26.4325	0.0582	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		4,894.4868	4,894.4868	0.2682		4,900.1191
Total	**1.9541**	**2.5217**	**26.4325**	**0.0582**	**4.8964**	**0.0412**	**4.9376**	**1.2986**	**0.0379**	**1.3365**		**4,894.4868**	**4,894.4868**	**0.2682**		**4,900.1191**

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	0.4255	5.4181	4.7150	6.8900e-003		0.3007	0.3007		0.2767	0.2767	0.0000	715.4489	715.4489	0.2158		719.9808
Total	**0.4255**	**5.4181**	**4.7150**	**6.8900e-003**		**0.3007**	**0.3007**		**0.2767**	**0.2767**	**0.0000**	**715.4489**	**715.4489**	**0.2158**		**719.9808**

3.7 3A_Adjusted - 2016

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	1.9541	2.5217	26.4325	0.0582	4.8964	0.0412	4.9376	1.2986	0.0379	1.3365		4,894.4868	4,894.4868	0.2682		4,900.1191
Total	**1.9541**	**2.5217**	**26.4325**	**0.0582**	**4.8964**	**0.0412**	**4.9376**	**1.2986**	**0.0379**	**1.3365**		**4,894.4868**	**4,894.4868**	**0.2682**		**4,900.1191**

3.8 6A_Adjusted - 2016

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	0.2689	3.6319	3.4426	5.1000e-003		0.1883	0.1883		0.1732	0.1732		529.3214	529.3214	0.1597		532.6743
Total	**0.2689**	**3.6319**	**3.4426**	**5.1000e-003**		**0.1883**	**0.1883**		**0.1732**	**0.1732**		**529.3214**	**529.3214**	**0.1597**		**532.6743**

3.8 6A_Adjusted - 2016

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	0.2495	0.3219	3.3744	7.4300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		624.8281	624.8281	0.0342		625.5471
Total	**0.2495**	**0.3219**	**3.3744**	**7.4300e-003**	**0.6251**	**5.2600e-003**	**0.6303**	**0.1658**	**4.8300e-003**	**0.1706**		**624.8281**	**624.8281**	**0.0342**		**625.5471**

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	0.2689	3.6319	3.4426	5.1000e-003		0.1883	0.1883		0.1732	0.1732	0.0000	529.3214	529.3214	0.1597		532.6743
Total	**0.2689**	**3.6319**	**3.4426**	**5.1000e-003**		**0.1883**	**0.1883**		**0.1732**	**0.1732**	**0.0000**	**529.3214**	**529.3214**	**0.1597**		**532.6743**

3.8 6A_Adjusted - 2016

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	0.2495	0.3219	3.3744	7.4300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		624.8281	624.8281	0.0342		625.5471
Total	**0.2495**	**0.3219**	**3.3744**	**7.4300e-003**	**0.6251**	**5.2600e-003**	**0.6303**	**0.1658**	**4.8300e-003**	**0.1706**		**624.8281**	**624.8281**	**0.0342**		**625.5471**

3.9 5_Utility and Electrical Connections - 2016

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	3.1636	21.1351	21.3512	0.0312		1.3293	1.3293		1.2885	1.2885		3,008.8929	3,008.8929	0.7676		3,025.0116
Total	**3.1636**	**21.1351**	**21.3512**	**0.0312**		**1.3293**	**1.3293**		**1.2885**	**1.2885**		**3,008.8929**	**3,008.8929**	**0.7676**		**3,025.0116**

3.9 5_Utility and Electrical Connections - 2016

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	0.3118	0.4024	4.2180	9.2900e-003	0.7813	6.5700e-003	0.7879	0.2072	6.0400e-003	0.2133		781.0351	781.0351	0.0428		781.9339
Total	**0.3118**	**0.4024**	**4.2180**	**9.2900e-003**	**0.7813**	**6.5700e-003**	**0.7879**	**0.2072**	**6.0400e-003**	**0.2133**		**781.0351**	**781.0351**	**0.0428**		**781.9339**

