

September 28, 2018

Mr. Rafik Albert
EPD Solutions, Inc.
2030 Main St., Suite 1200
Irvine, CA 92614

**SUBJECT: CALIFORNIA CORRECTIONAL INSTITUTION – TEHACHAPI SOLAR PROJECT
FOCUSED AIR QUALITY AND GREENHOUSE GAS MEMORANDUM**

Dear Mr. Rafik Albert:

Urban Crossroads, Inc. is pleased to submit this Focused Air Quality and Greenhouse Gas Memorandum (Memo) to EPD Solutions, Inc. (“Client”) for the California Correctional Institution – Tehachapi Solar Project (“Project”), which is located in an incorporated island of the City of Tehachapi at the western terminus of State Route (SR) 202 in Kern County.

SUMMARY OF FINDINGS

Results of the Memo indicate the construction and operations of the proposed Project would result in less than significant impacts associated with air quality and greenhouse gas emissions.

PROJECT DESCRIPTION

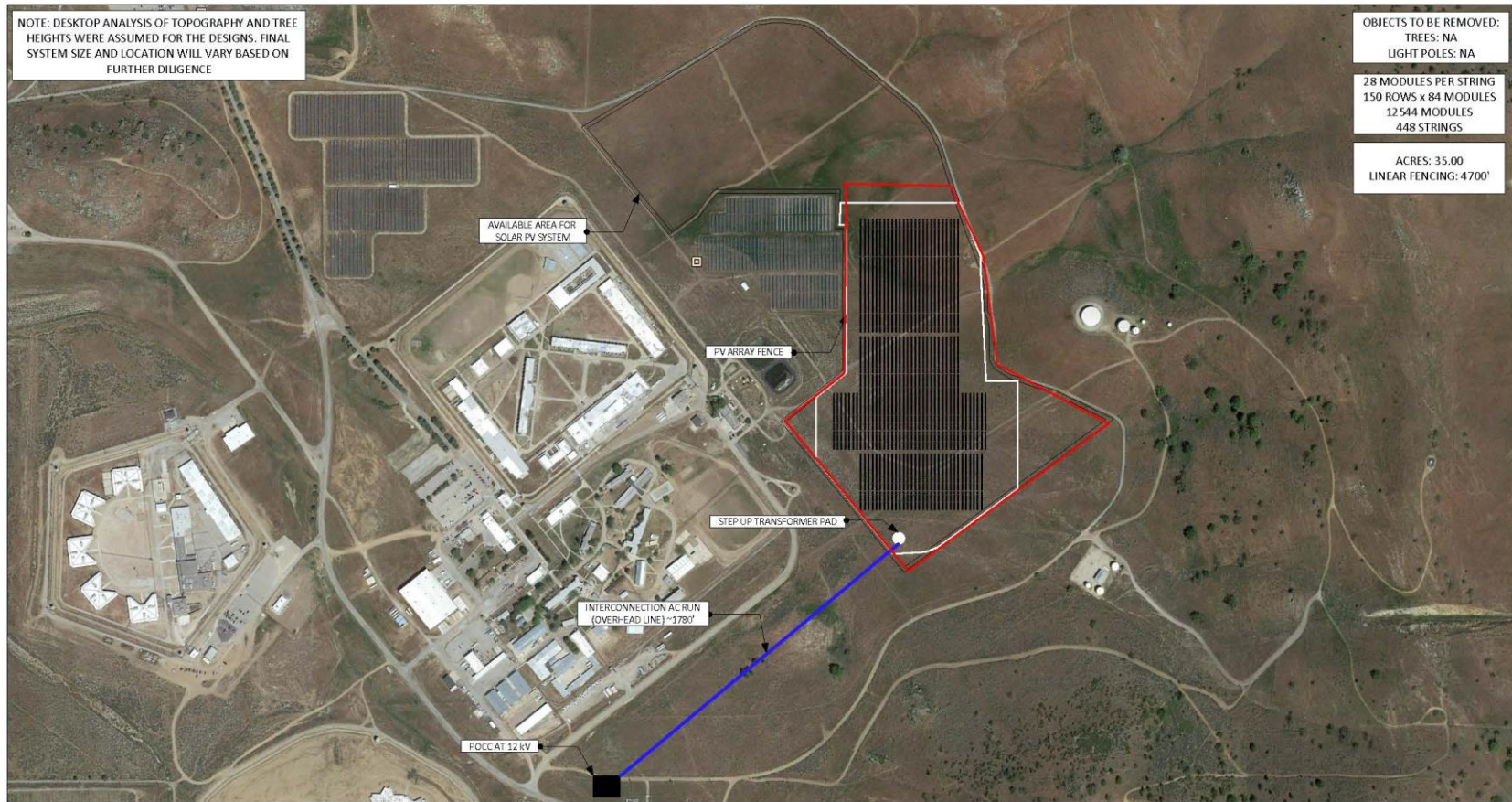
The proposed, a 3,625-kilowatt (kW) solar photovoltaic power that would occupy a 35-acre site, as shown on Exhibit A. For the purposes of this analysis, it has been assumed that the Project will be developed in one phase with an anticipated Opening Year of 2019. It should also be noted that the exact opening year is unknown. Notwithstanding, based on the required time for entitlements, the size of the Project, and the anticipated construction phases, the opening year is estimated to be 2019.


PROJECT-RELATED AIR QUALITY AND GREENHOUSE GASES

Land uses such as the Project affect air quality through construction-source and operational-source emissions.

On October 17, 2017, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.2. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}) and

EXHIBIT A: SITE PLAN



	PROJECT DETAIL		SYSTEM DESCRIPTION			SHEET INFORMATION	
	PROJECT#: CA-14-0583	LAT/LONG: 38.3168; -121.9742	MODULE TYPE: TRINA TSM-355-DD14A(IJ)	TILT ANGLE: 0°	AZIMUTH: 180°	DATE: 08/02/17	SHEET NO: CL-1
SITE NAME: DGS PRISONS - CA CORRECTIONAL INSTITUTE ADDRESS: 24900 Highway 202, Tehachapi, CA 93561		MODULE QUANTITY: 12,544	RACKING STRUCTURE: NEXTRACKER		DESIGNER: RP		
		SYSTEM SIZE (DC): 4453.12 kW	INVERTER: 29 x SUNGROW SG125HV (600V)		STRINGS: 448x28	SCALE: NTS	
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greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (1). Accordingly, the latest version of CalEEMod™ has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Attachment “A”.

STANDARDS OF SIGNIFICANCE

The Project site is located in City of Tehachapi, in the portion of the County of Kern, California, that is under the jurisdiction of the Eastern Kern Air Pollution Control District (EKAPCD). The EKAPCD has adopted regional thresholds for criteria pollutants, as summarized at Table 1 (2).

TABLE 1: MAXIMUM DAILY EMISSIONS THRESHOLDS

Pollutant	Construction	Operations
Regional Thresholds (tons per year)¹		
NO _x	25	25
VOC	25	25
PM ₁₀	15	15
PM _{2.5}	--	--
SO _x	27	27
CO	--	--

AIR QUALITY

CONSTRUCTION EMISSIONS

Construction activities associated with the Project will result in emissions of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. Construction related emissions are expected from the following construction activities: mobilization, site preparation and grading, on-site construction and panel installation, and construction workers and vendors commuting.

The duration of construction activity was based on CalEEMod defaults and a 2019 opening year, as shown on Table 2. The construction schedule utilized in the analysis represents a “worst-case” analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.² The associated construction equipment for all phases based on CalEEMod defaults, as shown

¹ The EKAPCD has no established thresholds for PM_{2.5} and CO.

² As shown in the California Emissions Estimator Model (CalEEMod) User’s Guide Version 2013.2, Table 3.4 “OFFROAD Equipment Emission Factors” as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

on Table 3. Site specific construction fleet may vary due to specific project needs at the time of construction.

Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site) were estimated based on information provided in the *California Correctional Institution – Tehachapi Solar Project Construction Trip Generation* (EPD, Solutions 2018) (3) . As a conservative measure, a vendor and worker trip length of 40 miles has been assumed.

TABLE 2: CONSTRUCTION SCHEDULE

Phase Name	Start Date	End Date	Days
Mobilization	01/01/2019	01/14/2019	10
Site Preparation & Grading	01/15/2019	02/11/2019	20
On-Site Construction	02/12/2019	04/15/2019	45

TABLE 3: CONSTRUCTION EQUIPMENT

Activity	Equipment	Number	Hours Per Day
Mobilization	Rubber Tired Dozers	3	8
	Tractors/Loaders/Backhoes	4	8
Site Preparation & Grading	Graders	1	8
	Rubber Tired Dozers	1	8
	Tractors/Loaders/Backhoes	2	8
On-Site Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8

Eastern Kern Air Pollution Control District (EKAPCD) Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 401 (Visible Emissions) (4); Rule 405 (Particulate Matter – Emission Rate) (5); Rule 419 (Nuisance) (5). It should be noted that these Best Available Control Measures (BACMs) are not mitigation as they are standard regulatory requirements.

The estimated maximum annual construction emissions for the proposed Project are summarized on Table 4. Detailed construction model outputs are presented in Attachment “A”. As shown, the proposed Project would not exceed the applicable EKAPCD thresholds. As such, no impacts would occur and no mitigation is required.

TABLE 4: PROPOSED PROJECT CONSTRUCTION EMISSIONS SUMMARY

Year	Emissions (tons per year)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2019	0.15	1.39	1.03	3.10E-03	0.35	0.17
Maximum Annual Emissions	0.15	1.39	1.03	3.10E-03	0.35	0.17
EKAPCD Regional Threshold	25	25	--	27	15	--
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

OPERATIONAL EMISSIONS

Operational activities associated with the Project will result in emissions of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5}. Operational related emissions are expected from the following primary sources: area source emissions, energy source emissions, and mobile source emissions.

Project mobile source emissions impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project related operational air quality impacts derive primarily from vehicle trips generated by the Project. As per information provided in the trip generation, the Project site will not be permanently staffed during operation (3). The site will be accessed by maintenance personnel a few times per month to perform ongoing repair and maintenance. As a conservative measure and for analytical purposes, it is assumed that 5 trips per week will be made to the site with a worker trip length of 40 miles.

The estimated operational-source emissions for the proposed Project are summarized on Table 5. Detailed operational model outputs are presented in Attachment "A". As shown, the proposed Project would result in emissions of VOC, NO_x, CO, SO_x, PM₁₀, and PM_{2.5} that would not exceed the applicable EKAPCD thresholds. As such, no impacts would occur and no mitigation is required.

TABLE 5: OPERATIONAL EMISSIONS SUMMARY

Operational Activities	Emissions (tons per year)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Proposed Project	1.42E-03	0.02	0.02	9.00E-05	5.70E-03	1.60E-03
EKAPCD Regional Threshold	25	25	--	27	15	--
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

-- = Negligible amount of emissions (CalEEMod does not report any emissions for these pollutants)

POTENTIAL IMPACTS TO SENSITIVE RECEPTORS

The potential impact of Project-generated air pollutant emissions at sensitive receptors has also been considered. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, child care centers, and athletic facilities can also be considered as sensitive receptors.

Sensitive receptors near the Project site include the California Correctional Institution which is located approximately 855.67 feet west of the Project site boundary. The proposed Project would not exceed any applicable criteria pollutant thresholds during construction and on-going operational activities, therefore, sensitive receptors would not be subjected to a significant air quality impact during Project construction.

ODORS

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. Project operational activities would be primarily associated with intermittent maintenance activities which would not generate any substantive odors. The proposed Project would also be required to comply with Rule 419 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required.

GREENHOUSE GAS

In April 2017, the Environmental Protection Agency (EPA) released *Inventory of U.S. Greenhouse Gas Emissions and Sinks* which detailed the anthropogenic GHG emissions for the years 1990 to 2015. According to the report, emissions from electricity sector accounts for the largest portion of GHG emissions in the United States (14). Coal fired power plants have the highest GHG emission intensities on a lifecycle basis. Electricity generated from coal fired power plants currently accounts for approximately 70 percent of Carbon Dioxide (CO₂) emissions from the sector and only represents about

34 percent of the electricity generated in the country. The use of natural gas accounts for 32 percent of the electricity generated in the U.S. and is reported to display noticeably lower GHG emissions than processes that use coal combustion. Petroleum accounts for less than 1 percent of electricity generation and the remainder is produced through use of renewables such as biomass, nuclear, hydroelectric, wind, and solar photovoltaic sources (15). Renewable sources have lifecycle GHG emission intensities that are significantly lower than fossil fuel-based generation (16). Solar projects produce electricity with no GHG emissions at the point of generation and very low amounts of GHG emissions across their entire lifecycle (17). As such, since the Project is purposing the development of solar systems, the net GHG emissions will offset GHG emissions produced by coal fired power plants.

CONSTRUCTION AND OPERATIONAL EMISSIONS

Construction activities associated with the proposed Project will result in emissions of CO₂ and CH₄ from construction activities. For the construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the EKAPCD recommends calculating the total greenhouse gas emissions for the construction activities, dividing it by a 30-year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30-year period and added to the annual operational phase GHG emissions.

GREENHOUSE GAS EMISSIONS SUMMARY

On March 8, 2012, the EKAPCD adopted the *Addendum to CEQA Guidelines Addressing GHG Emission Impacts For Stationary Source Projects When Serving As Lead CEQA Agency*, which outlines project-specific GHG emission thresholds. CEQA encourages lead agencies to develop and publish thresholds of significance for use in determining the significance of environmental impacts. Projects are considered to have a less than significant impact on GHG emissions if one of the following conditions are met (18):

1. Projects subject to a CEQA statutory exemption or subject to a CEQA categorical exemption that does not otherwise have significant individual and cumulative effects on GHG emissions would not require further CEQA review.
2. Projects that are not exempt from CEQA would require quantification of Project-Specific GHG Emissions to determine annual GHG emissions.
3. Projects that emits less than 25,000 tons per year (tpy) of GHGs would be determined to have a less than significant individual or cumulatively considerable impact on GHG emissions and would not require further CEQA review³.
4. Project GHG emissions equal or greater than the 25,000 tpy threshold will be assessed for CEQA significance as follows:

³ The EKAPCD considers the 25,000 tpy threshold appropriate because it encompasses facilities whose GHG emissions may be subject to regulation. Additionally, the threshold is less than the industrial source ARB threshold.

- a. Projects subject to state or federal GHG emission reduction plans or programs that can demonstrate to EKAPCD compliance with such plans or programs, are determined less than significant.
 - b. Projects that implement one or more of the following strategies that achieve at least a combined 20% reduction in GHG emissions compared to BAU, will be determined less than significant.
5. Projects that are not exempt from CEQA, not subject to adopted state or federal GHG reduction plans, or cannot demonstrate a 20% reduction below BAU will require preparation of an EIR.

The annual GHG emissions associated with the construction and operation of the proposed Project are estimated to be 19.58 tpy⁴ as summarized in Table 6. Detailed construction and operational model outputs are presented in Attachment "A". The proposed Project would not exceed the 25,000 tpy threshold. As such, the proposed Project would result in a less than significant impact with respect to GHG emissions. As previously stated, the majority of GHG emissions associated with the proposed Project is generated from short-term construction activities. Operational emissions are produced from maintenance activities which occur occasionally. Long-term operational emissions are therefore considered less than significant.

Table 6 presents an annual comparison of GHG operational emissions for the proposed Project versus emissions associated with electrical use within the EKAPCD. The project is Proposed to produce 3,625 kW (3.63 MW) of electricity, which would amount to approximately 9,923.44 megawatt hours (MWh) per year⁵. CalEEMod has assessed a CO₂ intensity factor of 702.44 pounds per MWh for projects serviced by Southern California Edison. GHG emissions from a facility that utilizes 3,625 kW (3.63 MW) of electricity is estimated to produce an estimated 3,500 tpy⁶. In comparison, the net GHG displacement or off-set would therefore be the difference between the annual operational GHG emissions associated with the California Correctional Institution - Tehachapi solar project and emissions associated with 3,625 kW (3.63 MW) of electrical use at a given facility. The project would result in a net GHG displacement of 3,480.81 tpy and would therefore result in a substantial net reduction in GHG emissions in the region.

⁴ It should be noted that CalEEMod annual project greenhouse gas emissions are in metric tons per year. As such, the greenhouse gas emissions have been converted to tons per year since the EKAPCD thresholds units are in tons per year.

⁵ MWh is calculated by multiplying MW produced by Project by assumed hours of daylight (7.5 hours) and number of days in a year (365).

⁶ GHG emissions for electrical use is calculated by converting intensity factor from pounds per MWh to metric tons per MWh then multiplying the result by the MWh produced by given project. The EKAPCD presents GHG emissions in tpy. As such, GHG emissions have been converted to tpy.

TABLE 6: OPERATIONAL GREENHOUSE GAS EMISSIONS SUMMARY (ANNUAL)

Emission Source	Emissions (tons per year)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Annual Construction-related Emissions amortized over 30 years	10.40	--	--	10.43
Project Operational Emissions	9.13	--	--	9.15
Total CO₂E (All Sources)	19.58			
EKAPCD Regional Threshold	25,000			
Threshold Exceeded?	NO			
CO₂E Emissions Associated with Electricity Use	3,500.39			
Net Change	-3,480.81			
New Significant Impacts?	NO			

-- = Negligible amount of emissions (CalEEMod does not report any emissions for these pollutants)

CONSISTENCY WITH CARB SCOPING PLAN

The Project will provide renewable energy and would consequently will assist the state in its goals for renewable energy as set forth by AB 32. As such, the Project would not conflict with the goals for AB 32 in reducing GHG emissions and would result in a less than significant impact on global climate.

If you have any questions, please contact me directly at (949) 336-5987.

Respectfully submitted,

URBAN CROSSROADS, INC.



Haseeb Qureshi,
 Senior Associate

REFERENCES

1. **South Coast Air Quality Management District.** California Emissions Estimator Model. [Online] 2016. [Cited: October 31, 2017.] <http://www.caleemod.com/>.
2. **Eastern Kern Air Pollution Control District.** Guidelines for Implementation of the California Environmental Quality Act (CEQA) of 1970 as Amended. [Online] 1996. http://www.kernair.org/Documents/CEQA/CEQA_Guidelines%20&%20Charts.pdf.
3. **EPD Solutions, Inc.** *California Correctional Institution - Tehachapi Solar Project Construction Trip Generation* . 2018.
4. **Eastern Kern Air Pollution Control District.** Rule 401 Visible Emissions. [Online] 1993. <http://www.kernair.org/Rule%20Book/4%20Prohibitions/401%20Visible%20Emissions.pdf>.
5. —. Rule 405 Particulate Matter - Emission Rate. [Online] 1983. <http://www.kernair.org/Rule%20Book/4%20Prohibitions/405%20Particulate%20Emission%20Rate.pdf>.
6. —. Rule 419 Nuisance. [Online] 1972. <http://www.kernair.org/Rule%20Book/4%20Prohibitions/419%20Nuisance.pdf>.
7. **Agency, U.S. Environmental Protection.** Inventory of U.S. Greenhouse Gas Emissions and Sinks. [Online] April 2017. https://www.epa.gov/sites/production/files/2017-02/documents/2017_complete_report.pdf.
8. **Agency, U.S. Environmental Protection.** Sources of Greenhouse Gas Emissions. [Online] <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions#electricity>.
9. **Association, World Nuclear.** Comparison of Lifecycle Greenhouse Gas Emissions of Various Electricity Generation Sources. [Online] July 2011. http://www.world-nuclear.org/uploadedFiles/org/WNA/Publications/Working_Group_Reports/comparison_of_lifecycle.pdf.
10. —. Electricity Generation - What Are the Options? [Online] <http://www.world-nuclear.org/nuclear-basics/electricity-generation-what-are-the-options.aspx>.
11. **Eastern Kern Air Pollution Control District** . *Addendum to CEQA Guidelines Addressing GHG Emission Impacts For Stationary Source Projects When Serving As Lead CEQA Agency*. 2012.

ATTACHMENT "A"

California Correctional Institution - Kern County APCD Air District, Annual

**California Correctional Institution
Kern County APCD Air District, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
User Defined Industrial	35.00	User Defined Unit	35.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.7	Precipitation Freq (Days)	32
Climate Zone	7			Operational Year	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - As per the Project Applicant, the Solar Field Area is 35 acres.

Construction Phase - Construction Schedule adjusted as per direction from Project Applicant.

Off-road Equipment - Construction Equipment approved by the Project Applicant.

Off-road Equipment - Hours are based on an 8-hour workday.

Grading -

Trips and VMT - Trips and VMT based on information provided in the Trip Generation.

Vehicle Trips - Trip Rates based on information provided in the Trip Generation.

California Correctional Institution - Kern County APCD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	740.00	45.00
tblConstructionPhase	NumDays	75.00	20.00
tblConstructionPhase	NumDays	30.00	10.00
tblConstructionPhase	PhaseEndDate	6/6/2022	4/15/2019
tblConstructionPhase	PhaseEndDate	8/5/2019	2/11/2019
tblConstructionPhase	PhaseEndDate	4/22/2019	1/14/2019
tblConstructionPhase	PhaseStartDate	8/6/2019	2/12/2019
tblConstructionPhase	PhaseStartDate	4/23/2019	1/15/2019
tblConstructionPhase	PhaseStartDate	3/12/2019	1/1/2019
tblGrading	AcresOfGrading	10.00	50.00
tblLandUse	LotAcreage	0.00	35.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	VendorTripLength	7.30	40.00
tblTripsAndVMT	VendorTripLength	7.30	40.00
tblTripsAndVMT	VendorTripLength	7.30	40.00
tblTripsAndVMT	VendorTripNumber	0.00	14.00
tblTripsAndVMT	VendorTripNumber	0.00	12.00
tblTripsAndVMT	VendorTripNumber	0.00	32.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripLength	10.80	40.00
tblTripsAndVMT	WorkerTripNumber	18.00	30.00

California Correctional Institution - Kern County APCD Air District, Annual

tblTripsAndVMT	WorkerTripNumber	15.00	40.00
tblTripsAndVMT	WorkerTripNumber	0.00	100.00
tblVehicleTrips	CW_TL	9.50	40.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	0.00	0.03
tblVehicleTrips	SU_TR	0.00	0.03
tblVehicleTrips	WD_TR	0.00	0.03

2.0 Emissions Summary

California Correctional Institution - Kern County APCD Air District, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-1-2019	3-31-2019	1.3272	1.3272
2	4-1-2019	6-30-2019	0.2110	0.2110
		Highest	1.3272	1.3272

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	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.3000e-004	6.3000e-004	0.0000	0.0000	6.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.3900e-003	0.0158	0.0199	9.0000e-005	5.6100e-003	9.0000e-005	5.7000e-003	1.5100e-003	9.0000e-005	1.6000e-003	0.0000	8.2864	8.2864	3.8000e-004	0.0000	8.2958
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4200e-003	0.0158	0.0202	9.0000e-005	5.6100e-003	9.0000e-005	5.7000e-003	1.5100e-003	9.0000e-005	1.6000e-003	0.0000	8.2870	8.2870	3.8000e-004	0.0000	8.2965

California Correctional Institution - Kern County APCD Air District, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.3000e-004	6.3000e-004	0.0000	0.0000	6.7000e-004
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.3900e-003	0.0158	0.0199	9.0000e-005	5.6100e-003	9.0000e-005	5.7000e-003	1.5100e-003	9.0000e-005	1.6000e-003	0.0000	8.2864	8.2864	3.8000e-004	0.0000	8.2958
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.4200e-003	0.0158	0.0202	9.0000e-005	5.6100e-003	9.0000e-005	5.7000e-003	1.5100e-003	9.0000e-005	1.6000e-003	0.0000	8.2870	8.2870	3.8000e-004	0.0000	8.2965

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2019	1/14/2019	5	10	
2	Grading	Grading	1/15/2019	2/11/2019	5	20	
3	Building Construction	Building Construction	2/12/2019	4/15/2019	5	45	

California Correctional Institution - Kern County APCD Air District, Annual

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 50

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	0	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	30.00	14.00	0.00	40.00	40.00	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	40.00	12.00	0.00	40.00	40.00	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	100.00	32.00	0.00	40.00	40.00	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195

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3.2 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-003	0.0260	6.4100e-003	9.0000e-005	2.5500e-003	2.7000e-004	2.8200e-003	7.4000e-004	2.6000e-004	9.9000e-004	0.0000	8.5424	8.5424	3.3000e-004	0.0000	8.5506
Worker	1.7700e-003	1.6800e-003	0.0141	4.0000e-005	4.4700e-003	3.0000e-005	4.5000e-003	1.1900e-003	2.0000e-005	1.2100e-003	0.0000	3.8367	3.8367	1.1000e-004	0.0000	3.8396
Total	2.9700e-003	0.0277	0.0205	1.3000e-004	7.0200e-003	3.0000e-004	7.3200e-003	1.9300e-003	2.8000e-004	2.2000e-003	0.0000	12.3791	12.3791	4.4000e-004	0.0000	12.3902

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					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	0.0217	0.2279	0.1103	1.9000e-004	0.0903	0.0120	0.1023	0.0497	0.0110	0.0607	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195

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3.2 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2000e-003	0.0260	6.4100e-003	9.0000e-005	2.5500e-003	2.7000e-004	2.8200e-003	7.4000e-004	2.6000e-004	9.9000e-004	0.0000	8.5424	8.5424	3.3000e-004	0.0000	8.5506
Worker	1.7700e-003	1.6800e-003	0.0141	4.0000e-005	4.4700e-003	3.0000e-005	4.5000e-003	1.1900e-003	2.0000e-005	1.2100e-003	0.0000	3.8367	3.8367	1.1000e-004	0.0000	3.8396
Total	2.9700e-003	0.0277	0.0205	1.3000e-004	7.0200e-003	3.0000e-004	7.3200e-003	1.9300e-003	2.8000e-004	2.2000e-003	0.0000	12.3791	12.3791	4.4000e-004	0.0000	12.3902

3.3 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0867	0.0000	0.0867	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530
Total	0.0258	0.2835	0.1629	3.0000e-004	0.0867	0.0140	0.1007	0.0360	0.0129	0.0488	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530

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3.3 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0600e-003	0.0445	0.0110	1.5000e-004	4.3800e-003	4.6000e-004	4.8400e-003	1.2600e-003	4.4000e-004	1.7100e-003	0.0000	14.6441	14.6441	5.6000e-004	0.0000	14.6582
Worker	4.7200e-003	4.4800e-003	0.0377	1.1000e-004	0.0119	7.0000e-005	0.0120	3.1700e-003	6.0000e-005	3.2300e-003	0.0000	10.2312	10.2312	3.1000e-004	0.0000	10.2388
Total	6.7800e-003	0.0490	0.0487	2.6000e-004	0.0163	5.3000e-004	0.0168	4.4300e-003	5.0000e-004	4.9400e-003	0.0000	24.8753	24.8753	8.7000e-004	0.0000	24.8970

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					0.0867	0.0000	0.0867	0.0360	0.0000	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530
Total	0.0258	0.2835	0.1629	3.0000e-004	0.0867	0.0140	0.1007	0.0360	0.0129	0.0488	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530

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3.3 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.0600e-003	0.0445	0.0110	1.5000e-004	4.3800e-003	4.6000e-004	4.8400e-003	1.2600e-003	4.4000e-004	1.7100e-003	0.0000	14.6441	14.6441	5.6000e-004	0.0000	14.6582
Worker	4.7200e-003	4.4800e-003	0.0377	1.1000e-004	0.0119	7.0000e-005	0.0120	3.1700e-003	6.0000e-005	3.2300e-003	0.0000	10.2312	10.2312	3.1000e-004	0.0000	10.2388
Total	6.7800e-003	0.0490	0.0487	2.6000e-004	0.0163	5.3000e-004	0.0168	4.4300e-003	5.0000e-004	4.9400e-003	0.0000	24.8753	24.8753	8.7000e-004	0.0000	24.8970

3.4 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0565	0.5109	0.4121	6.5000e-004		0.0311	0.0311		0.0292	0.0292	0.0000	56.7099	56.7099	0.0141	0.0000	57.0622
Total	0.0565	0.5109	0.4121	6.5000e-004		0.0311	0.0311		0.0292	0.0292	0.0000	56.7099	56.7099	0.0141	0.0000	57.0622

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3.4 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0124	0.2672	0.0659	9.3000e-004	0.0263	2.7800e-003	0.0290	7.5700e-003	2.6600e-003	0.0102	0.0000	87.8648	87.8648	3.3800e-003	0.0000	87.9493
Worker	0.0265	0.0252	0.2120	6.4000e-004	0.0671	3.9000e-004	0.0675	0.0178	3.6000e-004	0.0182	0.0000	57.5503	57.5503	1.7200e-003	0.0000	57.5933
Total	0.0389	0.2923	0.2779	1.5700e-003	0.0934	3.1700e-003	0.0965	0.0254	3.0200e-003	0.0284	0.0000	145.4151	145.4151	5.1000e-003	0.0000	145.5426

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	0.0565	0.5109	0.4121	6.5000e-004		0.0311	0.0311		0.0292	0.0292	0.0000	56.7098	56.7098	0.0141	0.0000	57.0622
Total	0.0565	0.5109	0.4121	6.5000e-004		0.0311	0.0311		0.0292	0.0292	0.0000	56.7098	56.7098	0.0141	0.0000	57.0622

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3.4 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0124	0.2672	0.0659	9.3000e-004	0.0263	2.7800e-003	0.0290	7.5700e-003	2.6600e-003	0.0102	0.0000	87.8648	87.8648	3.3800e-003	0.0000	87.9493
Worker	0.0265	0.0252	0.2120	6.4000e-004	0.0671	3.9000e-004	0.0675	0.0178	3.6000e-004	0.0182	0.0000	57.5503	57.5503	1.7200e-003	0.0000	57.5933
Total	0.0389	0.2923	0.2779	1.5700e-003	0.0934	3.1700e-003	0.0965	0.0254	3.0200e-003	0.0284	0.0000	145.4151	145.4151	5.1000e-003	0.0000	145.5426

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.3900e-003	0.0158	0.0199	9.0000e-005	5.6100e-003	9.0000e-005	5.7000e-003	1.5100e-003	9.0000e-005	1.6000e-003	0.0000	8.2864	8.2864	3.8000e-004	0.0000	8.2958
Unmitigated	1.3900e-003	0.0158	0.0199	9.0000e-005	5.6100e-003	9.0000e-005	5.7000e-003	1.5100e-003	9.0000e-005	1.6000e-003	0.0000	8.2864	8.2864	3.8000e-004	0.0000	8.2958

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
User Defined Industrial	1.00	1.00	1.00	14,560	14,560
Total	1.00	1.00	1.00	14,560	14,560

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	40.00	7.30	7.30	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
User Defined Industrial	0.469839	0.033283	0.180505	0.117821	0.026742	0.007075	0.011157	0.137299	0.002212	0.001412	0.009675	0.001272	0.001708

5.0 Energy Detail

Historical Energy Use: N

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5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.3000e-004	6.3000e-004	0.0000	0.0000	6.7000e-004
Unmitigated	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.3000e-004	6.3000e-004	0.0000	0.0000	6.7000e-004

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6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.3000e-004	6.3000e-004	0.0000	0.0000	6.7000e-004
Total	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.3000e-004	6.3000e-004	0.0000	0.0000	6.7000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.3000e-004	6.3000e-004	0.0000	0.0000	6.7000e-004
Total	3.0000e-005	0.0000	3.2000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	6.3000e-004	6.3000e-004	0.0000	0.0000	6.7000e-004

7.0 Water Detail

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7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation