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	3.1636	21.1351	21.3512	0.0312		1.3293	1.3293		1.2885	1.2885	0.0000	3,008.8929	3,008.8929	0.7676		3,025.0116
Total	**3.1636**	**21.1351**	**21.3512**	**0.0312**		**1.3293**	**1.3293**		**1.2885**	**1.2885**	**0.0000**	**3,008.8929**	**3,008.8929**	**0.7676**		**3,025.0116**

3.9 5_Utility and Electrical Connections - 2016

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	0.3118	0.4024	4.2180	9.2900e-003	0.7813	6.5700e-003	0.7879	0.2072	6.0400e-003	0.2133		781.0351	781.0351	0.0428		781.9339
Total	**0.3118**	**0.4024**	**4.2180**	**9.2900e-003**	**0.7813**	**6.5700e-003**	**0.7879**	**0.2072**	**6.0400e-003**	**0.2133**		**781.0351**	**781.0351**	**0.0428**		**781.9339**

3.10 4B_Press Installaion - 2016

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.10 4B_Press Installaion - 2016

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	0.4143	7.3534	4.5916	0.0192	0.4571	0.1121	0.5692	0.1252	0.1031	0.2283		1,934.1409	1,934.1409	0.0137		1,934.4282
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	**0.4143**	**7.3534**	**4.5916**	**0.0192**	**0.4571**	**0.1121**	**0.5692**	**0.1252**	**0.1031**	**0.2283**		**1,934.1409**	**1,934.1409**	**0.0137**		**1,934.4282**

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.10 4B_Press Installaion - 2016

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	0.4143	7.3534	4.5916	0.0192	0.4571	0.1121	0.5692	0.1252	0.1031	0.2283		1,934.1409	1,934.1409	0.0137		1,934.4282
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	**0.4143**	**7.3534**	**4.5916**	**0.0192**	**0.4571**	**0.1121**	**0.5692**	**0.1252**	**0.1031**	**0.2283**		**1,934.1409**	**1,934.1409**	**0.0137**		**1,934.4282**

3.11 4A_Adjusted - 2016

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	0.0832	1.3420	1.1673	1.9800e-003		0.0382	0.0382		0.0351	0.0351		205.5418	205.5418	0.0620		206.8438
Total	**0.0832**	**1.3420**	**1.1673**	**1.9800e-003**		**0.0382**	**0.0382**		**0.0351**	**0.0351**		**205.5418**	**205.5418**	**0.0620**		**206.8438**

3.11 4A_Adjusted - 2016

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	0.5821	0.7511	7.8735	0.0174	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,457.9323	1,457.9323	0.0799		1,459.6100
Total	**0.5821**	**0.7511**	**7.8735**	**0.0174**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,457.9323**	**1,457.9323**	**0.0799**		**1,459.6100**

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	0.0832	1.3420	1.1673	1.9800e-003		0.0382	0.0382		0.0351	0.0351	0.0000	205.5418	205.5418	0.0620		206.8438
Total	**0.0832**	**1.3420**	**1.1673**	**1.9800e-003**		**0.0382**	**0.0382**		**0.0351**	**0.0351**	**0.0000**	**205.5418**	**205.5418**	**0.0620**		**206.8438**

3.11 4A_Adjusted - 2016

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	0.5821	0.7511	7.8735	0.0174	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,457.9323	1,457.9323	0.0799		1,459.6100
Total	**0.5821**	**0.7511**	**7.8735**	**0.0174**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,457.9323**	**1,457.9323**	**0.0799**		**1,459.6100**

3.12 3B_Paving - 2016

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	0.3009	3.3848	2.1391	3.3900e-003		0.1682	0.1682		0.1547	0.1547		351.7699	351.7699	0.1061		353.9981
Paving	0.7257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0266**	**3.3848**	**2.1391**	**3.3900e-003**		**0.1682**	**0.1682**		**0.1547**	**0.1547**		**351.7699**	**351.7699**	**0.1061**		**353.9981**

3.12 3B_Paving - 2016

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	0.1538	2.5820	1.5629	7.0500e-003	0.2167	0.0476	0.2643	0.0617	0.0438	0.1054		709.6138	709.6138	4.5800e-003		709.7100
Worker	0.1039	0.1341	1.4060	3.1000e-003	0.2605	2.1900e-003	0.2626	0.0691	2.0100e-003	0.0711		260.3450	260.3450	0.0143		260.6446
Total	**0.2578**	**2.7161**	**2.9688**	**0.0102**	**0.4772**	**0.0498**	**0.5270**	**0.1307**	**0.0458**	**0.1765**		**969.9588**	**969.9588**	**0.0189**		**970.3546**

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	0.3009	3.3848	2.1391	3.3900e-003		0.1682	0.1682		0.1547	0.1547	0.0000	351.7699	351.7699	0.1061		353.9981
Paving	0.7257					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0266**	**3.3848**	**2.1391**	**3.3900e-003**		**0.1682**	**0.1682**		**0.1547**	**0.1547**	**0.0000**	**351.7699**	**351.7699**	**0.1061**		**353.9981**

3.12 3B_Paving - 2016

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	0.1538	2.5820	1.5629	7.0500e-003	0.2167	0.0476	0.2643	0.0617	0.0438	0.1054		709.6138	709.6138	4.5800e-003		709.7100
Worker	0.1039	0.1341	1.4060	3.1000e-003	0.2605	2.1900e-003	0.2626	0.0691	2.0100e-003	0.0711		260.3450	260.3450	0.0143		260.6446
Total	**0.2578**	**2.7161**	**2.9688**	**0.0102**	**0.4772**	**0.0498**	**0.5270**	**0.1307**	**0.0458**	**0.1765**		**969.9588**	**969.9588**	**0.0189**		**970.3546**

3.13 6C_Substation Demolition - 2016

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					0.0984	0.0000	0.0984	0.0149	0.0000	0.0149			0.0000			0.0000
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073		2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**	**0.0984**	**1.2938**	**1.3922**	**0.0149**	**1.2073**	**1.2222**		**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.13 6C_Substation Demolition - 2016

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	0.0113	0.2001	0.1249	5.2000e-004	0.0124	3.0500e-003	0.0155	3.4100e-003	2.8100e-003	6.2100e-003		52.6297	52.6297	3.7000e-004		52.6375
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	0.2495	0.3219	3.3744	7.4300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		624.8281	624.8281	0.0342		625.5471
Total	**0.2607**	**0.5220**	**3.4993**	**7.9500e-003**	**0.6375**	**8.3100e-003**	**0.6458**	**0.1692**	**7.6400e-003**	**0.1768**		**677.4578**	**677.4578**	**0.0346**		**678.1846**

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					0.0443	0.0000	0.0443	6.7100e-003	0.0000	6.7100e-003			0.0000			0.0000
Off-Road	2.5092	24.0609	19.0571	0.0285		1.2938	1.2938		1.2073	1.2073	0.0000	2,875.4434	2,875.4434	0.8490		2,893.2732
Total	**2.5092**	**24.0609**	**19.0571**	**0.0285**	**0.0443**	**1.2938**	**1.3381**	**6.7100e-003**	**1.2073**	**1.2140**	**0.0000**	**2,875.4434**	**2,875.4434**	**0.8490**		**2,893.2732**

3.13 6C_Substation Demolition - 2016

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	0.0113	0.2001	0.1249	5.2000e-004	0.0124	3.0500e-003	0.0155	3.4100e-003	2.8100e-003	6.2100e-003		52.6297	52.6297	3.7000e-004		52.6375
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	0.2495	0.3219	3.3744	7.4300e-003	0.6251	5.2600e-003	0.6303	0.1658	4.8300e-003	0.1706		624.8281	624.8281	0.0342		625.5471
Total	**0.2607**	**0.5220**	**3.4993**	**7.9500e-003**	**0.6375**	**8.3100e-003**	**0.6458**	**0.1692**	**7.6400e-003**	**0.1768**		**677.4578**	**677.4578**	**0.0346**		**678.1846**

3.14 4A_Equipment Installation - 2016

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	5.1566	61.1291	23.5364	0.0429		2.8210	2.8210		2.5953	2.5953		4,462.2191	4,462.2191	1.3460		4,490.4843
Total	**5.1566**	**61.1291**	**23.5364**	**0.0429**		**2.8210**	**2.8210**		**2.5953**	**2.5953**		**4,462.2191**	**4,462.2191**	**1.3460**		**4,490.4843**

3.14 4A_Equipment Installation - 2016

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	0.5821	0.7511	7.8735	0.0174	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,457.9323	1,457.9323	0.0799		1,459.6100
Total	**0.5821**	**0.7511**	**7.8735**	**0.0174**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,457.9323**	**1,457.9323**	**0.0799**		**1,459.6100**

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	5.1566	61.1291	23.5364	0.0429		2.8210	2.8210		2.5953	2.5953	0.0000	4,462.2191	4,462.2191	1.3460		4,490.4843
Total	**5.1566**	**61.1291**	**23.5364**	**0.0429**		**2.8210**	**2.8210**		**2.5953**	**2.5953**	**0.0000**	**4,462.2191**	**4,462.2191**	**1.3460**		**4,490.4843**

3.14 4A_Equipment Installation - 2016

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	0.5821	0.7511	7.8735	0.0174	1.4585	0.0123	1.4708	0.3868	0.0113	0.3981		1,457.9323	1,457.9323	0.0799		1,459.6100
Total	**0.5821**	**0.7511**	**7.8735**	**0.0174**	**1.4585**	**0.0123**	**1.4708**	**0.3868**	**0.0113**	**0.3981**		**1,457.9323**	**1,457.9323**	**0.0799**		**1,459.6100**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.6899	2.3430	8.5886	0.0228	1.6199	0.0333	1.6532	0.4328	0.0307	0.4635		1,947.3393	1,947.3393	0.0763		1,948.9409
Unmitigated	0.6899	2.3430	8.5886	0.0228	1.6199	0.0333	1.6532	0.4328	0.0307	0.4635		1,947.3393	1,947.3393	0.0763		1,948.9409

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Heavy Industry	172.50	172.50	172.50	763,878	763,878
Parking Lot	0.00	0.00	0.00		
User Defined Industrial	0.00	0.00	0.00		
Total	172.50	172.50	172.50	763,878	763,878

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Heavy Industry	16.60	8.40	6.90	59.00	28.00	13.00	92	5	3
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
User Defined Industrial	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
0.513125	0.060112	0.180262	0.139218	0.042100	0.006630	0.016061	0.030999	0.001941	0.002506	0.004348	0.000594	0.002104

5.0 Energy Detail

4.4 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
NaturalGas Unmitigated	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	5926.44	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0639**	**0.5810**	**0.4881**	**3.4900e-003**		**0.0442**	**0.0442**		**0.0442**	**0.0442**		**697.2280**	**697.2280**	**0.0134**	**0.0128**	**701.4713**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
General Heavy Industry	5.92644	0.0639	0.5810	0.4881	3.4900e-003		0.0442	0.0442		0.0442	0.0442		697.2280	697.2280	0.0134	0.0128	701.4713
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0639**	**0.5810**	**0.4881**	**3.4900e-003**		**0.0442**	**0.0442**		**0.0442**	**0.0442**		**697.2280**	**697.2280**	**0.0134**	**0.0128**	**701.4713**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Unmitigated	5.2596	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6700e-003	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Total	**5.2596**	**2.6000e-004**	**0.0276**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0581**	**0.0581**	**1.6000e-004**		**0.0615**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.2569					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.6700e-003	2.6000e-004	0.0276	0.0000		1.0000e-004	1.0000e-004		1.0000e-004	1.0000e-004		0.0581	0.0581	1.6000e-004		0.0615
Total	**5.2596**	**2.6000e-004**	**0.0276**	**0.0000**		**1.0000e-004**	**1.0000e-004**		**1.0000e-004**	**1.0000e-004**		**0.0581**	**0.0581**	**1.6000e-004**		**0.0615**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation